



INSTITUTE OF TECHNOLOGY OF CAMBODIA

# **CONSORTIUM MEETING INTERNATIONAL SUPPORT**

Phnom Penh, 25-26 March 2026

## **REPORT OF ACTIVITIES**

**2025-2026**

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# **Agenda**

## **of International Consortium Meeting at ITC**

### **25-26 March 2026**

#### **Wednesday, 25 March 2026:**

*7:30 - 8:30: Welcome of participants*

***8:30 - Plenary session in the room A-110***

*8:30 - 09:30*

- Welcome address by H.E. PHOEURNNG Sackona, President of the Board of Trustees
- Working methodology and objectives of the 2025 consortium meeting
- Report of Activities 2025 - 2026

*09:30 - 09:50: Coffee break*

*09:50 - 12:00: Perspective & Strategy for 2026-2027*

*12:00 - 13:00: Lunch*

#### ***13:00 Sessions by group***

*13:00 - 15h00: Group work by Department/Graduate School/Research*

*15:00 - 15h15: Coffee break*

*15:15 - 17h30: Presentation of results of discussion (A-110)*

*18:30 - Welcome Dinner organized by ITC Direction*

#### **Thursday, 26 March 2026:**

*8:30 - 12:00: Department/GS/RIC continue to work with their partners*

# Members of Consortium 2026

## I. Partner Institutions

| No | Name of Institution                                                               | Abbreviation           | Country   |
|----|-----------------------------------------------------------------------------------|------------------------|-----------|
| 1  | Ministry of Education, Youth and Sport                                            | MoEYS                  | Cambodge  |
| 2  | Ambassade de France                                                               | AF                     | France    |
| 3  | JICA Cambodia Office                                                              | JICA                   | Japan     |
| 4  | Ministry of Mine and Energy                                                       | MME                    | Cambodge  |
| 5  | Agence Universitaire de la Francophonie                                           | AUF                    | AUF       |
| 6  | Centre international de recherche agricole pour le développement                  | CIRAD                  | France    |
| 7  | Chambre de Commerce et d'Industrie France Cambodge                                | CCIFC                  | France    |
| 8  | DevKhmer SARL                                                                     | DevKhmer               | Cambodge  |
| 9  | École Nationale Supérieure de l'informatique pour l'Industrie et l'Entreprise     | ENSIIE                 | France    |
| 10 | École Catholique des Arts et Métiers                                              | ECAM LaSalle           | France    |
| 11 | École Nationale des Ponts et Chaussées                                            | ENPC                   | France    |
| 12 | École Nationale Supérieure en Génie des Technologies Industrielles (ENSGTI), UPPA | ENSGTI                 | France    |
| 13 | IMT Mines Alès, représentant Institut Mines-Télécom                               | IMT Mines Alès         | France    |
| 14 | Institut National des Sciences appliquées de Lyon                                 | INSA Lyon              | France    |
| 15 | Institut National des Sciences appliquées de Toulouse                             | INSA Toulouse          | France    |
| 16 | Institut National des Sciences appliquées de Rennes                               | INSA Rennes            | France    |
| 17 | Institut de Recherche pour le Développement                                       | IRD                    | France    |
| 18 | Institut National Polytechnique de Toulouse                                       | INP Toulouse           | France    |
| 19 | Institut Pasteur du Cambodge                                                      | IPC                    | Cambodge  |
| 20 | Institut Universitaire de Technologie d'Orsay                                     | IUTO                   | France    |
| 21 | IUT de Saint-Nazaire                                                              | IUT                    | France    |
| 22 | Kasetsart University                                                              | KU                     | Thaïlande |
| 23 | Kyushu University                                                                 | KU                     | Japon     |
| 24 | Montpellier SupAgro/ L'Institut Agro Montpellier                                  | Montpellier SupAgro    | France    |
| 25 | Northeastern Illinois University                                                  | NIU                    | USA       |
| 26 | Polytech Lille                                                                    | Polytech Lille         | France    |
| 27 | Institute of Science Tokyo                                                        | Tokyo Tech/IST         | Japon     |
| 28 | Université Catholique de Louvain                                                  | UCLouvain              | Belgique  |
| 29 | Université de la Réunion                                                          | UR                     | France    |
| 30 | Université de Liège                                                               | ULiège                 | Belgique  |
| 31 | Université de Liège, Gembloux Agro-Bio Tech                                       | Gembloux Agro-Bio Tech | Belgique  |
| 32 | Université de Mons                                                                | UMONS                  | Belgique  |
| 33 | Université de Namur                                                               | UN                     | Belgique  |
| 34 | Université de Rennes                                                              | UNIV Rennes            | France    |
| 35 | Université Libre de Bruxelles                                                     | ULB                    | Belgique  |

|    |                                |                |          |
|----|--------------------------------|----------------|----------|
| 36 | Université Paris-Sud           | UPS            | France   |
| 37 | Université Paul Sabatier       | UPS            | France   |
| 38 | Université Sorbonne Paris Nord | USPN           | France   |
| 39 | VOLTRA Co., Ltd.               | VOLTRA         | Cambodge |
| 40 | IMT Mines Albi                 | IMT Mines Albi | France   |

## II. Partenaires institutionnels

1. M. VINCENT Pierre, Conseiller de coopération et d'action culturelle, Ambassade de France
2. Ms. KOJIMA Mayu, Second Secretary, Embassy of Japan
3. S.E. le Dr. OM Romny, Secrétaire d'État au ministère de l'éducation, de la jeunesse et des sports
4. S.E. Mme PEN Chhorda, Secrétaire d'État au ministère des mines et de l'énergie
5. M. MAINETTI Nicolas, Directeur Asie-Pacifique de l'AUF
6. Mme BOUCHER Sandrine, Directrice au Cambodge chez l'AFD
7. M. KOICHIRO Watanabe, Senior Advisor of JICA
8. M. LE CALVEZ Luc, Représentant au pays chez l'IRD
9. M. ROGER François, Centre international de recherche agricole pour le développement
10. M. JULLIARD Charles, Chambre de Commerce et d'Industrie France Cambodge (CCIFC)

## III. Entreprises

11. M. TOUCH Franck, DevKhmer SARL Co., Ltd.,
12. M. VAUDIN Yann, VOLTRA Co., Ltd.,

## IV. Membres invités

13. Mme ANDRÉ Françoise, Coordinatrice de la coopération internationale, IMT Mines Alès
14. M. ANGLES Paul, INSA Toulouse
15. M. AUBERT Pascal, Université Paris-Saclay
16. Mlle AVALLONE Sylvie, professeure, Montpellier SupAgro
17. Mme Azura Binti A Rashid, CEng, P. Tech, Polymer Engineering Programme,
18. School of Materials & Mineral Resources Engineering, Universiti Sains Malaysia
19. Mme BARRIER Sylvie, Vice-Présidente aux Relations Internationales, Université Sorbonne Paris Nord
20. Mme BOKHARI Isabelle, Advisor to HE Vice-Prime Minister, Minister of Education, Youth and Sport/MJES - Expertise France (AFD)
21. Mme CÂMPIAN Mihaela Cristina, Director of the Erasmus Office and Professor, Technical University of Cluj-Napoca/GCI
22. Mme Cécile DURAND-MORILLEAU, Chargée de projets internationaux
23. International projects manager, l'Institut Agro Montpellier
24. M. CHABRIAT Jean-Pierre, professeur, Université de la Réunion
25. M. CHARLES Yann, Project Manager for Asia | International Relationship Office, Université Sorbonne Paris Nord
26. M. COLBEAU-JUSTIN Christophe, Université Paris-Sud
27. M. CYR Martin, Université de Toulouse
28. M. DARRACQ Bruno, Institut Universitaire de Technologie d'Orsay
29. Mme DARQUENNES Aveline, Professeure, Responsable Master MMGCM, INSA Rennes
30. M. DEBASTE Frédéric, Représentant ARES et les universités de Belgique
31. M. DESPLANCHE Didier, Directeur général, ECAM LaSalle de Lyon
32. M. DOSSANTOS-UZARRALDE Pierre, École Nationale Supérieure de l'informatique pour l'Industrie et l'Entreprise

33. M. HEIKOOP Rick, Senior Lecturer, Rotterdam University of Applied Sciences/Pays-Bas
34. M. HERAT Sunit, Associate Professor, Griffith University/Australie
35. M. IM Kravong, Représentant AUF - Cambodge
36. M. JOHANNES Kéryn, Professeur, INSA LYON
37. M. JOUQUET Pascal, Senior Researcher, Institut de Recherche pour le Développement (IRD)
38. M. KUZNIK Frédéric, INSA de Lyon
39. M. LECOMTE Didier, Professeur Émérite, IMT Mines Albi
40. Mme LEGEAS Béatrice, professeure, IUT de Saint-Nazaire
41. Mme LENCZEWSKI Melissa, Northeastern Illinois University
42. Mme LEROY Stéphanie, Chargée de Recherche, CNRS, Université Paris-Saclay
43. M. LOURS Philippe, Directeur des Relations Internationales, IMT Mines Albi
44. M. MERCADIER Jacques, Professeur, École Nationale Supérieure en Génie des Technologies Industrielles (ENSGTI), UPPA
45. M. MOJOLIC Cristian, Lecturer at the Faculty of Civil Engineering, Technical University of Cluj-Napoca/GCI
46. M. MORALES José, Directeur des Relations internationales, Université Sorbonne Paris Nord
47. M. OBRECHT Christian, Représentant, INSA Lyon
48. M. OGILVIE Andrew, Senior Researcher, Institut de Recherche pour le Développement (IRD)
49. M. PHALIP Vincent, professeur, Polytech Lille
50. M. PROTIN Ludovic, Directeur honoraire, Institut de Technologie du Cambodge
51. M. RIPPER Marc, Directeur, IUT de Toulon/GIM
52. Mme Rosalinda Solotareff, Conseillère du directeur de l'éducation à l'Ecole Polytechnique
53. M. SANGLEBOEUF Jean-Christophe, professeur des universités, Université de Rennes
54. M. SANTUI Kazumasa, Chief Representative of JICA Cambodia Office
55. Mlle SASAKI Chikako, Industrial Linkage/ Project Coordinator, JICA INACON Project
56. Mme SESTER Mathilde, Researcher, CIRAD
57. M. SIACCHITANO José-André, Chef de département, IUT de Toulon/GIM
58. M. SKRZYPEK Thibaut, École nationale des ponts et chaussées
59. M. SPIEGEL André, Institut Pasteur du Cambodge
60. M. TAKADA Jun-Ichi, Executive Vice President for Global Affairs/Chief Advisor, Institute of Science Tokyo/INACON Project
61. Mme THIBON Isabelle, Institut National des Sciences appliquées de Rennes
62. M. THOEUN Vongdy, Program Officer, JICA Cambodia Office
63. M. TOPA Vasile, Rector of the Technical University of Cluj-Napoca/GCI
64. Mme TRAN Thi Anh-Dao, Attachée de Coopération scientifique et universitaire, Ambassade de France
65. Mme TRIA Assia, Directrice, IMT Mines Alès
66. M. VATH Ly Vathana, Head of Master Programs, ENSIIE
67. Mme VENTARD Angélique, Chargée de mission aux relations internationales
68. M. VINCKE Bastien, Université Paris-Saclay
69. Mme WYNAR Elodie, Attachée de coopération pour le français-Ambassade de France
70. M. YONEZU Kotaro, Professor, Kyushu University

## **V. Équipe de direction de l'ITC**

### **V. 1. Direction**

71. S.E. Dr. PHOEURNNG Sackona, présidente du Conseil d'Administration et ministre de la culture et des beaux-arts

72. S.E. Prof. Dr. PO Kimtho, directeur de l'ITC
73. M. SOY Ty, directeur adjoint
74. M. BUN Kim Ngun, directeur adjoint
75. M. NGUON Kollika, directeur adjoint
76. M. BUN Long, directeur adjoint
77. M. PROTIEN Ludovic, directeur honoraire de l'ITC
78. M. CHUNHIENG Thavarith, conseiller pour la coopération
79. M. NUTH Sothân, conseiller pour les affaires académiques
80. M. PENH San, conseiller pour l'administration

## **V.2. Facultés, départements et sections**

81. M. SIM Tepmony, directeur de la formation de 3<sup>ème</sup> cycle (GS)
82. M. OR Chanmoly, directeur du centre de recherche et d'innovation (RIC)
83. M. HAN Virak, doyen de la faculté de génie civil (GCI)
84. M. CHHUON Kong, doyen de la faculté d'hydrologie et des ressources en eau (GRU)
85. Mme IN Sokneang, doyenne de la faculté de génie chimique et alimentaire (GCA)
86. M. ENG Chandoeun, doyen de la faculté de génie des géo-ressources et de géotechnique (GGG)
87. M. LAY Héng, doyen de la faculté de génie électrique et responsable du département de génie informatique et communication (GIC)
88. M. CHRIN Phok, vice-doyen de la faculté de génie électrique et responsable du département de génie électrique et énergétique (GEE)
89. M. CHAN Sarin, vice-doyen de la faculté de génie électrique et responsable du département de génie industriel et mécanique (GIM)
90. M. PHUN Veng Kheang, chef du département de génie des transports et des infrastructures (GTI)
91. M. MAY Raksmei, chef du département de génie d'architecture (GAR)
92. M. SRENG Sochenda, chef du département télécommunications et réseaux (GTR)
93. M. LIN Mongkulserey, responsable du campus de l'ITC à Tbongkhmum et chef du département de mathématiques appliquées et statistiques (AMS)
94. M. HIN Raveth, vice-directeur du 3<sup>ème</sup> cycle et responsable du campus de l'ITC à Kep
95. Mme SREY Malis, chef du département du Tronc Commun (TC)
96. M. SRANG Sarot, coordinateur du programme international ECAM LaSalle-ITC
97. M. CHEA Samneang, coordinateur du programme international à l'ITC
98. Mme KHEMTRAN Krasel, responsable de la section de français (SF)
99. M. SO Phea, responsable de la section d'anglais (SA)
100. M. SIEANG Phen, chef du bureau des relations internationales
101. Mme SUONG Malyna, chef adjoint du bureau des relations internationales
102. M. KHOUN Rithymean, chef du bureau des études (BE)
103. Mme HANG Leakhena, chef du bureau de l'assurance de qualité interne (QA)
104. Mme YIN Molyka, chef du bureau de la cellule d'interface (UIL)
105. M. BUN Saret, chef du bureau des projets
106. M. SOK Kimheng, chef de la bibliothèque
107. M. KHIEV Samnang, chef du service informatique (IT)
108. Mlle SANG Davin, responsable du centre d'incubation
109. Mme ROEURNGDETH Chanreasmey, responsable du centre d'employabilité

# **1. Summary of activities**

## **– Current state**

In 2025, a number of remarkable events have been organized in close cooperation with national and international stakeholders.

Moreover, different meetings of ITC councils have been taken place online as follows:

- International Consortium Meeting at ITC, 26-27 March 2025 (Annex 1).
- 33<sup>rd</sup> Board of Trustees Meeting, 26 June 2025 (Annex 2).
- Study Council and University Life meeting, 26 November 2025 (Annex 4).

An overview of the consortium opinions and CA recommendation in 2025 is presented in Annex 3.

## **1.1. Remarkable events at ITC in 2025-2026**

### **1.1.1. The 14<sup>th</sup> Scientific Day and Open House**

On June 5 and 6, 2025, ITC held its 14th Scientific Day under the theme: " Leveraging R&D for Innovation and Growth". The event was chaired by H.E. Dr. HANG Choun Naron, Deputy Prime Minister and Minister of Education, Youth and Sport, and attracted approximately 2000 participants, including researchers, scientists, teachers, and students, as well as students of about 1500 from various high schools.

The success of this event was made possible through the support from the Ministry of Education, Youth and Sports, the French Embassy, the Japan International Cooperation Agency, and the Agence Universitaire de la Francophonie. Financial contributions came from several private sector entities, including: Branch of Panasonic Asia Pacific PTE. Ltd, TEM Trading Co., Ltd, The French National Research Institute for Sustainable Development, FTRIP-EU-UNIDO, AFD-EDC, Ly Hour SBI Insurance PCL, Grande Solid Co., Ltd. & DKK-TOA Corporation, Grande Solid Co. Ltd. & Kyoto Electronics Manufacturing Co. Ltd., Centre de Coopération Internationale En Recherche Agronomique pour le Développement, DENSO (Cambodia) Co., Ltd., Yonemori Construction Co. Ltd., Cambodian-Yazaki Electric Wire Co. Ltd, CapCEE, SNP-PT International Co., Ltd., and Dynamic Scientific Co., Ltd. This event came with internet supports of two companies: Today Internet and NC NeocomISP Limited.

This event highlighted the importance of growth in R&D, innovation and collaboration between academia, researcher, and industry to drive sustainable development.



### **1.1.2. ITC National Robocon Champion 2025**

On June 29, 2025, during the 12th edition of the National Robotics Competition, the team from the Institute of Technology of Cambodia (ITC/Techno) won first prize!

As a reminder, the 12th edition of the National Robotics Competition in Cambodia, which took place at the Morodok Techo National Stadium in Phnom Penh, saw several Cambodian universities and higher education institutions participate with competitive teams, namely:

1. Institut de Technologie du Cambodge (ITC)
  - The ITC02 team won first prize.
2. Université Nationale de Gestion (NUM)
  - Team NUM01 represented the NUM finalist team.
3. Institut Polytechnique National du Cambodge (NPIC)
  - The NPIC01 team was also a finalist.
4. Institut National de Formation Technique (NTTI)
  - NTTI participated with his technical teams and distinguished himself with an engineering excellence award.
5. Institut Polytechnique Preah Kossamak (PPI)
  - Another institution also sent teams to the competition.

In total, five institutions took part in the competition with eight teams engaged in the robotics challenges that day.



As representatives of Cambodia, the team will participate in the international competition in Mongolia in August 2025. This year's theme is "Robot Basketball" as part of the ABU Asia-Pacific Robot Contest (ABU Robocon), MONGOLIA 2025.

### **Cambodian students win a prestigious prize at a robotics competition, August 22-26, 2025, in Ulaanbaatar, Mongolia**

#### **A Major Technical Recognition**

The ITC 02 team, representing Cambodia, won the prestigious "Best Engineering Award" at the competition held on August 24th in Mongolia. This award recognizes the precision, technical expertise, and innovation of their robotic design.

#### **A Continuous Ascent**

Ce This success is not an isolated case, but rather part of Cambodia's growing prominence in this field:

- The country has participated since 2017 and has already won several design and ideas awards.
- Cambodia even hosted the regional competition in 2023.



### 1.1.3. Signing of the agreement for the implementation of the "Bakheng Phase 3" drinking water supply project under the auspices of the European Union

On Wednesday, September 3, 2025, H.E. Prof. Dr. PO Kimtho, Director of the Institute of Technology Cambodia (ITC), attended the signing ceremony of the European Union-funded implementation agreement for the "Bakheng Drinking Water Supply Project, Phase 3."

The ceremony took place at the ITC in the presence of the following five signatory parties:

- The French Development Agency (AFD)
- The European Union (EU)
- The Institute of Technology of Cambodia (ITC)
- The Phnom Penh Water Authority (PPWSA)
- The Ministry of Industry, Science, Technology and Innovation.

A few words to learn more about the project's objectives:

The "Bakheng Phase 3" project will span five years (2025-2030). It includes diverse objectives tailored to the missions of each partner institution.

#### Opportunities for ITC

Within the specific framework of this agreement, ITC will benefit from several academic advantages:

- Scholarships: The project will fund scholarships for the institute's staff and students.
- Academic Levels: The scholarships cover all three university cycles: Bachelor's, Master's, and PhD.
- Specialization: The studies will focus on water resource management.
- Mobility: These training programs will take place in Europe, with the program scheduled to begin in November 2025.



### 1.1.4. Conference “WOMEN OF POWER AND WOMEN OF ACTION” at ITC

On Tuesday, September 30, 2025, H.E. Prof. Dr. PO Kimtho, Director of the Institute of Technology of Cambodia (ITC), delivered the welcoming address at the conference entitled « **WOMEN OF POWER AND WOMEN OF ACTION** ».

The event took place at the ITC under the high patronage of:

- **H.E. Dr. Hang Chuon Naron**, Deputy Prime Minister and Minister of Education, Youth and Sports.

- **H.E. Dr. Phoeurng Sackona**, Minister of Culture and Fine Arts.
- **H.E. Olivier Richard**, Ambassador of France in Cambodia.

The conference brought together more than 300 participants, including national and international professors, researchers and students, representing 28 institutions from the public sector, NGOs and the private sector.

#### **A source of inspiration: Claudie Haigneré**

This conference was organised by the ITC in collaboration with the French Embassy, the Research Institute for Development (**IRD**) and the French Institute of Cambodia (**IFC**), with the support of the Ministry of Education.

The highlight of the event was the presentation by guest of honor Claudie Haigneré. A former physician and the first French woman in space, she recounted her exceptional career in science, astronautics, and politics. Her testimony aimed:

- To serve as a model of excellence.
- To encourage women and girls to empower themselves.
- To inspire the next generation to pursue their dreams without limits.

ITC expressed its immense pride in hosting this event, which goes beyond simply sharing knowledge to bring about a genuine shift in mindset. The institute, in collaboration with the Ministry of Education, is actively working to provide opportunities for high-potential young female students to become the **scientists, engineers, and innovators of tomorrow**.

As head of Cambodia's leading public engineering institution, **H.E. Prof. Dr. PO Kimtho** expressed his profound admiration for Ms. Haigneré's achievements. He reiterated a powerful message to female students:

"The fields of engineering, science, and technology are open to all; they are not reserved for men alone."»



#### **1.1.5. CHAIIn-EU project for the internationalization of higher education in Cambodia**

On Monday, November 10, 2025, Institute of Technology of Cambodia (ITC) and the Directorate General of Higher Education of the Ministry of Education, Youth and Sports (MoEYS) opened the

second training workshop for trainers. This event is part of the "Cambodian Higher Education Advancing in Internationalization" (CHAIIn-EU) project, which aims to strengthen the internationalization capacities of staff at Cambodian public universities.



The opening ceremony was chaired by H.E. Dr. SOM Ratana, Under Secretary of State at MoEYS, and H.E. Prof. Dr. PO Kimtho, Director of ITC. This workshop brings together European partners such as Saarland University (Germany) and the University of Alicante (Spain), as well as six Cambodian partner institutions:

1. Institut de Technologie du Cambodge (ITC)
2. Université Nationale de Management (NUM)
3. Phnom Penh International University (PPIU)
4. Université Royale d'Agriculture (RUA)
5. University of South East Asia, Siem Reap (USEA)
6. Western University (WU)

### **An intensive 5-day programs**

The workshop is structured around three major themes for the development of higher education policies in Cambodia:

1. Leadership and Communication
2. Networking and Sustainability
3. From Planning to Practice

### **Visions et Objectives**

H.E. Dr. SOM Ratana reiterated that the internationalization of higher education institutions is a crucial element of human resource development. It enables them to meet the demands of the Cambodian job market and aligns with national policies that place people at the heart of the country's development.

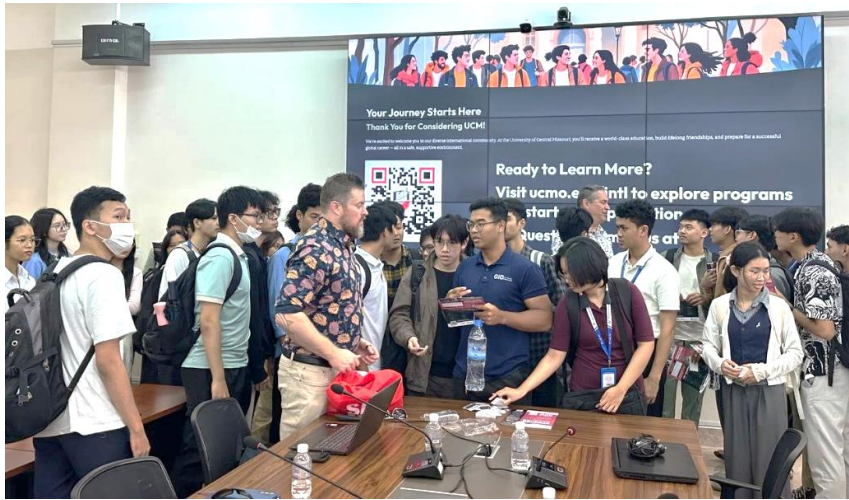
For his part, H.E. Prof. Dr. PO Kimtho emphasized that the CHAIIn project aims to raise the quality of learning and research. By strengthening internationalization capacities and teacher training, the project fosters sustainable collaboration between local and international universities.

### **Support et Perspectives**

Supported by the European Commission through the Erasmus+ program, this project represents a source of hope for the ITC and its partners. The ultimate goal is for participants to share the knowledge acquired to elevate Cambodian higher education towards greater recognition and collaboration at the regional and global levels.



### 1.1.6. Academic Partnership: ITC and the University of Central Missouri (UCM) strengthen their collaboration



On November 19, 2025, the Institute of Technology of Cambodia (ITC) hosted a delegation from the University of Central Missouri (UCM) for an orientation session for 2nd and 3rd year students.

This visit follows an agreement signed in October 2025 aimed at facilitating the international mobility of Cambodian students.

Key points of cooperation:

- Transfer programs: ITC students can now continue their studies in the United States through flexible pathways (1+3, 2+2 or 3+1).
- Areas of study concerned: The partnership focuses on cutting-edge technology sectors, including:
  - Computer Science: Computer Networking
  - Computer Science: Computer Science
  - Computer Science: Game Development
  - Computer Science: Software Development
  - Cybersecurity: Cyber Operations
  - Cybersecurity: Secure Software Development
  - Data Science

Student support: During this meeting, UCM representatives presented academic programs, scholarship opportunities, and practical details of student life on the American campus.

### 1.1.7. The conference on “Strategies and Technologies for Sustainable Architecture in ASEAN” at ITC

On November 26, 2025, the Institute of Technology of Cambodia (ITC) hosted the conference “Strategies and Technologies for Sustainable Architecture in ASEAN” in the Conference Hall, chaired by Dr. NGOUN Kollika, Deputy Director of ITC. The event brought together more than 200 national and international participants.

This two-day conference benefited from the support and collaboration of several institutions and projects, including ARES, COMBODIA, University of Liège and University of Brussels, as well as many teachers and students from the architecture department of the College of Engineering at ITC.

Renowned speakers participated, coming from international institutions such as Meiji University (Japan), University of California, Berkeley (USA), University of Liège and University of Brussels (Belgium), Universiti Teknologi MARA (Malaysia), as well as the Ministry of the Environment

and architectural firms such as Bloom Architecture. Participants shared their knowledge and experiences on key themes related to strategies and technologies for sustainable architecture.

On the second day, the conference also welcomed H.E. Chea ChanthebRass, Deputy Secretary General of the Cambodian Council of Architects (CAB), under the Ministry of Land Management, Urban Planning and Construction.

The event concluded in a convivial atmosphere with the announcement of the winners of the architecture poster competition and a group photo session celebrating the success of the conference.

This initiative underlines ITC's commitment to promoting sustainable architecture and strengthening academic and professional cooperation in ASEAN.



#### **1.1.8. ITC and École Polytechnique strengthen their partnership for the period 2025–2030**



On December 5, 2025, a delegation from ITC, led by H.E. Prof. Dr. PO Kimtho, Director of the Institute, visited École Polytechnique (L’X) in France for an official visit and discussions on continued academic cooperation. The delegation included Mr. SOY Ty, Deputy Director for Academic Affairs, and Mr. SIEANG Phen, Head of the International Relations Office.

#### **A historic and fruitful partnership**

The partnership between ITC and École Polytechnique (L’X) was established in 2007 and now spans 18 years. Since the beginning of this collaboration, 30 ITC students have successfully joined this prestigious engineering school. These graduates actively contribute to Cambodia's development, with some pursuing international careers while others have returned to serve in the country.

## A new agreement for 2025-2030



During this visit, the ITC and L'X signed a new Memorandum of Understanding (MoU) for the period 2025–2030. This renewal strengthens the foundations of the partnership and opens up new perspectives for joint activities:

- Strengthening international programs and increasing exchange opportunities for students at ITC and École Polytechnique (L'X).
- Development of collaborative research projects.
- Implementation of short-term academic exchanges for students from both institutions.
- Potential integration of École Polytechnique (L'X) as a new member of the ITC International Consortium.
- Accueil renouvelé des étudiants de L'X pour des stages et échanges à l'ITC.

This extension demonstrates the strength of the link between the two institutions and their shared commitment to the development of education, research and technology.

### 1.1.9. The 4th International EraGET2025 Conference and 16th AUN/SEED-Net RCGeoE2025 Regional Conference at ITC

The Faculty of Geo-resources and Geotechnical Engineering of the Institute of Technology of Cambodia (ITC) organized the 4th International Conference on Earth Resources and Geo-environmental Technologies (EraGET2025), in association with the 16th AUN/SEED-Net Regional Conference on Geological and Geo-resource Engineering, on December 11 and 12, 2023.

Held under the theme "Geo-Resources and Geotechnical Engineering for Circular Economy," the conference was chaired at its opening by Associate Professor Bun Kim Ngun, Deputy Director of the ITC. It also addressed key topics such as the challenges of geotechnical engineering in Cambodia and the STI-Coordination project.

The event strengthened international cooperation through collaboration with several prestigious institutions, including Kyushu University, Universiti Sains Malaysia, Caraga State University and the Japan International Cooperation Agency (JICA).

In total, 92 papers were submitted by teachers, researchers, experts, and students from national and international institutions. The conference aimed to promote the sharing of research results, strengthen academic networks, and develop new collaborations in the fields of geo-resources and geotechnics for the circular economy.

The event benefited from the support of several institutional partners and international companies.





#### 1.1.10. International Symposium on Life Mechatronics 2025

The International Symposium on Life Mechatronics 2025 (LMS 2025) was successfully held on December 26, 2025, at the Institute of Technology of Cambodia (ITC), Phnom Penh. The symposium was organized by the Committee of Life Mechatronics Symposium (LMS) and the Cooperative Research Committee on Life Mechatronics for Smart Agriculture (CPI) of the Institute of Electrical Engineers of Japan (IEEJ), in collaboration with ITC and the JICA INACON Project. The event brought together researchers, students, and professionals from Cambodia, Japan, and partner institutions to exchange ideas and showcase recent research in life mechatronics, smart agriculture, and AI-driven technologies.

The program featured two keynote talks on metrology and agricultural engineering, followed by a full day of oral and poster presentations covering a wide range of topics, including smart agriculture, robotics and control, computer vision and sensing, and AI for language and society. The luncheon poster session provided an interactive space for students to present applied research, encouraging technical discussion and cross-institutional feedback.

Beyond technical exchange, LMS 2025 strengthened international collaboration between Japanese and Cambodian institutions and supported capacity building for young researchers through presentations, mentoring, and networking. By bridging academia, education, and industry-relevant applications, the symposium highlighted practical pathways for deploying life mechatronics and AI technologies in agriculture, environmental monitoring, and digital transformation in Cambodia. Overall, LMS 2025 successfully fostered collaboration, showcased impactful student and faculty research, and reinforced the growing research partnership between ITC, IEEJ, and JICA-supported initiatives.



### **1.1.11. The Guangdong-Hong Kong-Macau Coastal Economic Research Federation, a potential future partner of ITC**

On January 22, 2026, Director of Institute of Technology of Cambodia (ITC), Prof. Dr. PO Kimtho, participated in a working meeting with a delegation of Chinese companies led by Mr. Liang Songshou, President of the Guangdong-Hong Kong-Macao Greater Bay Area Economic Research Federation.

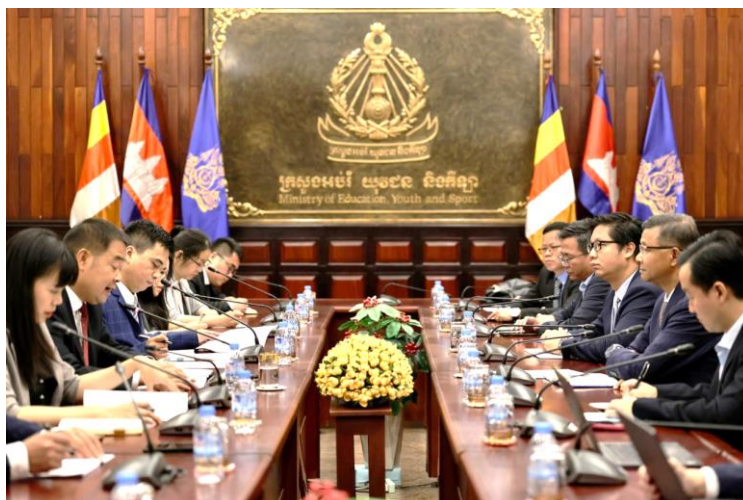
The meeting, held at the Ministry of Education, Youth and Sports, took place under the chairmanship of His Excellency Dr. Hang Chuon Naron, Deputy Prime Minister and Minister of Education, Youth and Sports.

The discussions focused on three main areas:

1. A request for support from the Ministry to organize drone pilot training courses in Cambodia;
2. Exploration of cooperation between Cambodian vocational training institutions and Shaanxi Polytechnic University;
3. Skills development in mechanics, electronics, and automation for local employees working for Chinese companies.

Following the discussions, H.E. Deputy Prime Minister encouraged ITC to collaborate with Chinese partners to bring these initiatives to fruition.

In response, ITC Director expressed his willingness to engage in this cooperation, stressing that the institute has solid expertise in mechanics, electronics and automation, conducive to the development of joint projects.



### **1.1.12. Seminar to present the results of the ARES institutional support project**

On January 28, 2026, ITC organized a seminar dedicated to the presentation of the results of the “ARES Institutional Support Project 2022-2027”, under the chairmanship of Her Excellency Dr. Phoeurng Sakona, Minister of Culture and Fine Arts and President of the Board of Trustees of ITC.



The Director of ITC, Professor Dr. PO Kimtho, expressed his gratitude to the Belgian partners for their continued support within the framework of the ARES program, which has been active since 1997. The project focuses on institutional governance and capacity building for training, in order to align the ITC with international standards.



The seminar highlighted six key outcomes: improvements to the institutional structure, technology transfer, enhanced teaching skills and knowledge sharing, improved research and laboratory management, and enriched documentary resources for teaching and research.

Professor Michel Verleysen, the project coordinator, emphasized the strength and longevity of the cooperation between ITC and Belgium. The event also brought together representatives from other higher education institutions, including the Royal University of Agriculture (RUA), Kampong Speu Institute and Technology (KSIT), Svay Rieng University (SRU), and the National University of Battambang (NUBB).

In her closing remarks, the President of the Board of Trustees of ITC commended the contributions of the Belgian and Cambodian teams, noting that next year will mark the 30th anniversary of this cooperation. She expressed her pride in the results achieved, emphasizing that this long-term partnership contributes not only to the development of the ITC, but also to the strengthening of higher education in Cambodia as a whole.



### **1.1.13. Hayashi Construction Co., Ltd. becomes a new partner of the ITC**

On January 29, 2026, the Institute of Technology of Cambodia (ITC) held a signing ceremony for a Memorandum of Understanding (MoU) with Hayashi Construction Co., Ltd., at the institution's headquarters in Phnom Penh.

The ceremony was held under the chairmanship of Professor Dr. PO Kimtho, Director of ITC, and Mr. Shinichiro Hayashi, President of the Japanese company. On this occasion, the Director of the ITC recalled that cooperation between the institute and Japan dates back to 2002, highlighting

the close ties with numerous Japanese universities, organizations, and private companies, as well as the presence of Japanese experts within the institution.

He expressed his satisfaction with this new partnership, which he considers an important step towards further strengthening academic and professional collaboration between the two parties.

For his part, Mr. Shinichiro Hayashi thanked the ITC for its warm welcome and highlighted the first tangible results of this collaboration. He recalled that two years prior, the company had received 20 applications from ITC interns, selected 10, and then hired 5 of them as employees. Of these, three will soon be sent to Japan to gain professional experience in large companies before returning to work in Cambodia.

Following the signing, the company also conducted interviews with fifth-year students from the architecture department, with a view to internships planned for the beginning of the second semester of the 2025–2026 academic year.



#### 1.1.14. Celebrating the achievements of the PWSSP project at ITC



On January 29, 2026, the Institute of Technology of Cambodia (ITC) hosted representatives from the European Union in Cambodia and the French Development Agency (AFD) at the event "PWSSP Showcase: Celebrating Achievements", celebrating the results of the Provincial Water Supply and Sanitation Project (PWSSP).

The Director of the ITC, Professor Dr. PO Kimtho, commended the partners for their continued support in human resource development and research, particularly in the water sector. Representatives from the EU and the AFD congratulated the institution on the project's success and reaffirmed their commitment to providing long-term support for the water and sanitation sector in Cambodia.

Since 2018, the PWSSP project has made a significant contribution to capacity building in the WASH (water, sanitation, and hygiene) sector. It has awarded 114 Master's scholarships in urban water and sanitation engineering, 48% of which went to women, demonstrating a strong commitment to gender equality.

The project has also funded 12 research sub-projects, academic exchanges with European universities, laboratory upgrades, curriculum improvements, the creation of smart classrooms, and the installation of pilot wastewater and drinking water treatment plants at the ITC.

The meeting concluded with discussions with former scholarship recipients and a visit to the new pilot wastewater treatment plant, marking an important step in the development of infrastructure and human capacity for sustainable water resource management in Cambodia.

#### **1.1.15. MOA, A new academic partnership to broaden educational opportunities for Cambodian students and support Cambodia's technological future**

On February 11, 2026, Macquarie University and Institute of Technology Cambodia (ITC) signed a new strategic agreement to create more flexible and accessible study pathways for Cambodian students.

This partnership will allow students to begin their studies at ITC in Cambodia before transferring their credits to Macquarie University in Australia to complete their degree. This innovative model offers the opportunity to earn qualifications recognized by both a Cambodian institution and an Australian university, while also allowing students to remain closer to their families during the early years of their higher education.

Each year, between 4,000 and 5,000 Cambodian students choose Australia as their study destination. This new program opens up additional opportunities for talented young Cambodians eager to pursue their academic and professional ambitions internationally.

Beyond student mobility, this agreement illustrates Australia's commitment to strengthening its trade, education, and investment ties with Southeast Asia. It also supports Cambodia's efforts in human capital development, particularly in science, technology, engineering, and mathematics (STEM) fields, as well as in digital transformation.

Both institutions welcome this major step, which will help train a new generation of qualified professionals and support Cambodia's technological and economic development.





### 1.1.16. Honda Y-E-S Award Program 2025

The HONDA Y-E-S AWARD PROGRAM covers Vietnam, Myanmar, India, Bangladesh, Laos, and Cambodia.

As one of the key ASEAN countries, Cambodia is expected to experience dramatic growth in the near future. Higher education institutions are still expanding, and the training of future leaders,



particularly in science and technology, is a priority. People-to-people exchanges and trade with Japan continue to grow daily, and expectations for expansion in these areas were high. Therefore, this program for Cambodia began in 2008. The participating institutions are Institute of Technology of Cambodia (ITC), Royal University of Phnom Penh

(RUPP), and Royal University of Agriculture (RUA).

This year, there are four Cambodian laureates, two from ITC and two from RUPP. The ITC administration congratulated its two students who won the two top prizes of the HONDA Y-E-S AWARD: Mr. LOU Chumdararith from the Department of Information Engineering and Communication, and Mr. CHHEOUM Porheng from the Faculty of Hydrology and Water Resources Engineering.

The following table highlights this data.

| Year | Name                                                    | Total Number     | ITC |
|------|---------------------------------------------------------|------------------|-----|
| 2025 | Mr. LOU Chumdararith (GIC)<br>Mr. CHHEOUN Porheng (GRU) | 4 (ITC/RUPP)     | 2   |
| 2024 | Mr. LUN Sokharaboth (GCI)                               | 4 (ITC/RUPP/RUA) | 1   |
| 2023 | Mr. LEY Satya (GCI)<br>Mr. LENG Mengthong (GIM)         | 4 (ITC/RUPP/RUA) | 2   |
| 2022 | Ms. DET Mouykeang (GCA)<br>Mr. VIRAK Alexander (GIM)    | 4 (ITC/RUPP)     | 2   |
| 2021 | Ms. CHHUOR Sochan Vimul (GCA)                           | 4 (ITC/RUPP)     | 1   |
| 2020 | Mr. KEO Seiha (GCI)<br>Ms. LAY Cheavita (GCA)           | 4 (ITC/RUPP)     | 2   |

|      |                                                                          |                  |   |
|------|--------------------------------------------------------------------------|------------------|---|
| 2019 | Mr. KONG Rathaseyhak (GCA)<br>Mr. CHHENG Ilay (GCI)                      | 4 (ITC/RUPP)     | 2 |
| 2018 | Mr. SONG Vergenylundy (GEE)                                              | 4 (ITC/RUA/RUPP) | 1 |
| 2017 | Ms. NY Vourchnea (GCA)                                                   | 4 (ITC/RUA/RUPP) | 1 |
| 2016 | Mr. KOUCH Keang Ang (GCI)<br>Mr. THAI Sereyvuth (GCA)                    | 4                | 2 |
| 2015 | Ms. EA Somuynea (GAR)<br>Ms. CHHIM Panchapor (GCA)                       | 4                | 2 |
| 2014 | Mr. KOUCH Henghok (GCI)<br>Mr. PHON Bunheng (GAR)                        | 4                | 2 |
| 2013 | Mr. SRENG Mengkoing (GIM)<br>Ms. SROY Sengly (GCA)                       | 4                | 2 |
| 2012 | Mr. RITH Monorom (GIM)<br>Mr. KHY Kimleng (GCI)                          | 4                | 2 |
| 2011 | Ms. EK Pichmony (GCA)<br>Mr. SAY Vortana (GIC)<br>Mr. CHHOR Marady (GCI) | 4                | 3 |
| 2010 | Mr. CHEA Ratha (GRU)<br>Ms. Rath Sovannsathya (GCI)                      | 4                | 2 |
| 2009 | Mr. Ngor Pengsieang (GIM)<br>Mr. En Sovann (GIC)                         | 4                | 2 |
| 2008 | Ms. Kim Keosopanha (GCA)<br>Ms. Khuysien Soveary (GCI)                   | 4                | 2 |

### 1.1.17. Admission to Ecole Polytechnique

Since 2007-2008, Cambodian students of the ITC have been present among other foreign students in a highly reputed school in France and around the world, the École Polytechnique. It is indisputable that our students have the basic knowledge solid enough to be recruited by the very difficult competition of this school. The list below illustrates the names of students who are studying or have studied at our polytechnic in other major schools and their careers.

For this year, 6 students took part in this competition organized at Institut Français du Cambodge, of which 5 students succeeded. It should be noted that there are two students for the École Polytechnique.

The table below illustrates this data.

| Academic Year | Full Name         | Sex | Degree   | Workplace | Responsibility |
|---------------|-------------------|-----|----------|-----------|----------------|
| 2025-2026     | SUON Chey Nutt    | M   | Étudiant |           |                |
|               | TOUCH Sovannborey | M   | Étudiant |           |                |
| 2024-2025     | CHHOY Zurich      | M   | Étudiant |           |                |
|               | UTH Rathana       | M   | Étudiant |           |                |
| 2023-2024     | CHOUV You Y       | F   | Étudiant |           |                |
|               | SEN Sovatheakna   | M   | Étudiant |           |                |
|               | KHUN Sivluy       | F   | Étudiant |           |                |
| 2022-2023     | SENG Hok          | M   | Étudiant |           |                |
| 2021-2022     | MOK Yong          | M   | Étudiant |           |                |

|           |                      |   |           |                                             |                             |
|-----------|----------------------|---|-----------|---------------------------------------------|-----------------------------|
| 2020-2021 | Covid-19 Pandemic    |   |           |                                             |                             |
| 2019-2020 | NORNG Vannvatthana   | M | Ingénieur | Photorealistic Rendering                    | Ingénieur R&D               |
|           | CHHOUT Laychiva      | M | Étudiant  |                                             |                             |
| 2018-2019 | VENG Namchhoen       | M | Étudiant  |                                             |                             |
| 2016-2017 | CHAO Kimhong         | M | Ingénieur | Institut Polytechnique                      | Doctorant                   |
|           | SAMBATH Vibolroth    | F | Ingénieur | Institut Polytechnique                      | Etudiant en Master          |
|           | THY Vathana          | M | Ingénieur | Institut Polytechnique                      | Etudiant en Master          |
| 2015-2016 | EANG Chanpaya        | M | Abandon   |                                             | Ingénieur                   |
|           | NOU Sithea           | M | Master    | Suisse                                      | Ingénieur                   |
| 2014-2015 | HEANG Kitiyavirayuth | M | Master    | Ecole des Ponts ParisTech (Paris)           | Etudiant Architecte         |
|           | KHUN Kimang          | M | Master    | INRIA (Grenoble)                            | Ingénieur Doctorant         |
|           | THAN Poseng          | M | Master    | Paris Partner (Paris)                       | Ingénieur Informaticien     |
| 2013-2014 | IEA Bunthan          | M | Master    | Ministère du Développement Durable (France) | Ingénieur Corps d'Etat      |
|           | DIN Ratanak          | M | Master    | Vinci Construction (Paris)                  | Ingénieur d'Etudes          |
| 2012-2013 | KHOUN Ladyya         | M | PhD       | Naval Group                                 | Ingénieur-Chercheur         |
|           | SENG Sodarith        | M | Master    | Vinci Construction (Phnom Penh)             | Ingénieur d'Etudes          |
| 2011-2012 | UCH Bunnarith        | M | Master    | Suez (Rennes et Phnom Penh)                 | Ingénieur de Projet         |
| 2010-2011 | IM Seyha             | M | Master    | Corsicasole (Paris)                         | Ingénieur, Chef de projet   |
|           | HUY Seav Er          | M | Master    | AFD (Phnom Penh)                            | Ingénieur, Chef de projet   |
|           | SE Dara              | M | Master    | Suez (Rennes et Phnom Penh)                 | Ingénieur, Chef de projet   |
| 2009-2010 | SVAY Angkeara        | M | PhD       | LBL International (Phnom Penh)              | Directeur Technique (CTO)   |
|           | CHEY Sopheak         | M | Ingénieur | TC (Cambodge)                               | Enseignant à temps partiels |
| 2008-2009 | MUY Sokseiha         | M | PhD       | EPFL (Suisse)                               | Post-Doctorat               |
| 2007-2008 | MANG Chetra          | M | PhD       | IRT SystèmeX (Paris)                        | Ingénieur R&D Sénior        |



## **2. Recruitment, Evolution of Number of Students and Others Activities**

## 2.1. Recruitment in 2025-2026

Students of engineering programs are recruited through an entrance writing examination on mathematics, physics/chemistry and logic. Recruitment of technician programs is based on documentation from high school.

### 2.1.1. Preparation of Entrance Exam

Information campaigns to high school students had been done in different provinces. ITC also received many visits of high school students at the campus, especially during the ITC Scientific Day and Open House. Campaign through social network is also implemented.

ITC lecturers were requested to propose writing tests based on curriculum in high school. The Direction Board of ITC was responsible for the final selection of the tests with confidentiality.

The date, the tests and all regulations of the exam in the 3 campuses (Phnom Penh, Tbong Khmum and Kep Provinces) are the same.

### 2.1.2. Registration to the entrance exam

Registration to the entrance exam of Engineering Program took place from 25 September 2025 to 11 October 2025. Total number of candidates is 4228 in which 1476 are females. Table below shows the number of candidates in all the 3 campuses.

Table 1. Number of candidates registered to the entrance exam.

|           | Phnom Penh  |      | Intl. Programs |    | Tbong Khmum |    | Kep       |           | Grand Total |      |
|-----------|-------------|------|----------------|----|-------------|----|-----------|-----------|-------------|------|
|           | Total 1     | F    | Total 2        | F  | Total 3     | F  | Total 4   | F         | Total       | F    |
| Candidate | <b>4076</b> | 1426 | <b>98</b>      | 21 | <b>29</b>   | 19 | <b>25</b> | <b>10</b> | <b>4228</b> | 1476 |

The entrance examination was held at ITC-Phnom Penh, ITC-Tbong Khmum and ITC-Kep on 14 October 2025 under supervision of ITC's Direction Board. No fraud had been reported and the tests were conducted in a satisfactory and transparent manner.

Figure below shows the evolution of number of candidates over the last 10 years.

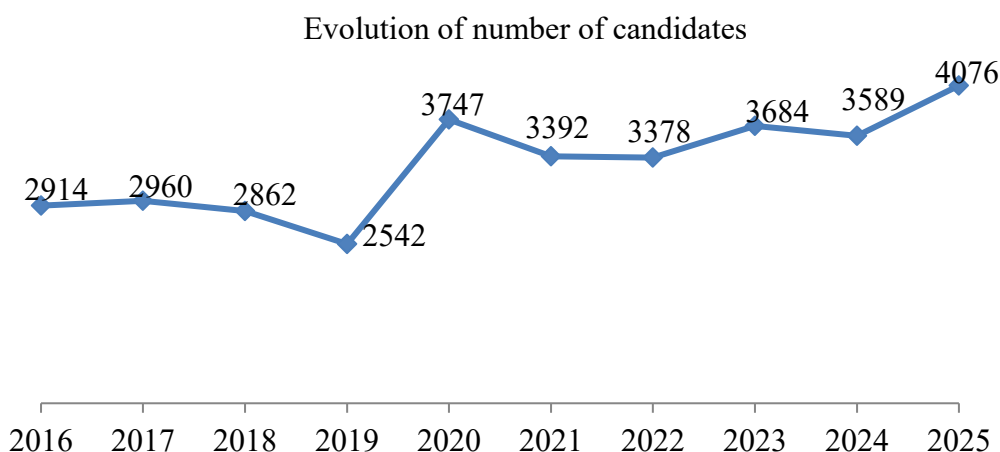


Figure 1. Number of candidates registered in the entrance exam at ITC-Phnom Penh.

### 2.1.3. Result of the Entrance Exam

Result of the entrance exam was announced on 16 October 2025. There are 1500 successful candidates (479 Females) and 401 candidates (151 Females) in the waiting list.

Figure below shows evolution of the successful candidates over the past 10 years. Due to new buildings and equipment, number of successful candidates were increased every year from 805 in 2016 to around 1700 during Covid-19 period from 2020 to 2022 but decreased to around 1500 in the last 3 years.

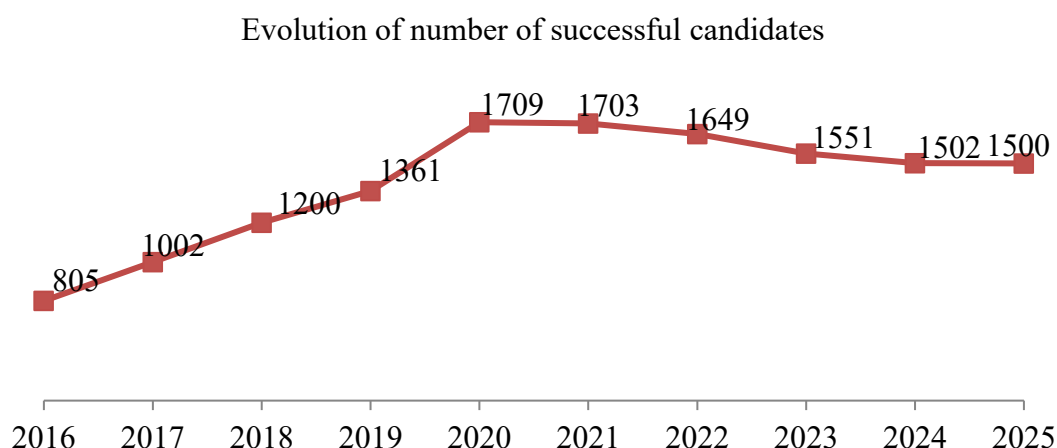


Figure 2. Evolution of number of successful candidates the last 10 years.

### 2.1.4. Enrollment in 1st Year

The academic year 2025-2026 of 1<sup>st</sup> Year students was commenced on 10 November 2025 which is about 1 month late comparing to others students who started their classes since 6 October 2025.

#### a) Engineering Program (ITC-Phnom Penh)

In total, 1377 students (481 females) have enrolled to 1<sup>st</sup> year of Engineering Program in the academic year 2025-2026.

#### b) International Engineering Program (ITC-Phnom Penh)

The International Engineering Program at ITC has been launched from the academic year 2023-2024. Table below presents number of high school students registered in the entrance examination, number of successful candidates and the one enrolled in the first year of international engineering programs.

Table 2. Number of students enrolled to 1st Year of International Program.

|                       | Total | Female |
|-----------------------|-------|--------|
| Candidate             | 98    | 21     |
| Successful candidates | 60    | 12     |
| Reserved list         | 10    | 4      |
| Enrolled in Year 1    | 62    | 14     |

### c) Associate Degree Program (ITC-Phnom Penh)

For the Associate Degree Program (2-Year Program), 836 students (317 females) have enrolled in the first year in 2025-2026.

### d) Engineering Program (ITC-Tbong Khmum)

Table below presents number of high school graduates registered in the entrance examination, number of successful candidates and the one enrolled in the first year of engineering program at the second campus in Tbong Khmum Province. It is noted that all students enrolled in Tbong Khmum Campus are scholarship holders (Tuition Fee's exemption).

Table 3. Number of students enrolled to 1st Year at ITC-Tbong Khmum.

|                              | <b>Total</b> | <b>Female</b> |
|------------------------------|--------------|---------------|
| <b>Candidate</b>             | <b>29</b>    | 19            |
| <b>Successful candidates</b> | <b>15</b>    | 9             |
| <b>Enrolled in Year 1</b>    | <b>19</b>    | 10            |

### e) Engineering Program (ITC-Kep)

Following the recommendation of the Minister of Education, Youth and Sport, ITC sets up another campus in Kep Province which is located in the southwest of Cambodia and which about 160 kilometers from main campus in Phnom Penh. Table below presents number of high school graduates registered in the entrance examination, number of successful candidates and the one enrolled in the first year of engineering program at ITC Kep Campus for the academic year 2025-2026. It is noted that all students enrolled in Kep Campus are scholarship holders.

Table 4. Number of students enrolled to 1st Year at ITC-Kep.

|                              | <b>Total</b> | <b>Female</b> |
|------------------------------|--------------|---------------|
| <b>Candidate</b>             | <b>25</b>    | 10            |
| <b>Successful candidates</b> | <b>16</b>    | 5             |
| <b>Enrolled to I1</b>        | <b>18</b>    | 6             |

### f) Associate Degree Program (ITC-Kep)

For the Associate Degree Program (GEE), 12 students (2 females) have enrolled in the first year.

## 2.1.5. Remark and Conclusion

Due to the commitment and achievements, ITC gets trust from the Ministry of Education, Youth and Sports to expand its capacity to another campus in Kep Province. Maintaining the entrance examination is very important in order to keep a positive impression and a very strong brand in mind and appreciation of students, parents, public and society. It is noted that all expenses of this examination were fully covered by the Ministry of Education, Youth and Sports, and ITC.

The direction board of ITC should continue to strengthen recruitment strategy of 1<sup>st</sup> year student of both engineering and technician program by sending staffs to high school in some provinces to promote different academic programs and to show the importance and benefit of studying of STEM (Science, Technology, Engineering and Mathematics), especially studying at ITC. The promotion activities were also implemented through Open House and social media. The recruitment of 1<sup>st</sup> Year students has been done with great success.

## 2.2. Pathway to 3rd Year Engineering Program

### 2.2.1. Pass from T2 to 3rd Year Engineering Program

The pathway is for graduates from Associate Degree or equivalent degree to pursue Engineering Program. This year 2025-2026, 83 candidates applied for this pathway in which 53 successful candidates. Candidates have to pass the following criteria:

- Pre-select and Interview by relevant department,
- Join intensive preparation class on mathematics and physic.

Table below indicates number of candidates and successful candidates to 3<sup>rd</sup> Year distributed by department over the last five years.

Table 5. Number of technician graduates accepted to 3<sup>rd</sup> Year Engineering Program.

| Dept.        | Number of candidates and successful candidates to Year 3 (I3) |                      |           |               |           |               |           |               |           |               |
|--------------|---------------------------------------------------------------|----------------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|
|              | 2021-2022                                                     |                      | 2022-2023 |               | 2023-2024 |               | 2024-2025 |               | 2025-2026 |               |
|              | Candidate                                                     | Successful Candidate | Candi.    | Succe. Candi. | Candi.    | Succe. Candi. | Candi.    | Succe. Candi. | Candi.    | Succe. Candi. |
| GCA          | 27                                                            | 15                   | 13        | 9             | 13        | 13            | 11        | 11            | 17        | 15            |
| GCI          | 12                                                            | 10                   | 6         | 2             | 12        | 11            | 13        | 11            | 33        | 19            |
| GAR          | -                                                             | 2                    | -         | -             | -         | 1             | -         | 2             | -         | -             |
| GEE          | 6                                                             | 3                    | 2         | 2             | 2         | 2             | 14        | 14            | 19        | 9             |
| GIC          | -                                                             | -                    | -         | -             | -         | -             | -         | -             | 1         | 1             |
| GIM          | 2                                                             | 2                    | 3         | 2             | 1         | 1             | 0         | 0             | 8         | 5             |
| GRU          | -                                                             | -                    | -         | -             | -         | -             | 1         | 1             | 4         | 3             |
| GTR          |                                                               | 3                    | -         | -             | -         | -             | 4         | 4             | 1         | 1             |
| <b>Total</b> | <b>47</b>                                                     | <b>35</b>            | <b>24</b> | <b>15</b>     | <b>28</b> | <b>28</b>     | <b>43</b> | <b>43</b>     | <b>83</b> | <b>53</b>     |

### 2.2.2. Entry into 3<sup>rd</sup> Year Engineering Program

Third year engineering program students may come from different sources:

- Engineering students who finished successfully 2<sup>nd</sup> year of foundation year,
- Graduates from Associate Degree if they pass writing test and interview,

Table below shows number of 3<sup>rd</sup> year Engineering students in 2025-2026.

Table 6. Number of 3<sup>rd</sup> year engineering students.

| Department   | I2 to I3   | T2 to I3  | Repeating students | Other     | Total      |
|--------------|------------|-----------|--------------------|-----------|------------|
| GCA          | 140        | 15        | 8                  | 5         | <b>168</b> |
| GCI          | 136        | 15        | 16                 | 14        | <b>181</b> |
| GAR          | 69         | 4         | 5                  | 1         | <b>79</b>  |
| GEE          | 102        | 9         | 18                 | 2         | <b>131</b> |
| GGG          | 38         | 0         | 4                  | 0         | <b>42</b>  |
| GIC          | 55         | 1         | 4                  | 1         | <b>61</b>  |
| GIM          | 76         | 5         | 5                  | 0         | <b>86</b>  |
| GRU          | 64         | 3         | 5                  | 0         | <b>72</b>  |
| GTR          | 37         | 1         | 6                  | 0         | <b>44</b>  |
| GTI          | 26         | 0         | 4                  | 1         | <b>31</b>  |
| AMS          | 62         | 0         | 9                  | 0         | <b>71</b>  |
| <b>Total</b> | <b>805</b> | <b>53</b> | <b>84</b>          | <b>24</b> | <b>966</b> |

## 2.3. Total number of students in 2025-2026

### 2.3.1. Total number of students in November 2025

As of November 2025, there are 7356 students (2645 females, 36%) in both Engineering and Associate programs (ITC-Phnom Penh) in academic year 2025-2026 shown in Table below.

Table 7. Total number of students in 2025-2026 at ITC-Phnom Penh.

| Dept.        | T1         | T2         | Total 1     | I1          | I2          | I3         | I4          | I5          | Total 2     | Total 1+2   |
|--------------|------------|------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|
| <b>DTC</b>   |            |            |             | 1377        | 1276        |            |             |             | <b>2653</b> | <b>2653</b> |
| <b>GCA</b>   | 252        | 186        | <b>438</b>  |             |             | 168        | 175         | 181         | <b>524</b>  | <b>962</b>  |
| <b>GCI</b>   | 118        | 105        | <b>223</b>  |             |             | 181        | 233         | 197         | <b>611</b>  | <b>834</b>  |
| <b>GAR</b>   | -          | -          | -           |             |             | 79         | 86          | 77          | <b>242</b>  | <b>242</b>  |
| <b>GEE</b>   | 158        | 153        | <b>311</b>  |             |             | 131        | 152         | 139         | <b>422</b>  | <b>733</b>  |
| <b>GGG</b>   | -          | -          | -           |             |             | 42         | 70          | 88          | <b>200</b>  | <b>200</b>  |
| <b>GIC</b>   | 148        | -          | <b>148</b>  |             |             | 61         | 96          | 88          | <b>245</b>  | <b>393</b>  |
| <b>GIM</b>   | 125        | 61         | <b>186</b>  |             |             | 86         | 111         | 140         | <b>337</b>  | <b>523</b>  |
| <b>GRU</b>   | 13         | 17         | <b>30</b>   |             |             | 72         | 74          | 86          | <b>232</b>  | <b>262</b>  |
| <b>GTR</b>   | 22         | 17         | <b>39</b>   |             |             | 44         | 67          | 29          | <b>140</b>  | <b>179</b>  |
| <b>GTI</b>   | -          | -          | -           |             |             | 31         | 58          | 45          | <b>134</b>  | <b>134</b>  |
| <b>AMS</b>   | -          | -          | -           |             |             | 71         | 80          | 90          | <b>241</b>  | <b>241</b>  |
| <b>Total</b> | <b>836</b> | <b>539</b> | <b>1375</b> | <b>1377</b> | <b>1276</b> | <b>966</b> | <b>1202</b> | <b>1160</b> | <b>5981</b> | <b>7356</b> |



Table below presents total number of students in 2025-2026 at ITC-Tbong Khmum Campus.

Table 8. Total number of students in 2025-2026 at ITC-Tbong Khmum.

| Dept.        | I1        |           | I2        |           | I3        |           | I4        |          | I5        |           | Total     | F  |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|----|
|              | Total     | F         | Total     | F         | Total     | F         | Total     | F        | Total     | F         |           |    |
| <b>DTC</b>   | 19        | 10        | 26        | 14        |           |           |           |          |           |           | <b>45</b> | 24 |
| <b>GCA</b>   |           |           |           |           | 9         | 9         |           |          | 10        | 10        | <b>19</b> | 19 |
| <b>GCI</b>   |           |           |           |           | 13        | 1         | 12        | 3        | 10        | 0         | <b>35</b> | 4  |
| <b>Total</b> | <b>19</b> | <b>10</b> | <b>26</b> | <b>14</b> | <b>22</b> | <b>10</b> | <b>12</b> | <b>3</b> | <b>20</b> | <b>10</b> | <b>99</b> | 47 |

### 2.3.2. Reorientation

The reorientation represents number of students who quitted ITC due to some reasons such as:

- Recipient of scholarship to study abroad
- Changing of institution
- Dropping out since beginning of academic year
- Family issue/financial difficulty
- Etc.

Table below summarizes number of reoriented students from 2<sup>nd</sup> to 5<sup>th</sup> Year. It is noted that 1<sup>st</sup> Year students just finished their 1<sup>st</sup> semester's exam. Therefore, number of reoriented students is not yet available at the time of reporting.

Table 9. Number of Reorientation of Engineering and Technician students.

|              | T1 | T2  | Total 1    | I1 | I2  | I3 | I4 | I5 | Total 2    | Total      |
|--------------|----|-----|------------|----|-----|----|----|----|------------|------------|
| <b>Total</b> | -  | 113 | <b>113</b> | -  | 181 | 72 | 38 | 10 | <b>301</b> | <b>414</b> |

### 2.4. Final Exam (End of Semester)

This academic year 2025-2026, final exam during the 18<sup>th</sup> week of semester was organized at ITC. The examination of some subjects has been made in advance because of special character (oral exam, projects...). The score is allocated according to the following scale:

- Attendance in class, TD and TP: 10%,
- Mid-term exam, project report, assignment, report of TP: 30-40%,
- Final exam: 50-60%.

It is noted that ITC management system has been developing under support of ARES-CCD project, Belgium. Score input is entered into this system by each lecturer.

## 2.5. Continuing Education

Continuing Education is designed for students graduated from associate degree or equivalent degree who would like to continue their study in order to upgrade their degree to Bachelor of Engineering. This pathway is to support lifelong learning policy.

This year, 209 new students (94 Females) have enrolled in this continuing education. Among them, 76 students (60 Females) enrolled in GCA Department, 39 (17 Females) in GCI department, 69 (14 Females) in GEE department and 25 (3 Females) in GIM department.

Table below shows total number of students registered for the continuing education.

Table 10. Number of students enrolled in the Continuing Education Program.

| Start        | End  | GCA        |            | GCI        |           | GEE        |           | GIM       |           |            |            |
|--------------|------|------------|------------|------------|-----------|------------|-----------|-----------|-----------|------------|------------|
|              |      | Total      | F          | Total      | F         | Total      | F         | Total     | F         | Total      | F          |
| 2023         | 2026 | 32         | 30         | 46         | 8         | 43         | 12        | 19        | 5         | 140        | 55         |
| 2024         | 2027 | 57         | 53         | 80         | 14        | 54         | 16        | 20        | 4         | 211        | 87         |
| 2025         | 2028 | 68         | 61         | 69         | 10        | 67         | 10        | 26        | 6         | 230        | 87         |
| 2026         | 2029 | 76         | 60         | 39         | 17        | 69         | 14        | 25        | 3         | 209        | 94         |
| <b>Total</b> |      | <b>233</b> | <b>204</b> | <b>234</b> | <b>49</b> | <b>233</b> | <b>52</b> | <b>90</b> | <b>18</b> | <b>790</b> | <b>323</b> |

Figures 3, 4, 5 and 6 below show number of students enrolled and graduated in GCI, GEE GCA and GIM departments respectively.

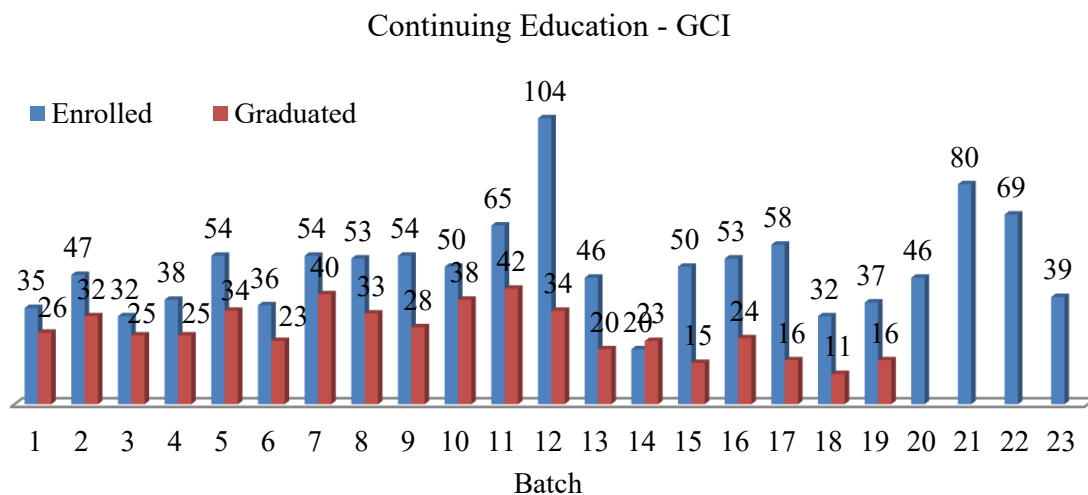


Figure 3. Number of students enrolled and graduated in continuing education (GCI).

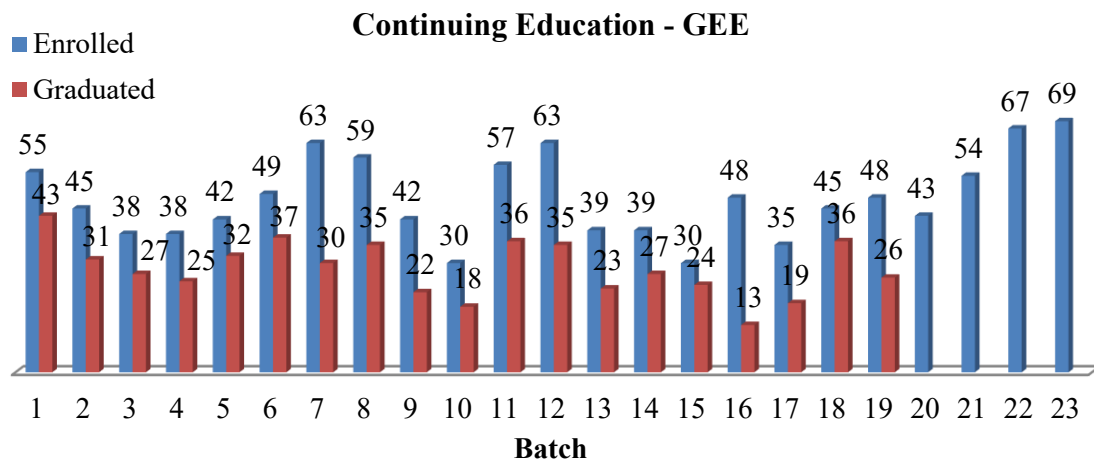


Figure 4. Number of students enrolled and graduated in continuing education (GEE).

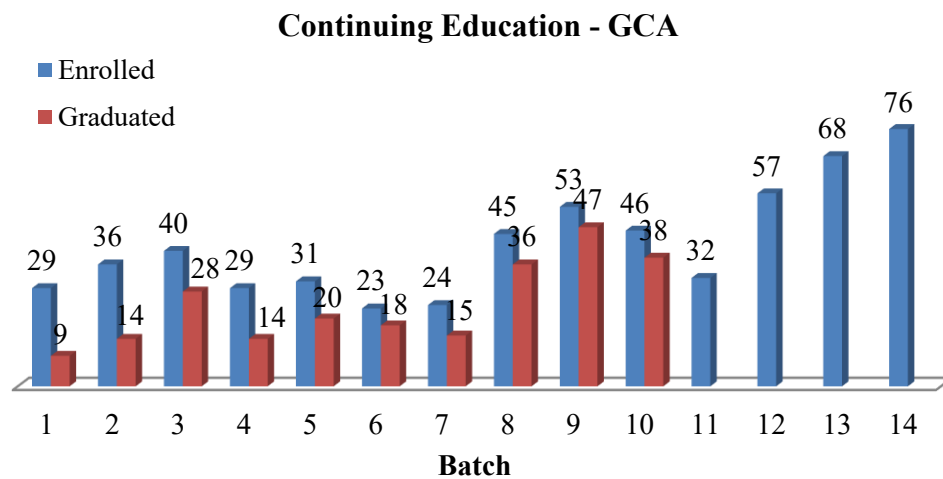


Figure 5. Number of students enrolled and graduated in continuing education (GCA).

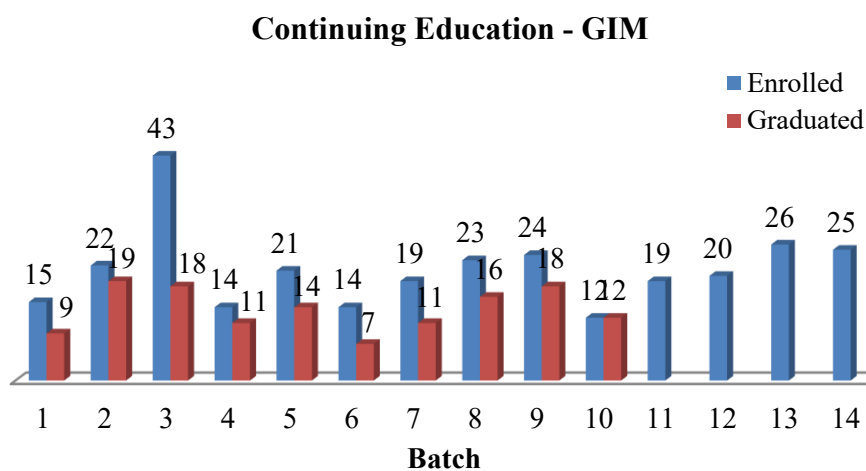


Figure 6. Number of students enrolled and graduated in continuing education (GIM).

## 2.6. Preparation of ITC students for exam of Grandes Ecoles in France

The cooperation between ITC and Ecole Polytechnique ParisTech was launched in 2007. It is mainly reflected by receiving at Department of Foundation Year long-term polytechnician trainees and organizing international exam of Ecole Polytechnique at ITC. A partnership agreement was signed between the two institutions.

An intensive session of preparation for Institut Polytechnique de Paris (IP Paris) was set up from 20 to 25 October 2025 for 6 eligible ITC students. This preparation has involved two French professors of preparatory classes of Grandes Ecoles (Olivier GRANIER and Philippe BARLIER).

The exam was conducted at Institut Francais du Cambodge on 11-12 November 2025 by an International Committee of Institut Polytechnique de Paris. Finally, five students have been accepted. Two of them will study at Ecole Polytechnique and Four at École nationale supérieure d'informatique pour l'industrie et l'entreprise (ENSIIE).

Since 2007-2008, at least 73 ITC students have joined one of the Grande Ecoles in France:

- 32 at Ecole Polytechnique,
- 4 at Ecole Supérieure de Physique et de Chimie Industrielles (ESPCI),
- 3 at Ecole Nationale Supérieure des Techniques Avancées (ENSTA),
- 25 at Ecole Nationale Supérieure d'Informatique pour l'Industrie et l'Entreprise (ENSIIE),
- 1 at Ecole Nationale Supérieure des Mines d'Albi,
- 2 at Ecole Nationale Supérieure des Mines d'Alès,
- 2 at Ecole Telecom Sud Paris, and
- 4 at Ecole Nationale de la Statistique et de l'Administration Economique (ENSAE).

These students get systematically scholarships, usually Eiffel Scholarship from Government of France.

Figure 7 shows number of ITC students integrated in the engineering schools since 2007-2008.

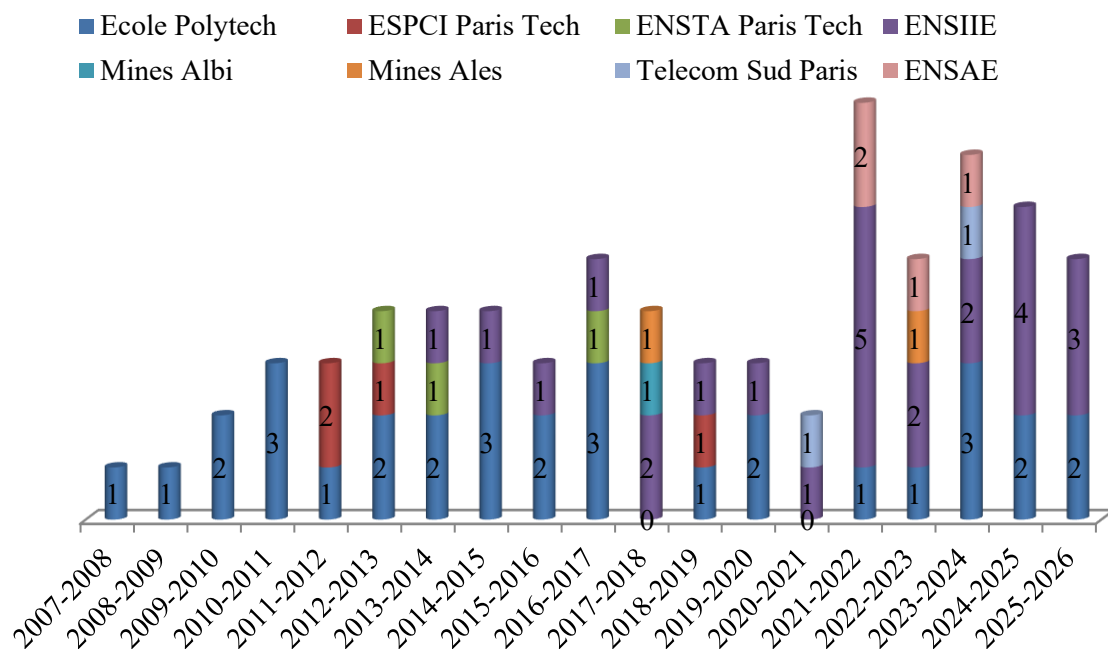


Figure 7. Number of ITC students integrated in an engineering school since 2007-2008.

## 2.7. The exam of Japanese Government Scholarship

Table below shows the number of ITC students who pass successfully the exam of Japanese Government Scholarship. In 2025-2026, 6 students of ITC among 32 successful candidates awarded MEXT Scholarship.

Table 11. Number of awardees of Japanese Government Scholarship 2025.

| Year    | Research |     | Undergraduate |     | National Institute of Technology |     | Specialized Training College |     | Total (ITC) |
|---------|----------|-----|---------------|-----|----------------------------------|-----|------------------------------|-----|-------------|
|         | Total    | ITC | Total         | ITC | Total                            | ITC | Total                        | ITC |             |
| 2010-11 | 9        | 0   | 0             | 0   | 0                                | 0   | 2                            | 2   | 11 (2)      |
| 2011-12 | 11       | 0   | 2             | 1   | 8                                | 8   | 7                            | 1   | 28 (10)     |
| 2012-13 | 11       | 0   | 0             | 0   | 14                               | 13  | 12                           | 3   | 37 (16)     |
| 2013-14 | 11       | 0   | 1             | 0   | 16                               | 15  | 9                            | 3   | 37 (18)     |
| 2014-15 | 12       | 2   | 2             | 0   | 15                               | 12  | 13                           | 7   | 42 (21)     |
| 2015-16 | 12       | 2   | 1             | 1   | 6                                | 3   | 7                            | 3   | 26 (9)      |
| 2016-17 | 12       | 3   | 1             | 1   | 7                                | 4   | 10                           | 5   | 30 (13)     |
| 2017-18 | 12       | 1   | 2             | 1   | 5                                | 4   | 3                            | 3   | 22 (9)      |
| 2018-19 | 12       | 5   | 1             | 1   | 7                                | 3   | 5                            | 0   | 25 (9)      |
| 2019-20 | 10       | 5   | 0             | 0   | 11                               | 8   | 8                            | 4   | 29 (17)     |
| 2020-21 | -        | -   | 0             | 0   | 14                               | 7   | 8                            | 3   | 22 (10)     |
| 2021-22 | 12       | 1   | 1             | 1   | 14                               | 11  | 9                            | 5   | 36 (19)     |
| 2022-23 | 10       | 1   | 0             | 0   | 10                               | 5   | 6                            | 1   | 27 (7)      |
| 2023-24 | 11       | 1   | 1             | 0   | 12                               | 6   | 10                           | 4   | 34 (11)     |
| 2024-25 | 12       | 1   | 2             | 1   | 10                               | 1   | 11                           | 5   | 31 (8)      |
| 2025-26 | 12       | 0   | 2             | 0   | 11                               | 4   | 7                            | 2   | 32 (6)      |

## 2.8. Activities Report of E-learning Center

### 2.8.1. Background

ASEAN Cyber University project was first proposed at the ASEAN – South Korea Summit in 2009. The project is expected to help establishing a foundation for sharing experiences, knowledge, and skills in higher education and long-distance education among ASEAN countries and South Korea. At the first stage, the project is designed to help the CLMV (Cambodia, Laos, Myanmar and Vietnam) countries acquire the technology and knowledge related to e-learning systems, to help students in remote areas access higher education.

In 2011, ITC was selected by the selection committee from Korea for setting up ASEAN Cyber University (ACU) and also mandated by the Ministry of Education, Youth and Sport (MoEYS) of Cambodia to implement the ACU Project. In the project, an e-learning center and multimedia studio

had been installed in May 2012 with a content development room, an operation room and learning management system (LMS) servers to host the e-learning course contents. The e-learning center is directly connected to the ACU hub center in Vietnam to share online courses among CLMV countries using TEIN (Trans-Eurasia Information Network) high speed network connection.

From January 2020, the ASEAN Cyber University project finished. There is no support from ACU for course development and course operation. ITC has moved all the courses (including the courses of our partners) to our own LMS for course operating in ITC.

The mission of this center are the follows:

- Promote e-learning activities in ITC
- Increase access to higher education using ICT as the tool for learning, teaching, and sharing information
- Promote Cambodia life-long learning
- Promote the collaboration on e-learning in CLMV countries
- Advocate best practice, strategy and policy for e-learning

### **2.8.2. Cambodian Cyber University Network (CCUN)**

In 2022, ITC supports the Directorate General of Higher Education of the Ministry of Education, Youth and Sport (DGHE/MoEYS) to prepare the concept note for the CCUN project. This project aims to improve higher education quality by using online and digital Teaching and Learning (T&L) materials. The project will connect the Higher Education Institutes (HEIs) in Cambodia through a common network infrastructure and LMS (Moodle). And through this common infrastructure and platform, Member Institutes (MIs) can share their digital content among each other's. The project will also promote the credit transfer among MIs and allow them to connect to global cyber universities network.

In the pilot phase of this project, in 2023, the CCUN involves six HEIs (ITC, RUPP, RUA, NUBB, SRU, UHST) as MIs. With the experience ITC gained from ACU project, ITC played a role as technical lead and support other five HEIs to development their e-learning activities.

From 2023, the activities of e-Learning Center of ITC are not only to promote the e-learning in ITC, but we put more focus to support all the CCUN's member to develop and implement their e-learning activities, while ITC handle also the CCUN's infrastructure and LMS.

In early 2024, to support the development of CCUN, the direction board of ITC decided to integrate ITC's LMS with CCUN. All the courses' materials (340+ courses from different programs (e-learning and non-learning)) at ITC are moved to CCUN's platform (<https://moodle.ccun.edu.kh>).

On June 25<sup>th</sup>, 2024, CCUN was officially launched under the high presidency of Samdech Moha Borvor Thipadei Hun Manet, Prime Minister of the Kingdom of Cambodia, and His Excellency Dr. Hang Chuon Naron, Deputy Prime Minister and Minister of the Ministry of Education, Youth and Sport, with 12 member universities. By the end of 2025, CCUN has total 20 member universities joining the network.



### 2.8.3. Activities 2025

Below paragraphs show a summary activities and result of CCUN implementation in 2025

- Organize 1 training on “e-Learning and Digital Content Development” with total 53 participants from 11 organizations.
- Organize 1 training on “Learning Management System (LMS) – Moodle Administration” with total 40 participants from 8 organizations.
- Organize a join workshop with UNESCO-ICHEI on “Using AI to Supporting Teaching and Learning” with 150 participants.
- Convert 20 courses (master of Agro-Industry, and master of Data Science) into e-learning materials.
- Operate 13 courses developed in 2023 and 2024: for academic 2024-2025, there are total 1270 enrollment (equal to 446 learners or individuals).

Remark: one learner can take several online courses which count as enrollment. For example, if one learner takes two courses, then there are two enrollments (to two different courses) while there is one learner.

In addition to above activities (in activities plan), ITC developed 5 courses for National University of Management (CCUN’s member) and supported the university to set up their e-learning studio.

ITC supported the Economic and Finance Institute to set up their e-learning environment and build human capacity. This includes

- Set up server and network infrastructure
- Set up and configure Learning Management System – Moodle
- Set up e-learning studio
- Provide capacity building on “e-Learning and Digital Content Development” and “Learning Management System (LMS) – Moodle Administration”
- Participate in develop content for EFI
- Continue to provide consultation to EFI as requested

ITC supported the Ministry of Rural Development (MRD) to develop 8 modules as part of the project “E-Learning on Climate-Risk Informed WASH Programming”. ITC also supported MRD to set up the e-learning environment and LMS.

## 2.9. Activities of ITC’s library

### 1. Introduction

The STEM Library, inaugurated in 2017 to a new building I at the Institute of Technology of Cambodia, is a brand-new facility designed to support academic and research activities in the fields of Science, Technology, Engineering, and Mathematics (STEM). The library is managed by a dedicated team of six librarians and houses an extensive collection of **13,350 books, 2,378 theses, 127 printed journals, may open educational resources and open access database**. It offers a variety of spaces to cater to diverse user needs, including **10 discussion rooms, 1 meeting room, 1 self-study room, and 3 startup rooms** for innovative projects and collaborative work. Since its establishment, the STEM Library has become a central hub for learning, research, and innovation, providing students, faculty, and researchers with the resources and environment necessary for academic success.

## 2. Access and Registration

The STEM Library is a popular destination for students, with an average of **200 students** visiting daily and **31000 yearly**. These students utilize the library for a variety of purposes, including **reading, completing assignments, self-study, and conducting research using the internet**. To ensure smooth access, the library has implemented an efficient registration system that allows users to create accounts and access resources seamlessly. At the beginning of each academic year, **new student orientations** are conducted to familiarize users with the library's facilities, services, and policies. These orientations have proven effective in helping users navigate the library's resources and spaces.

## 3. Circulation

The circulation desk is one of the busiest sections of the library. The library uses an **automated circulation system** to manage loans, returns, and overdue items, which has significantly improved efficiency and reduced errors. The most frequently borrowed items include **textbooks and theses**. The circulation service is very flexible to student need, for example if students are doing internship at a very far area, we allow students to borrow book with a very long duration by discussing with librarian.

## 4. Catalog

The library is currently in the process of transitioning from the **PMB library management system** to **Koha library management system**, an open-source system widely used by other university libraries. This transition is expected to be completed within the year and aims to improve catalog management, enhance user experience, and ensure compatibility with other institutions. Koha offers advanced features such as a **user-friendly interface, customizable search options, and integration with digital resources**. The new system will also allow users to access the catalog remotely, making it easier to search for and reserve materials. Training sessions for staff and users will be conducted to ensure a smooth transition.

## 5. Reference Service

The reference service is a critical component of the library's offerings, providing users with assistance in locating resources, conducting research, and using digital tools. In the past year, the reference team handled **many inquiries**, ranging from simple book searches to complex research assistance. While the service has been helpful, there is a need for improvement through **staff capacity building**. Plans are underway to organize **training sessions and workshops** focused on enhancing skills in research assistance, digital resource management, and user support. These initiatives will ensure that the reference team is equipped to meet the evolving needs of users.

## 6. Symposium Room Usage

The symposium room is one of the most frequently used spaces in the library, operating at **full capacity** throughout the year. Within the one whole year there are **3276 teams** book the room. It serves as a venue for **student discussions, teamwork, projects, and presentations**. Equipped with **smart TV and WiFi**, the room has become a preferred space for collaborative activities and academic events. The library plans to continue promoting the use of this space for academic and creative endeavors.

## 7. Partnership and Collaboration

The STEM Library has established **partnerships** with other university libraries to facilitate **webinars, training sessions, knowledge exchange, and mutual support**. These collaborations have enriched the library's resources and provided users with access to a broader range of materials and expertise. For example, the library has joint initiatives such as **webinars on digital literacy** and **workshops on research methodologies** have been organized to benefit users and staff alike. These partnerships have strengthened the library's role as a center for academic excellence.

## 8. Capacity Building

To enhance the quality of services, library staff have participated in seminars, workshops, and capacity-building programs in **Belgium**. These initiatives have focused on improving skills in **reference services, digital resource management, user engagement** and **Institutional Repository**.

### **3. Educational Report**

### 3.1. Overview of teaching/research staffs at ITC

#### 3.1.1. Number of lecturers/researchers

In 2025-2026, ITC has 398 (113 females, 28.4%) full-time, trainee and part-time lecturers, and researchers. Table below shows the number of lecturers and lecturer-researchers in different departments. Among these 398 lecturers/researchers, there are 124 PhD (31.2%), 226 Masters (56.8%) and 48 other degrees (12%). They give lectures and also participate in research projects, as well as other administrative tasks.

Table 12. Number of lecturers/researchers in different departments in 2025-2026.

| Degree      |           | GCA | GCI | GAR | GEE | GGG | GIC | GIM | GRU | GTR | GTI | MAS | DTC | SF | SA | Total |
|-------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-------|
| PhD         | Full-time | 14  | 15  | 0   | 7   | 11  | 1   | 8   | 12  | 5   | 1   | 3   | 0   | 0  | 0  | 77    |
|             | Trainee   | 8   | 5   | 3   | 1   | 3   | 1   | 3   | 7   | 1   | 1   | 1   | 0   | 0  | 0  | 34    |
|             | Part-time | 1   | 2   | 0   | 0   | 0   | 0   | 0   | 3   | 0   | 2   | 3   | 1   | 0  | 1  | 13    |
| Sub-Total 1 |           | 23  | 22  | 3   | 8   | 14  | 2   | 11  | 22  | 6   | 4   | 7   | 1   | 0  | 1  | 124   |
| Msc.        | Full-time | 3   | 3   | 0   | 6   | 2   | 12  | 14  | 7   | 3   | 1   | 5   | 9   | 5  | 2  | 72    |
|             | Trainee   | 19  | 9   | 4   | 15  | 4   | 8   | 11  | 12  | 3   | 1   | 1   | 2   | 0  | 1  | 90    |
|             | Part-time | 2   | 4   | 6   | 0   | 1   | 1   | 2   | 4   | 0   | 6   | 16  | 4   | 8  | 10 | 64    |
| Sub-Total 2 |           | 24  | 16  | 10  | 21  | 7   | 21  | 27  | 23  | 6   | 8   | 22  | 15  | 13 | 13 | 226   |
| Bsc.        | Full-time | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 3   | 4  | 0  | 7     |
|             | Trainee   | 0   | 0   | 0   | 1   | 0   | 6   | 1   | 2   | 0   | 0   | 0   | 0   | 1  | 0  | 11    |
|             | Part-time | 0   | 0   | 6   | 0   | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 1   | 17 | 5  | 30    |
| Sub-Total 3 |           | 0   | 0   | 6   | 1   | 0   | 6   | 1   | 2   | 1   | 0   | 0   | 4   | 22 | 5  | 48    |
| Total       |           | 47  | 38  | 19  | 30  | 21  | 29  | 39  | 47  | 13  | 12  | 29  | 20  | 35 | 19 | 398   |

Number of lecturers/researchers increases slightly each year. The evolution of number of lecturers/lecturer-researchers in the last 10 years is shown in Figure 8.

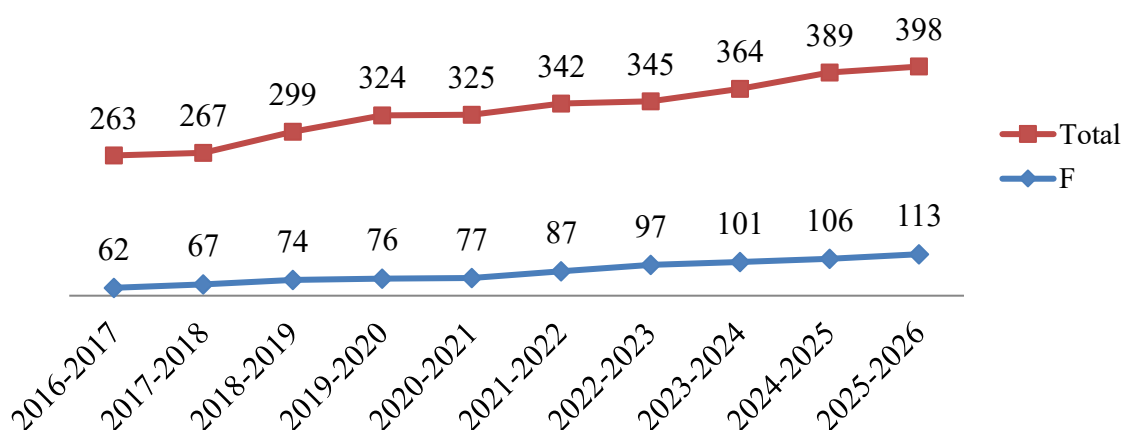


Figure 8. Evolution of number of lecturers/lecturer-researchers.

Evolution of number of lecturers/researchers with PhD and Master Degree is shown on Figure below. Through regional and international cooperation and partnership, number of PhD holders increases more than 2 times over the past 10 years, from 56 in 2016-2017 to 124 in 2025-2026. Number of Master holders also increases slightly every year from 139 in 2016-2017 to 226 in 2025-2026. They are potential human resources for teaching and doing research at ITC.

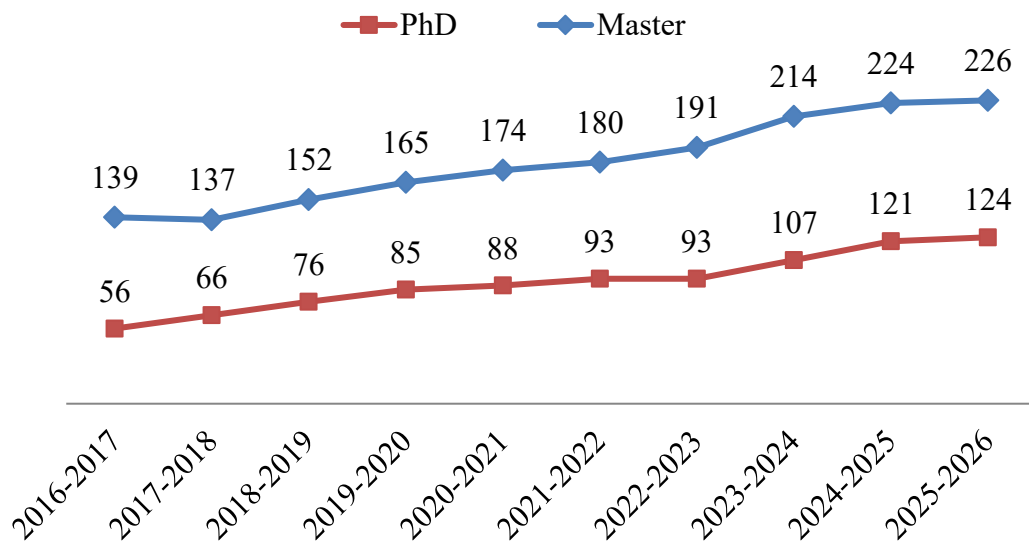


Figure 9. Evolution of number of PhD and Master holders.

### 3.1.2. Lecturers/researchers graduated from different countries

Lecturers/researchers of ITC were graduated from different countries and regions in the world:

- At local level in Cambodia (39.7%) in which most of them are lecturers in Department of Foundation Year, English and French Sections. Some of them were graduated Master or PhD from ITC's Graduate School.
- At regional level (18.6%) in 5 ASEAN countries: Thailand, Indonesia, Philippines, Malaysia, and Vietnam.
- At international level (41.7%) in 15 countries: France, Japan, Belgium, South Korea, Russia, China, Australia, Canada, USA, India, Mexico, Netherlands, New Zealand, Spain and England.

Figure 10 below indicates percentage by country that ITC lecturers/researchers were graduated from. Abroad, ITC lecturers/researchers graduated from France the most, followed by Japan, Thailand, Indonesia, Belgium and so on.

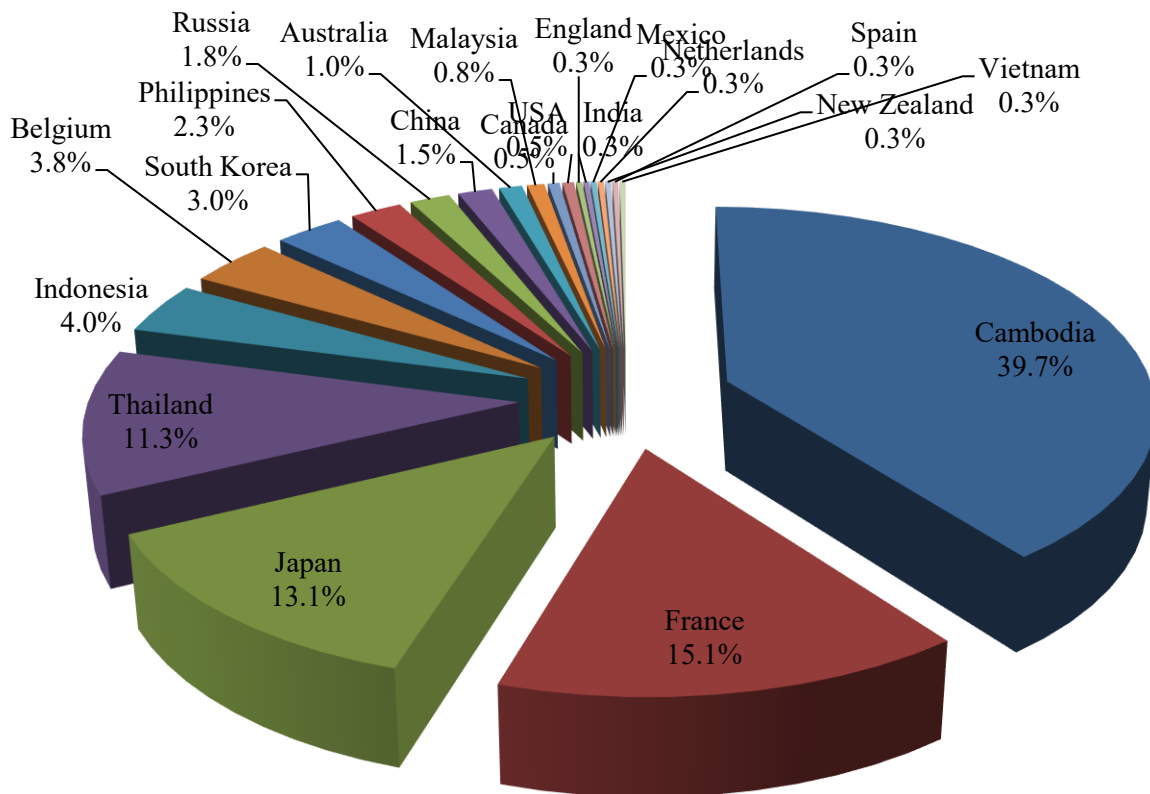


Figure 10. ITC lecturers/lecturer-researchers graduated from different countries.

### 3.1.3. Conclusion

Human capitals of ITC have increased every year, especially female teaching staffs almost double during the last 10 years. This year, number of PhD holders (124) is slight increased than last year (121), however number of PhD holders with civil servant status remaining the same (77).

With strong collaboration with partners and through some projects, young lecturers and students have been sent to partner universities abroad to continue their PhD's Degree abroad and will come back in the upcoming year. On the other hand, students earned Master and PhD Degree from ITC's Graduate School are also encouraged to work for ITC.

To ensure quality of teaching, research and also start-up and technology transfer, ITC needs to recruit and also maintain young Master and PhD holders who are dynamic for both academy and research.



### 3.2. Student Employability

An online survey on student employability was conducted in December 2025. 763 engineering students graduated in 2025 responded which is about 68% of total graduates (1130). Result of this survey is shown graphically in Figure 11.

Figure 11 shows that 82% of engineers graduated in 2025 are employed; 10% continues their studies mostly in overseas; and 8% are waiting for result of scholarship or seeking for employment.

Among the employed graduates, 89% works with private sector, 9% with public sector and 2% with others sectors.

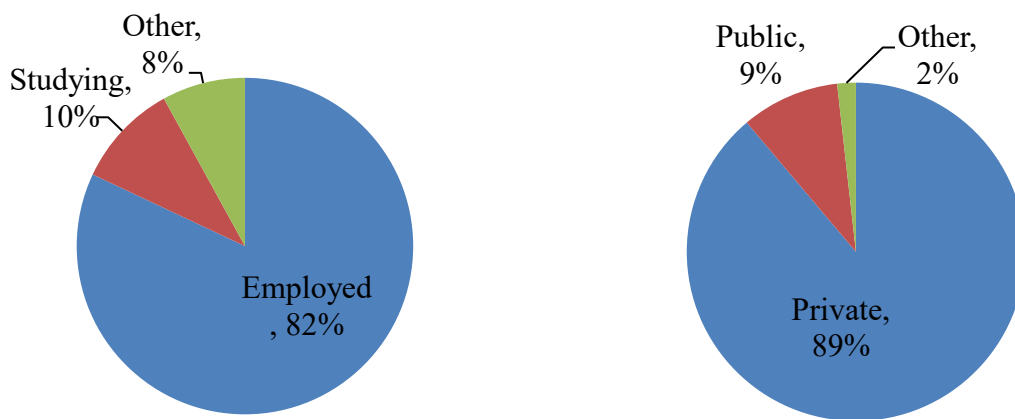


Figure 11. Engineering students graduated in 2024-2025.

Figure 12 shows that 38% of technicians graduated in 2025 are employed; 41% continue their studies to Engineer's degree or Continuing Education Program, and others 21% are seeking for a job or can not contact.

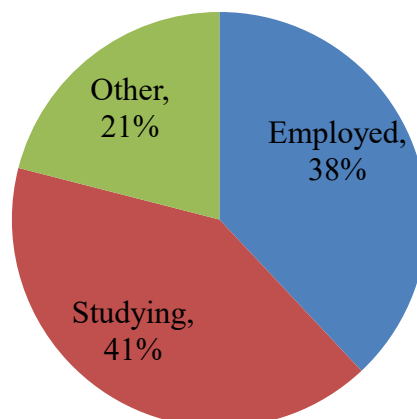


Figure 12. Technician students graduated in 2024-2025.

### 3.3. Graduate School of ITC

#### 3.3.1. Introduction

Graduate School of the Institute of Technology of Cambodia (GS-ITC) plays an important role in supporting and providing services regarding the development of human resources at graduate (Master and Doctoral) levels at ITC. Its prime objective is to increase the number of highly qualified human resources in fields of Sciences, Engineering, Technology and Architecture, to meet the demands of Cambodian economic development and society.

#### *Vision*

Excellence in graduate education in STEM so that graduates have full potentials and skills to meet the requirement of the Cambodia's 2030 vision.

#### *Mission*

GS-ITC commits to achieving the long-term vision of ITC concerning graduate education by providing services to the campus community that maintain integrity and excellence in graduate education in STEM through clear and consistent policies, high standards, efficient procedures, and direct student support. We seek to support and serve as a resource for all graduate students, and to support faculty and staff by fostering relationships, increasing communications and collaborations, and delivering comprehensive research and data resources to inform about graduate education. The graduate school:

1. Improve and develop graduate training programs in STEM to align with national, regional, and international standards.
2. Educate graduate students to have full potentials and skills in STEM to meet the requirement of the Cambodia's 2030 vision.

#### *Core Values*

- Excellence in graduate education
- Recruitment and graduation of outstanding students
- Ethical conduct and integrity in graduate studies and research
- Diversity among students, faculty, and staff
- Communication and collaboration throughout the graduate community
- Accountability and transparency
- Graduate-student professional development
- Preservation of academic standards
- Maintaining accurate data and records.

#### *Goals (2021-2030)*

1. Improve and develop **10 graduate training programs** in STEM to align with national, regional, and international standards.
2. Educate **952 graduate students** to have full potentials and skills in STEM to meet the requirement of the Cambodia's 2030 vision.

### 3.3.2. Summary of Realized Activities in 2025-2026

| No | Activities                                                                                           |                                   | Based line<br>(2024-25)    | Target<br>(2025-26)        | Realized<br>(March 2026)                   | Plan<br>2026-27            | Indicator              |
|----|------------------------------------------------------------------------------------------------------|-----------------------------------|----------------------------|----------------------------|--------------------------------------------|----------------------------|------------------------|
| 1  | Increase<br>number of<br>partnerships                                                                | Academic institutions             | 21                         | 23                         | 23                                         | 23                         | Number                 |
|    |                                                                                                      | Development<br>agencies           | 4                          | 4                          | 4                                          | 4                          | Number                 |
|    |                                                                                                      | Government/Private<br>sectors/NGO | 4                          | 5                          | 5                                          | 5                          | Number                 |
| 2  | Operate thematic programs (Master)                                                                   |                                   | 8                          | 9                          | 9                                          | 9                          | Number                 |
| 3  | Operate research-based program<br>(Master)                                                           |                                   | 7                          | 9                          | 9                                          | 9                          | Number                 |
| 4  | Seek for<br>funds/scholarships<br>to support students                                                | Master<br>programs                | 61<br>students<br>enrolled | 60<br>students<br>enrolled | 96<br>students<br>enrolled                 | 80<br>students<br>enrolled | Number                 |
|    |                                                                                                      | Doctoral<br>programs              | 57<br>students<br>enrolled | 57<br>students<br>enrolled | 58<br>students<br>enrolled                 | 58<br>students<br>enrolled |                        |
| 5  | Conduct fresh<br>graduate<br>employment survey<br>of master and<br>doctoral graduates<br>(annually). | Master                            | 52                         | 90                         | 68<br>(among all 69<br>fresh<br>graduates) | 90                         | Number of<br>responses |
|    |                                                                                                      | PhD                               | 9                          | 10 new                     | 40/41<br>(13 new<br>graduates)             | 10 new                     | Number of<br>responses |
| 6  | Internationalize<br>Master programs<br>through our<br>regional and<br>international<br>partnerships. | Programs<br>involved              | 5                          | 7                          | 5                                          | 7                          | Number                 |
|    |                                                                                                      | Student<br>inbound<br>mobility    | 1                          | 5                          | 0                                          | 5                          | Number                 |
|    |                                                                                                      | Student<br>outbound<br>mobility   | 22                         | 15                         | 12                                         | 15                         | Number                 |
|    |                                                                                                      | Staff mobility                    | 6                          | 9                          | 10                                         | 9                          | Number                 |
|    |                                                                                                      | Guest<br>lecturer                 | 6                          | 9                          | 3                                          | 9                          | Number                 |

|    |                                                                                                                                                                           |        |                              |                                                            |                              |                                                            |                        |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------------------------|------------------------------------------------------------|------------------------------|------------------------------------------------------------|------------------------|
| 7  | Increase communication among campus community, faculty staff and prospective students.                                                                                    |        | Website, Facebook, Telegram  | Website, Facebook, Telegram, study fair, promotional video | Website, Facebook, Telegram  | Website, Facebook, Telegram, study fair, promotional video | Means of communication |
| 8  | Develop E-learning courses                                                                                                                                                |        | 0                            | 5                                                          | 4                            | 10 (new)                                                   | Number                 |
| 9  | Increase number of research topics that respond to the societies needed through support from research fund institutions such as ministries, LBE/JICA project, WB project. | Master | 35                           | 40                                                         | 43                           | 40                                                         | Number                 |
|    |                                                                                                                                                                           | PhD    | 13                           | 10                                                         | 15                           | 10                                                         | Number                 |
| 10 | Increase number of students' publications in journals/conferences                                                                                                         | Master | 50<br>(all journal articles) | 55                                                         | 29<br>(all journal articles) | 50                                                         | Number                 |
|    |                                                                                                                                                                           | PhD    | 19<br>(16 journal articles)  | 30                                                         | 19<br>(18 journal articles)  | 30                                                         | Number                 |
| 11 | Enroll PhD students                                                                                                                                                       |        | 57<br>(13 new enrolled)      | 10 new enrolled                                            | 58<br>(15 new enrolled)      | 10 new enrollments                                         | Number                 |
| 12 | Number of PhD students graduated                                                                                                                                          |        | 28<br>(9 new graduates)      | 38<br>(plan 10 new graduates)                              | 41<br>(13 new graduates)     | 56<br>(plan 15 new graduates)                              | Number                 |
| 13 | Enroll Master students for the full-time thematic master programs                                                                                                         |        | 139                          | 150                                                        | 185                          | 180                                                        | Number                 |
| 14 | Number of Master students graduated (accumulated)                                                                                                                         |        | 463<br>(52 new graduates)    | 553<br>(plan 90 new graduates)                             | 532<br>(69 new graduates)    | 622<br>(plan 90 new graduates)                             | Number                 |

|    |                                                                                                                                                                                                                             |           |                     |                                 |                    |                                 |                                   |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------|
| 15 | Implementation of EDC-AFD-EU project to support Master and Doctoral program in Energy and Technology Management 2023-2027                                                                                                   | Enrolled  | 23 masters<br>4 PhD | 10 new masters                  | 13 new masters     | -                               | Number of master and PhD students |
|    |                                                                                                                                                                                                                             | Graduated | 9 Masters<br>0 PhD  | 21 Masters<br>(12 new)<br>0 PhD | 9 Masters<br>0 PhD | 33 Masters<br>(12 new)<br>2 PhD |                                   |
| 16 | Recruit 30 scholarship students (Bachelor, Master, PhD) to fully study at EU universities under the EU Global Gateway Scholarship on Water Professions Program, under the framework of Bakheng Water Supply Project Phase 3 |           | -                   | -                               | -                  | 20 new                          | Number                            |

### 3.3.3. Master Programs

#### 3.3.3.1. Overview

The master programs at ITC were authorized by the Ministry of Education Youth and Sport (MoEYS) since 2007 and launched the first promotions of different programs successively from 2010. The curricula were continuously updated from which a remarkable change from departments-based operation to a centralization at Graduate School in 2017. Six master programs were transformed to be thematic so that the students can be trained in multi-disciplinary skills.

In the academic year 2025-2026, the Graduate School of ITC offers 9 full-time thematic Master programs in the field of engineering and applied science (cf. table below). The calendar of semester 1 is from October 20, 2026 to February 13, 2026 and the semester 2 from March 2, 2025 to July 3, 2026.

#### *List of Thematic Master Programs*

| No | Program<br>( <b>Master of Engineering</b> )            | Eligible student's background               | Promo.             | Descended from  | Remark                                                                                                                                                                                                                                        |
|----|--------------------------------------------------------|---------------------------------------------|--------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Master of Materials and Structural Engineering (M-MSE) | GCI, GIM, GGG, GRU, others equivalent field | 15<br>(since 2010) | MGCI<br>(+MGIM) | <ul style="list-style-type: none"> <li>• In operation</li> <li>• Program Head: <i>Dr. LIM Sovanvichet</i></li> <li>• <b>Double degree with INSA de Rennes since 2010</b></li> <li>• <b>Double degree with Université de Rennes</b></li> </ul> |

|   |                                                                           |                                                  |                 |                     |                                                                                                                                                                                                                                                      |
|---|---------------------------------------------------------------------------|--------------------------------------------------|-----------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                                                           |                                                  |                 |                     | <b>and Université Toulouse III-Paul Sabatier since 2023</b> <ul style="list-style-type: none"> <li>• <b>Double degree with Université Sorbonne Paris Nord since 2024</b></li> </ul>                                                                  |
| 2 | Master of Energy Technology and Management Engineering (M-ETM)            | GIM, GEE, others equivalent field                | 9 (since 2011)  | MGIM (+MGEE)        | <ul style="list-style-type: none"> <li>• In operation</li> <li>• Program Head: <i>Dr. KHON Kimsrornn</i></li> <li>• <b>Double degree with Grenoble INP since 2024</b></li> <li>• <b>Financial support by EDC-AFD-EU project 2023-2027</b></li> </ul> |
| 3 | Master of Water and Environmental Engineering (M-WEE)                     | GRU, GCA, GCI, GGG, others equivalent field      | 11 (since 2012) | MGRU                | <ul style="list-style-type: none"> <li>• In operation</li> <li>Program Head: <i>Dr. THENG Vouchlay</i></li> </ul>                                                                                                                                    |
| 4 | Agro-industrial Engineering (M-AIE)                                       | GCA, GGG, RUPP, RUA, others equivalent field     | 11 (since 2012) | MGCA                | <ul style="list-style-type: none"> <li>• In operation</li> <li>• Program Head: <i>Dr. TY Boreborey</i></li> </ul>                                                                                                                                    |
| 5 | Master of Computer Science (M-ECS)                                        | GIC, GTR, others equivalent field                | 11 (since 2013) | MGIC                | <ul style="list-style-type: none"> <li>• In operation</li> <li>• Program Head: <i>Mr. HENG Rathpisey</i></li> </ul>                                                                                                                                  |
| 6 | Master of Mechatronics, Information and Communication Engineering (M-MIC) | GTR, GIM, GEE, GIC, others equivalent field      | 9 (since 2012)  | MGIM (+MGEE, +MGIC) | <ul style="list-style-type: none"> <li>• In operation</li> <li>• Program Head: <i>Dr. PEC Rothna</i></li> <li>• <b>Double degree with IMT Mines Alès since 2021</b></li> </ul>                                                                       |
| 7 | Master of Transport Engineering (M-TIE)                                   | GTI, GCI, GIM, GIC, GEE, others equivalent field | 5 (since 2020)  | -                   | <ul style="list-style-type: none"> <li>• In operation</li> <li>• Program Head: <i>Dr. SAUM Narith</i></li> </ul>                                                                                                                                     |
| 8 | Master of Data Science (M-DAS)                                            | AMS, GIC, GEE, MATH, others equivalent field     | 3 (since 2022)  | AMS (+MGIC)         | <ul style="list-style-type: none"> <li>• In operation</li> <li>• Program Head: <i>Dr. PHAUK Sökkhey</i></li> </ul>                                                                                                                                   |

|   |                                     |                                                        |                   |   |                                                                                                                                                             |
|---|-------------------------------------|--------------------------------------------------------|-------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9 | Master of Architectural Engineering | GAR, GTI, GRU, GCI, GIM, RUFA, others equivalent field | 1<br>(Since 2025) | - | <ul style="list-style-type: none"> <li>Licensed by MoEYS on 27 November 2024</li> <li>In operation</li> <li>Program Head: <i>Dr. KET Kannary</i></li> </ul> |
|---|-------------------------------------|--------------------------------------------------------|-------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------|

### ***Enrollment and Scholarship in 2025-2026***

The official announcement of all master's programs was released by ITC in April 2025 through the Graduate School, ITC's Facebook page, and Telegram channels. Students are offered two study pathways: the course-research pathway and the research-based pathway.

The standard duration of the master's programs is two years, structured as Year 1 (M1) and Year 2 (M2). Students holding an ITC Engineer's degree with sufficient qualifications may be admitted directly into the M2 program. This enables them to complete the master's degree in just one additional year, following the 5+1 program (five years in engineering plus one year in master's).

### ***Enrollment Summary***

| Category               | Total | Female |
|------------------------|-------|--------|
| Students enrolled      | 185   | 44     |
| Scholarship recipients | 96    | 29     |

The details of student enrollments, selected study pathways, and scholarship distribution, as well as sources of funding are presented in the tables below.

### ***Number of Students enrolled in 2025-2026***

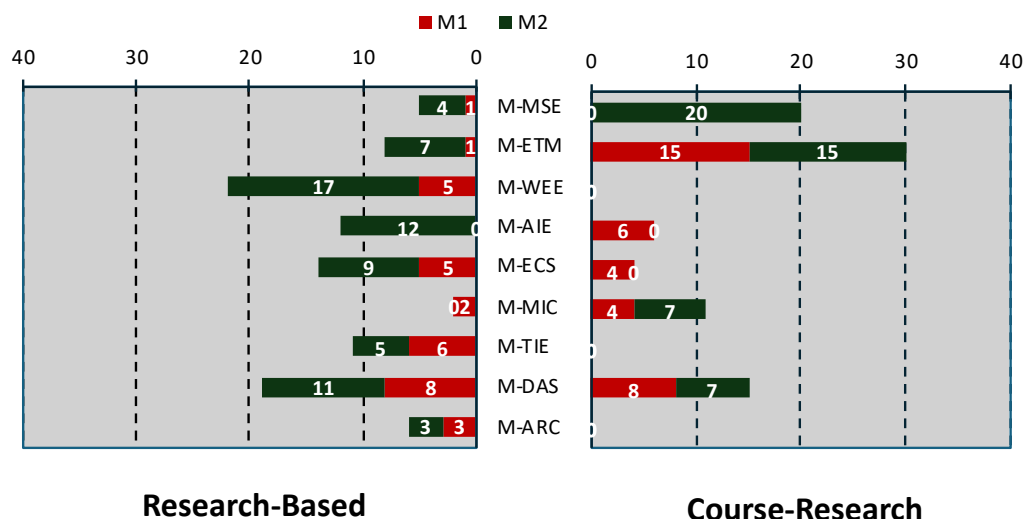
| Master Programs | Partial or Full Scholarship Students |   |       |   | Non-scholarship Students |   |       |   | Total | Female |
|-----------------|--------------------------------------|---|-------|---|--------------------------|---|-------|---|-------|--------|
|                 | M1                                   |   | M2    |   | M1                       |   | M2    |   |       |        |
|                 | Total                                | F | Total | F | Total                    | F | Total | F |       |        |
| M-MSE           | 0                                    | 0 | 5     | 2 | 0                        | 0 | 20    | 1 | 25    | 3      |
| M-ETM           | 16                                   | 4 | 15    | 4 | 0                        | 0 | 13    | 0 | 38    | 8      |
| M-WEE           | 2                                    | 1 | 8     | 4 | 3                        | 1 | 9     | 3 | 22    | 9      |
| M-AIE           | 4                                    | 2 | 9     | 4 | 2                        | 1 | 3     | 2 | 18    | 9      |
| M-ECS           | 4                                    | 2 | 2     | 0 | 5                        | 0 | 7     | 1 | 18    | 3      |
| M-MIC           | 4                                    | 1 | 4     | 2 | 2                        | 0 | 3     | 0 | 13    | 3      |
| M-TIE           | 4                                    | 0 | 0     | 0 | 2                        | 1 | 5     | 1 | 11    | 2      |



|              |           |           |           |           |           |          |           |           |            |           |
|--------------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|------------|-----------|
| M-DAS        | 11        | 2         | 5         | 0         | 5         | 2        | 13        | 2         | 34         | 6         |
| M-ARC        | 1         | 0         | 2         | 1         | 2         | 0        | 1         | 0         | 6          | 1         |
| <b>Total</b> | <b>46</b> | <b>12</b> | <b>50</b> | <b>17</b> | <b>21</b> | <b>5</b> | <b>74</b> | <b>10</b> | <b>185</b> | <b>44</b> |

The following graph shows the distribution of students by study's pathways.

***Master Students Registered in 2025-2026 (by Pathway)***



***Sources of Scholarships/funding in 2025-2026***

| Nº | Type/<br>Funder   | Benefit                              | Number of<br>students | Remark                                    |
|----|-------------------|--------------------------------------|-----------------------|-------------------------------------------|
| 1  | Erasmus+          | Mobility                             | 5                     | 4 students counted in HEIP 2 and ITC 100% |
| 2  | EDC-AFD-EU        | 100% Tuition Fee + Monthly allowance | 25                    |                                           |
| 3  | ITC 100%          | 100% Tuition Fee                     | 2                     |                                           |
| 4  | ITC-IMT           | 100% Tuition Fee + Mobility          | 1                     |                                           |
| 5  | IRD               | Tuition Fees + Research Fund         | 10                    |                                           |
| 6  | HEIP2             | 100% Tuition Fee                     | 11                    |                                           |
| 7  | HEIP-SRU          | 100% Tuition Fee                     | 3                     |                                           |
| 8  | EU-Cambodia       | 100% Tuition Fee + Monthly allow.    | 24                    |                                           |
| 9  | Techo Scholarship | 100% Tuition Fee                     | 8                     |                                           |
| 10 | INACON Project    | 100% Tuition Fee + Monthly allow.    | 4                     |                                           |
| 11 | NUM               | 100% Tuition Fee                     | 3                     |                                           |
| 12 | ADB               | 100% Tuition Fee                     | 1                     |                                           |

|              |        |                                      |           |  |
|--------------|--------|--------------------------------------|-----------|--|
| 13           | DCLab  | Tuition Fees + Research Fund         | 2         |  |
| 14           | Eiffel | 100% Tuition Fee + Monthly allowance | 1         |  |
| <b>Total</b> |        |                                      | <b>96</b> |  |

### ***Double-Degree Programs***

In the academic year 2025-26, a total of 14 students registered under double degree programs:

| <b>Program</b> | <b>Partner Institution</b> | <b>Students</b> |
|----------------|----------------------------|-----------------|
| M-MSE          | INSA Rennes                | 8               |
| M-MIC          | IMT Mines Alès             | 2               |
| M-ETM          | Grenoble INP               | 4               |

### ***Study Exchanges at Partner Universities***

Twelve students are currently studying or have undertaken exchanges at partner institutions:

| <b>Partner Institution</b> | <b>Program</b> | <b>Support</b>                   | <b>Students</b> |
|----------------------------|----------------|----------------------------------|-----------------|
| INSA Rennes                | M-MSE          | Self-support                     | 1               |
| IMT Mines Alès             | M-MIC          | Self-support, ITC-IMT and Eiffel | 2               |
| Université de Liège        | M-MSE          | Erasmus+                         | 1               |
| University of Namur        | M-DAS          | Erasmus+                         | 4               |
| Grenoble INP               | M-ETM          | EDC–AFD–EU                       | 4               |

### ***Graduates and Tracer study***

Table below presents the number of graduates in 2024-25 and the accumulative number since the start of the master's programs in 2010-11.

#### ***Graduates Statistics***

| <b>Academic Year / Period</b> | <b>Graduates</b> |               | <b>Scholarship Recipients</b> | <b>Double Degrees</b> |               |
|-------------------------------|------------------|---------------|-------------------------------|-----------------------|---------------|
|                               | <b>Total</b>     | <b>Female</b> |                               | <b>Total</b>          | <b>Female</b> |
| 2024–2025                     | 69               | 21            | 35                            | 18                    | 3             |
| 2010–2025 (cumulative)        | 532              | 140           | 244                           | 116                   | 15            |

The details of graduate's statistics and the double degree breakdown are presented in the following tables.

***Number of Students graduated from master programs in 2024-2025***

| Program | Number of students graduated in 2024-2025 |    |                          |    |       |        | Cumulative graduated students from Promotion 1 |       |        |
|---------|-------------------------------------------|----|--------------------------|----|-------|--------|------------------------------------------------|-------|--------|
|         | Partial or Full Scholarship Students      |    | Non-scholarship students |    | Total | Female |                                                |       |        |
|         | Total                                     | F  | Total                    | F  |       |        | Number of promotions                           | Total | Female |
| M-MSE   | 11                                        | 1  | 11                       | 2  | 22    | 3      | 15                                             | 152   | 17     |
| M-ETM   | 10                                        | 2  | 1                        | 0  | 11    | 2      | 10                                             | 56    | 3      |
| M-WEE   | 3                                         | 2  | 1                        | 1  | 4     | 3      | 11                                             | 135   | 57     |
| M-AIE   | 6                                         | 6  | 3                        | 3  | 9     | 9      | 10                                             | 54    | 44     |
| M-ECS   |                                           |    | 3                        | 1  | 3     | 1      | 11                                             | 47    | 7      |
| M-MIC   | 5                                         | 0  | 1                        | 0  | 6     | 0      | 10                                             | 50    | 5      |
| M-TIE   | -                                         | -  | 5                        | 0  | 5     | 0      | 5                                              | 18    | 1      |
| M-DAS   | -                                         | -  | 9                        | 3  | 9     | 3      | 3                                              | 20    | 6      |
| Total   | 35                                        | 11 | 34                       | 10 | 69    | 21     | Total                                          | 532   | 140    |

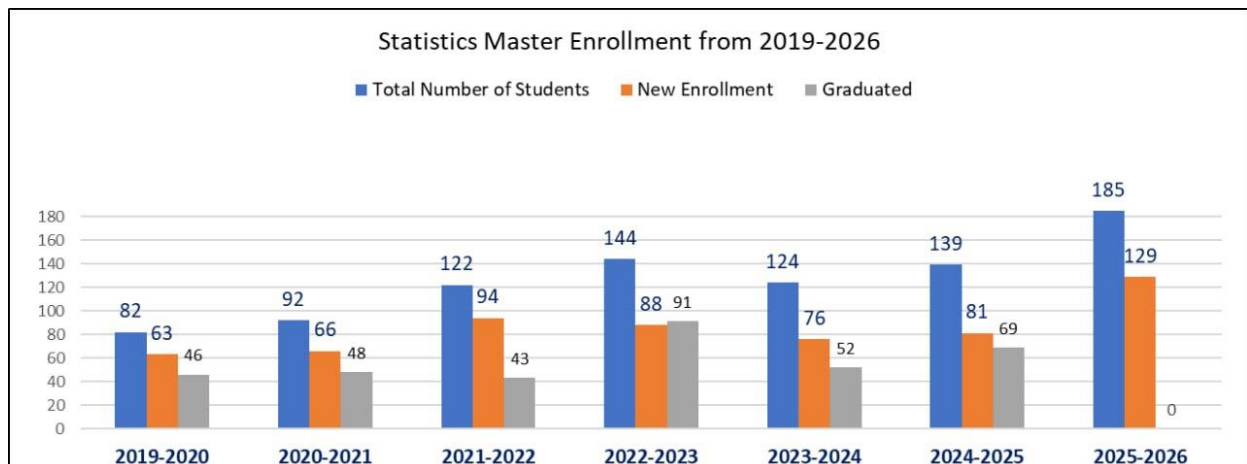
***Double Degree Breakdown***

| Partner Institution                     | 2024–2025 Graduates |          | 2010–2025 Graduates (Accumulative) |           |
|-----------------------------------------|---------------------|----------|------------------------------------|-----------|
|                                         | Total               | Female   | Total                              | Female    |
| INSA Rennes                             | 8                   | 2        | 102                                | 13        |
| Université de Rennes                    | 2                   | 0        | 3                                  | 0         |
| Université Toulouse III – Paul Sabatier | 2                   | 0        | 3                                  | 0         |
| Université Sorbonne Paris Nord          | 1                   | 0        | 1                                  | 0         |
| Grenoble INP                            | 5                   | 1        | 5                                  | 1         |
| IMT Mines Alès                          | -                   | -        | 2                                  | 1         |
| <b>Total</b>                            | <b>16</b>           | <b>3</b> | <b>116</b>                         | <b>14</b> |

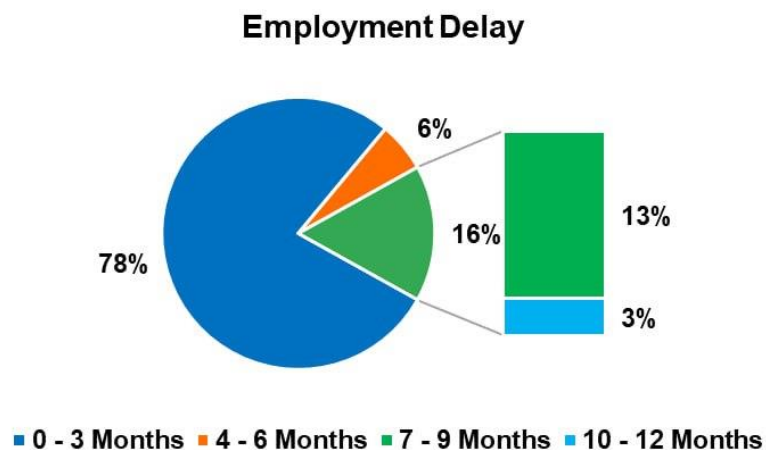
Lists of Master's Theses could be found on the webpage of the Graduate School (GS-ITC).



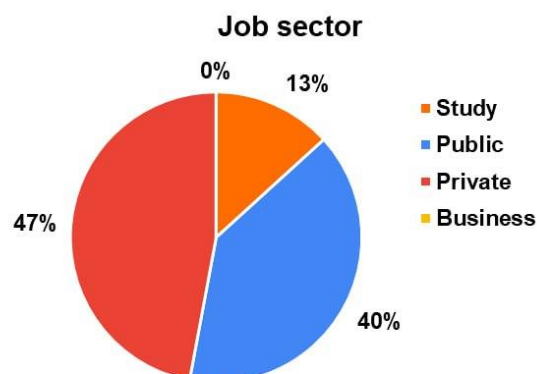
The following figure displays the evolution of enrollments and graduates from 2019 to the present time.



A survey on fresh graduates in 2024-2025 was conducted via Google Form. The objectives of this survey are to trace the employability and skills development of the graduates. 68 graduates responded to the questionnaires, that is 98.6%. The result of the survey shows that 78% of fresh graduates could find jobs immediately, 6% needed more than 3 months to find jobs and 16% spent more than 6 months to find jobs.



The survey also reveals the distribution of job sectors for fresh graduates. Forty percent of them work for public sector, 47% work for private sector, 13% continue their study and none run their own business.



When asking the question “Please evaluate the level of 5 following skills that you gained from your study in master program: creativity, teamwork, critical thinking, problem solving, and entrepreneurship (1 = Very little, 2 = Little, 3 = Much, 4 = Very much)”, 90% of them said that they gained (much or very much) the creativity skill, 72% gain the team work skill, 96% gain the critical thinking skill and 91% gain the problem solving skill. However, the rating on entrepreneurship skill remains behind other skills (only 44% of them are satisfied). Overall, the result looks similar if we compare with the 2023-2024 (see the table below).

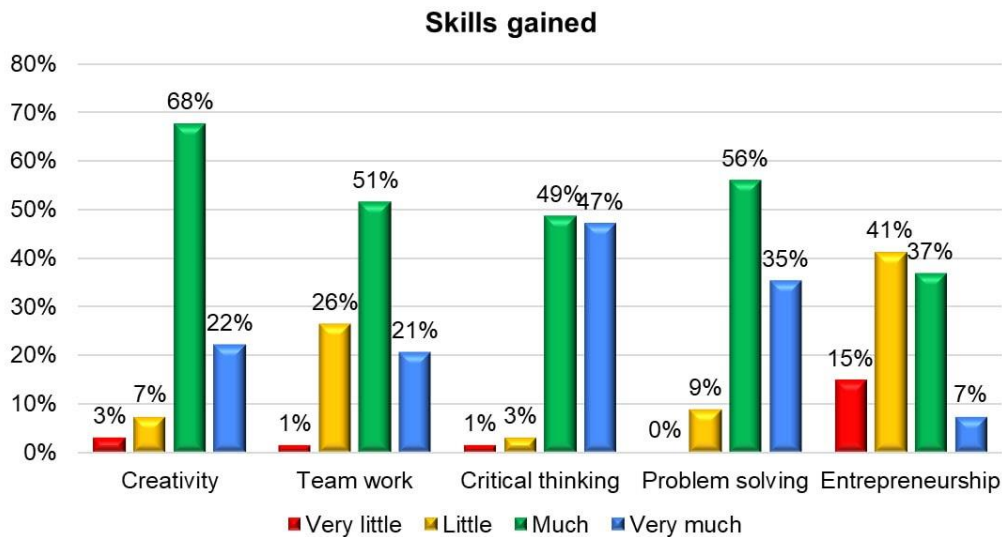


**Table: Average score (scale 4) for each skill**

| Year      | # of Graduate | # of Respondent | Creativity | Team-work | Critical thinking | Problem solving | Entrepreneurship |
|-----------|---------------|-----------------|------------|-----------|-------------------|-----------------|------------------|
| 2024-2025 | 69            | 68              | 3.1        | 2.9       | 3.4               | 3.3             | 2.4              |
| 2023-2024 | 53            | 53              | 3.2        | 3.1       | 3.5               | 3.2             | 2.6              |
| 2022-2023 | 91            | 91              | 3.0        | 3.0       | 3.2               | 3.1             | 2.4              |
| 2021-2022 | 43            | 33              | 3.0        | 3.2       | 3.2               | 3.2             | 2.5              |

### 3.3.3.2. Program M-MSE

#### *Program's objective*

Master's Degree Program of Materials and Structural Engineering, codeveloped by professionals and experts of INSA Rennes, France, is designed to provide students expertise in research, innovation, and complex problem solving of diverse engineering topics related to materials properties and structural engineering. In this program, qualified students can apply for double degrees issued by ITC and by INSA Rennes, and they can choose to study at ITC or at INSA Rennes.

**Program Coordinator:** Dr. LIM Sovannvichet

#### *Curriculum and syllabus*

M-MSE is a full-time program (1 to 3 years), classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 52 credits, 40 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students

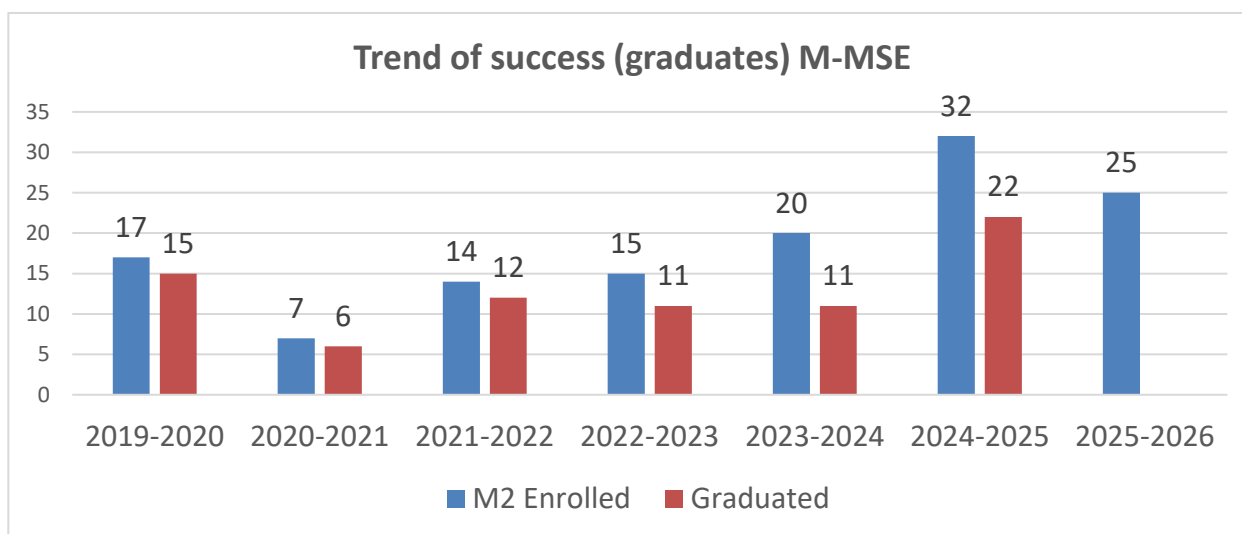
are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis, and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

### ***Students and alumni***

Starting in 2010-2011 academic year, in total, 152 students (17 females) graduated from the program, in which 102 (13 females) or 67% (8.6% females) of them obtained double degrees from INSA Rennes, 1 (0 female) from Université de Rennes and 1 (0 female) from Université Toulouse III-Paul Sabatier. In the academic year 2025-2026, there are 25 students (3 females) enrolling in the program and the details are reported in the table below.

| Pathway         | M1       |          | M2        |          | Total     | Female   | Remark                            |
|-----------------|----------|----------|-----------|----------|-----------|----------|-----------------------------------|
|                 | Total    | F        | Total     | F        |           |          |                                   |
| Course-research | 0        | 0        | 17        | 3        | 20        | 3        | Double degree:<br>(8) INSA Rennes |
| Research-based  | 1        | 0        | 4         | 0        | 5         | 0        |                                   |
| <b>Total</b>    | <b>1</b> | <b>0</b> | <b>21</b> | <b>3</b> | <b>25</b> | <b>3</b> |                                   |

The records of enrollments in M2 and numbers of graduates from 2019 to 2026 is displayed in the following figure. We observe that rate of success (ratio graduate/ M2 enrolled) is 73% in this program.



### ***Scholarships***

In this academic year 2025-2026, Only a student obtains scholarship and funding support from Erasmus+ for international mobilities to study or to do internship in partner universities.

### ***Lecturers***

This program involves over 15 faculty members whose specializations are in materials science and engineering, civil engineering, and structural engineering, etc. All of them hold doctoral degrees from Europe, Japan, and ASEAN. They serve as teaching resources and superiors for the master students M-MSE. Some students are jointly supervised by professors from partner universities. The list of faculty members for M-MSE can be found in **Annex 5** or on the website of GS-ITC.

### ***Theses and publications***

The list of published theses can be found in **Annex 6** or on the website of GS-ITC.

The list of publications can be found in **Annex 7**, the webpage of GS-ITC or via <https://techno-srj.itc.edu.kh/search?topic=10>

### **3.3.3.3. Program M-ETM**

#### ***Program's objective***

Master's Degree Program of Energy Technology and Management Engineering, technically supported by professionals and experts from European and ASEAN partner universities, is designed to provide students with technical skills, competencies, and expertise in the field of energy technology and management. Students will be equipped with advanced research methods, energy-related techniques and regulations, project management, and problem-solving methods. Graduates of M-ETM will be able to design effective techniques and tools, manage projects, and propose suitable solutions toward solving real-world energy-related problems.

***Program Coordinator:*** Dr. KHON Kimsornn

#### ***Curriculum and syllabus***

M-ETM is a full-time program (1 to 3 years), classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 54 credits, 42 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis, and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

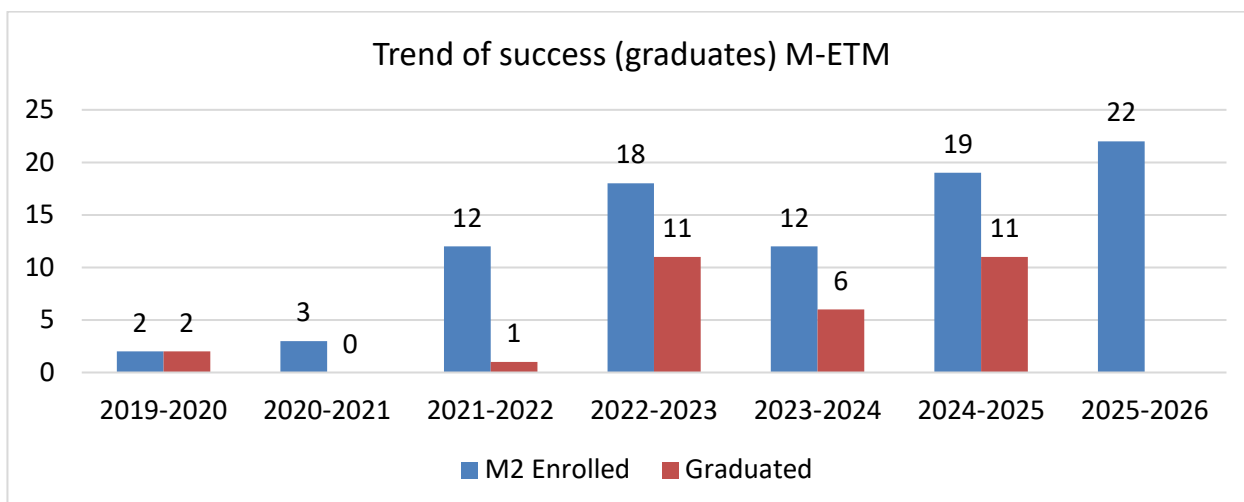
The curriculum of M-ETM is reviewed annually by the program's curriculum committee with consultation with stakeholders and partner universities, especially with INP Grenoble, France. In 2023, this program was evaluated as satisfactory by external expert panels (both technical and educational aspects) as it met the criteria set by the higher education's educational experts from the MoEYS and the World Bank (WB).

#### ***Alumni and Students***

From 2016-2017 academic year, in total, 56 students (3 females) graduated from the program. Currently, there are 38 students (8 females) enrolling in the program and the details are reported in the table below.

| Pathway         | M1        |          | M2        |          | Total     | Female   | Remark                             |
|-----------------|-----------|----------|-----------|----------|-----------|----------|------------------------------------|
|                 | Total     | F        | Total     | F        |           |          |                                    |
| Course-research | 15        | 3        | 15        | 3        | 30        | 6        | Double degree:<br>(4) Grenoble INP |
| Research-based  | 1         | 1        | 7         | 1        | 8         | 2        |                                    |
| <b>Total</b>    | <b>16</b> | <b>4</b> | <b>22</b> | <b>4</b> | <b>38</b> | <b>8</b> |                                    |

The records of M2 enrollments and numbers of graduates from 2019 to 2026 is displayed in the following figure. We observe that rate of success (ratio graduate/ M2 enrolled) is 47% in this program.



### ***Scholarships***

In this academic year 2026-2026, in total 31 students (8 females) obtain scholarships and funding support: 25 from EDC-AFD-EU (5 females) under the Platform for Research and Training on the Power System, 3 (2 females) from HEIP-2, 1 female from HEIP-SRU and 2 from EU-Cambodia scholarship.

### ***Lecturers***

This program involves over 14 faculty members whose specializations range from electrical energy, renewable energy to energy power management. Half the faculty members (7) hold doctoral degrees from Europe, Japan, Korea, and ASEAN. They serve as teaching resources and supervisors for the master students M-ETM. The list of faculty members for M-ETM can be found in **Annex 5** or on the website of GS-ITC.

### ***Theses and publications***

The list of published theses can be found in Annex 6 or on the website of GS-ITC.

Regarding the dissemination and publication, the list of publications can be found in Annex 7, on the website of GS-ITC, or the webpage: <https://techno-srj.itc.edu.kh/search?topic=10>.

## **3.3.3.4. Program M-WEE**

### ***Program's objective***

Degree Program of Water and Environmental Engineering, technically supported by professionals and experts from European and ASEAN partner universities, is designed to provide students with technical skills, competencies, and expertise in the field of water and environment. Students will be equipped with advanced research methods, water-related techniques, modern modeling tools and problem-solving methods, and after graduation, they will be able to design effective techniques and tools, manage projects, and propose suitable solutions toward solving real-world problems



including water supply and sanitation, irrigation and drainage, disaster management, wastewater treatment and disposal systems, transport and disposal systems and drainage systems.

**Program Coordinator:** Dr. THENG Vouchlay

### ***Curriculum and syllabus***

M-WEE is a full-time program (1 to 3 years), classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 54 credits, 42 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis and thesis defense. There are three specializations in M-WEE, namely, (1) Water Resources Engineering (WRE), (2) Urban Water and Sanitation Engineering (UWE), which receives full financial supports from AFD-EU to support both curriculum development and student scholarships, and (3) Environmental Engineering and Management (EEM). Detailed curriculum can be found on the website of GS-ITC.

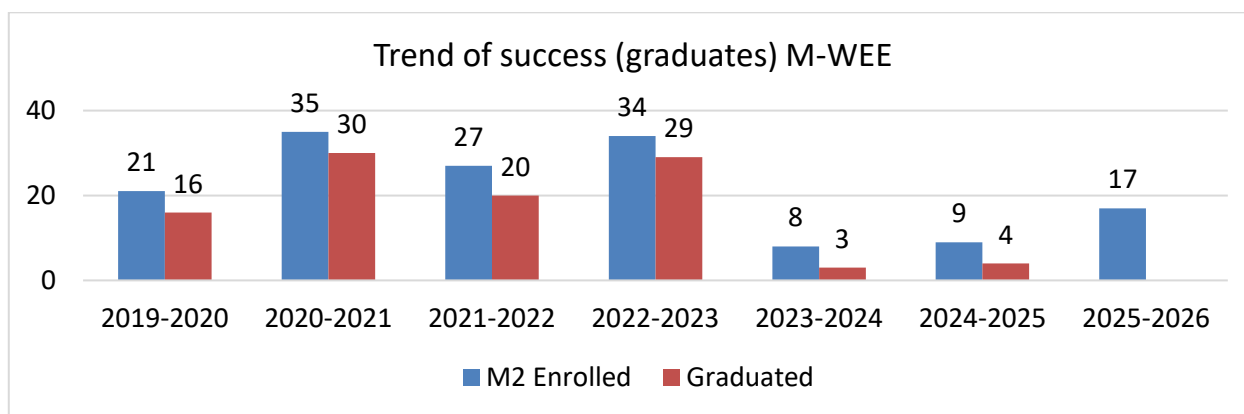
The curriculum of M-WEE is reviewed annually by the program's curriculum committee with consultation with stakeholders and partner universities, especially, with Chulalongkorn University (CU), Thailand--a partner under HEIP project and with Pau University, France. In 2023, this program was evaluated by external expert panels (both technical and educational aspects) to see whether the program meets the modest standard criteria set by the higher education's educational experts from the MoEYS and the World Bank (WB). Overall score results were 3/4 with satisfaction of the evaluation.

### ***Alumni and Students***

Starting in 2012-2013 academic year, in total, 135 students (57 females) graduated from the program. Currently, there are 22 students (9 females) enrolling in the program. The details are reported in the table below.

| Pathway         | M1       |          | M2        |          | Total     | Female   | Remark |
|-----------------|----------|----------|-----------|----------|-----------|----------|--------|
|                 | Total    | F        | Total     | F        |           |          |        |
| Course-research | 0        | 0        | 0         | 0        | 0         | 0        |        |
| Research-based  | 5        | 2        | 17        | 7        | 22        | 9        |        |
| <b>Total</b>    | <b>5</b> | <b>2</b> | <b>17</b> | <b>7</b> | <b>22</b> | <b>9</b> |        |

The time series of M2 enrollments and numbers of graduates from 2019 to 2026 is displayed in the following figure. We observe that rate of success (ratio graduate/ M2 enrolled) is 76% in the program.



### ***Scholarships***

In this 2025-2026 academic year, 8 students (5 females) receive scholarship supports, 1 female student receive ADB scholarship, 4 students (2 females) receive IRD scholarship, 1 student receive EU-Cambodia scholarship, 1 female student receive HEIP-2, and 1 female student receive scholarship from INACON Project.

### ***Lecturers***

This program involves over 20 faculty members whose specializations are in water resources, hydrology, environmental engineering. Most of them hold doctoral degrees from Europe, Japan, Korea, and ASEAN. They serve as teaching resources and superiors for the master students M-WEE. Some students are jointly supervised by professors from partner universities. The list of faculty members for M-WEE can be found Annex 5 or on the website of GS-ITC.

### ***Theses and publications***

The list of published theses can be found in Annex 6 or on the website of GS-ITC.

Regarding the dissemination and publication, the list of publications can be found in Annex 7 or on the website of GS-ITC or via <https://techno-srj.itc.edu.kh/search?topic=10>.

### **3.3.3.5. Program M-AIE**

#### ***Program's objective***

Master's Degree Program of Agro-industrial Engineering, technically supported by professionals and experts from European and ASEAN partner universities, is designed to provide students with technical skills, competencies, and expertise in the field of agro-industrial engineering. Students will be equipped with advanced research methods, food processing and development techniques, business and entrepreneurship skills and problem-solving methods. As graduates of M-AIE, they will be able to design innovative techniques and processes, manage projects and propose suitable solutions toward solving real-world problems in food industries. Graduates can also apply their knowledge and skills to do develop their own businesses.

***Program Coordinator:*** Dr. TY Boreborey

## ***Curriculum and syllabus***

M-AIE is a full-time program (1 to 3 years), classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 54 credits, 42 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

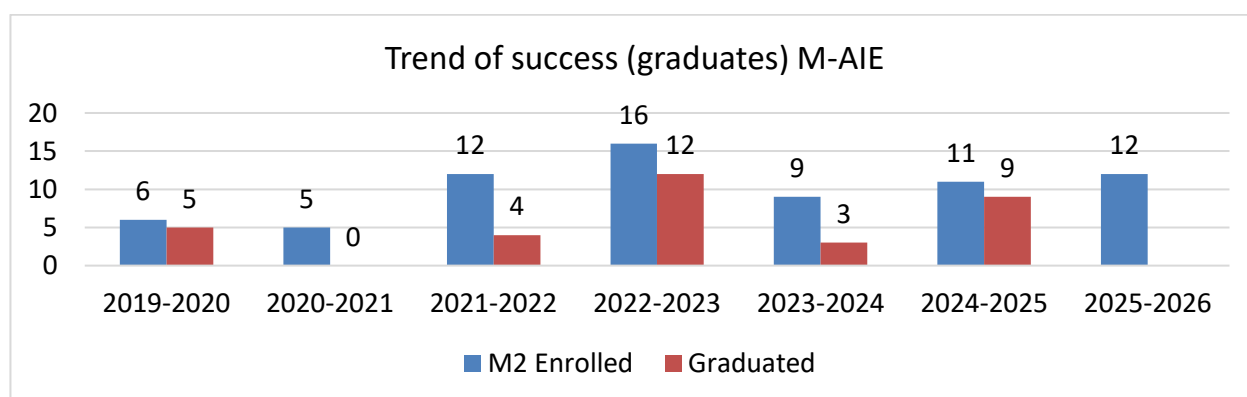
The curriculum of M-AIE is reviewed annually by the program's curriculum committee with consultation with stakeholders and partner universities, especially, with Kasetsart University (KU), Thailand--a partner under HEIP project and AgroSup Dijon, France. In 2023, this program was evaluated by external expert panels (both technical and educational aspects) to see whether the program meets the modest standard criteria set by the higher education's educational experts from the MoEYS and the World Bank (WB). Overall score results were 3/4 with satisfaction of the evaluation.

## ***Alumni and Students***

Starting in 2019-2020 academic year, in total, 54 students (44 females) graduated from the program. In the academic year 2025-2026, there are 18 students (9 female) enrolling in the program and the details are reported in the table below.

| Pathway         | M1       |          | M2        |          | Total     | Female   | Remark |
|-----------------|----------|----------|-----------|----------|-----------|----------|--------|
|                 | Total    | F        | Total     | F        |           |          |        |
| Course-research | 6        | 3        | 0         | 0        | 6         | 3        |        |
| Research-based  | 0        | 0        | 12        | 6        | 12        | 6        |        |
| <b>Total</b>    | <b>6</b> | <b>3</b> | <b>12</b> | <b>6</b> | <b>18</b> | <b>9</b> |        |

The records of enrollments of master students (M1 and M2) and numbers of graduates from 2019 to 2026 is displayed in the following figure. We observe that rate of success (ratio graduate/ M2 enrolled) is 56% in this program.



## ***Scholarships***

In this academic year 2025-2026, 13 students (6 females) obtain scholarships. 4 students (2 females) receive EU-Cambodia scholarship, 2 students receive Techo scholarship, 1 student receives AWPB, 1 female student receives HEIP-2, and 5 students (3 females) from IRD projects.

### ***Lecturers***

This program involves over 20 faculty members whose specializations are in food science and technology, food processing, agro-industrial engineering, chemical engineering, ... All of them hold doctoral degrees from Europe, Japan, and ASEAN. They serve as teaching resources and superiors for the master students M-AIE. Some students are jointly supervised by professors from partner universities. The list of faculty members for M-AIE can be found Annex 5 or on the website of GS-ITC.

### ***Theses and publications***

The list of published theses can be found in Annex 6 or on the website of GS-ITC.

The list of publications can be found in Annex 7 or on the website of GS-ITC or via <https://techno-srj.itc.edu.kh/search?topic=10>.

### **3.3.3.6. Program M-ECS**

#### ***Program's objective***

Master's Degree Program of Computer Science aims to provide students with essential skills and advanced research methods, in the field of Computer Science, Artificial Intelligence (AI) applications and Information Security, to address the current trends of fast-growing technology and digitalization.

***Program Coordinator:*** Mr. HENG Rathpisey

#### ***Curriculum and syllabus***

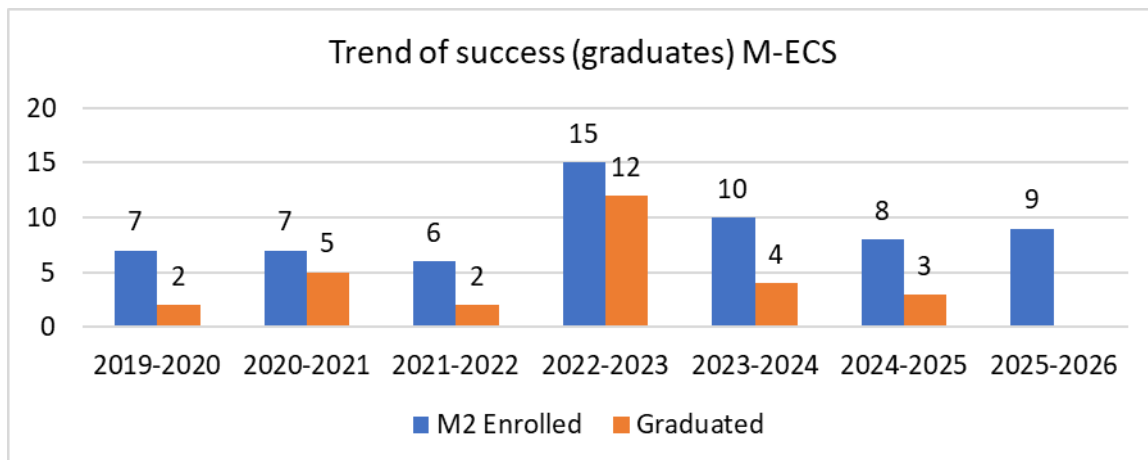
M-ECS is a full-time program, classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 54 credits, 42 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

#### ***Alumni and Students***

Starting in academic 2013-2014, in total, 47 students (7 females) graduated from the program. In the academic year 2024-2025, there are 18 students (3 female) enrolling in the program and the details are reported in the table below.

| Pathway         | M1       |          | M2       |          | Total     | Female   | Remark |
|-----------------|----------|----------|----------|----------|-----------|----------|--------|
|                 | Total    | F        | Total    | F        |           |          |        |
| Course-research | 4        | 1        | 0        | 0        | 4         | 1        |        |
| Research-based  | 5        | 1        | 9        | 1        | 14        | 2        |        |
| <b>Total</b>    | <b>9</b> | <b>2</b> | <b>9</b> | <b>4</b> | <b>18</b> | <b>3</b> |        |

The time series of M2 enrollments and numbers of graduates from 2019 to 2026 is displayed in the following figure. We observe that rate of success (ratio graduate/ M2 enrolled) is 53% in this program.



### ***Scholarships***

In this academic year 2025-2026, five students (1 female) obtain scholarships and funding support: 3 (1 female) students receive EU-Cambodia scholarship, 1 student receives ITC scholarships and 1 student receives DCLab fund.

### ***Lecturers***

This program involves over 18 faculty members whose specializations are in software engineering, IT, machine learning, deep learning, AI, information security, computer vision, NLP, data science, etc. Among these, 67% (10 lecturers) of them hold doctoral degrees from Europe, Japan, Korea, and ASEAN. They serve as teaching resources and superiors for the master students M-ECS. Some students are jointly supervised by professors from partner universities. The list of faculty members for M-ECS can be found in Annex 5 or on the website of GS-ITC.

### ***Theses and publications***

The list of published theses can be found in Annex 6 or on the website of GS-ITC.

The list of publications can be found in Annex 7, on the website of GS-ITC, or in the webpage of Techno-Science Research Journal: <https://techno-srj.itc.edu.kh/search?topic=3>.

### **3.3.3.7. Program M-MIC**

#### ***Program's objective***

Multidisciplinary master's degree Program of Mechatronics, Information and Communication Engineering, technically supported by professionals and experts from stakeholders and European partner university, is designed to equip students with a broad range of skills and knowledge that seek the applications in engineering disciplines ranging from mechanical design to software engineering as well as those more purely focused on mechatronics, automation, and robotics. Graduates from this program are employed in industries ranging from mining to manufacturing, agriculture, and defense.

**Program Coordinator:** Dr. PEC Rothna

### **Curriculum and syllabus**

M-MIC is a full-time program, classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 54 credits, 42 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

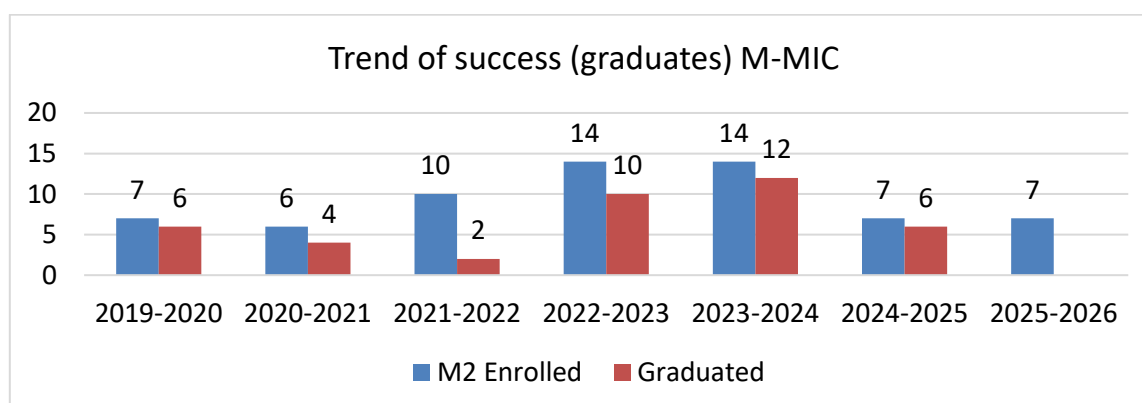
The curriculum of M-MIC is reviewed annually by the program's curriculum committee with consultation with stakeholders and partner university, namely, IMT Mines Alès, France--a partner under HEIP project. In 2023, this program was evaluated by external expert panels (both technical and educational aspects) to see whether the program meets the modest standard criteria set by the higher education's educational experts from the MoEYS and the World Bank (WB). Overall score results were 3/4 with satisfaction of the evaluation.

### **Alumni and Students**

Starting in academic 2013-2014, in total, there were 50 students (5 females) graduated from the program. Currently, there are 13 students (3 female) enrolling in the program and the details are reported in the table below.

| Pathway         | M1       |          | M2       |          | Total     | Female   | Remark                            |
|-----------------|----------|----------|----------|----------|-----------|----------|-----------------------------------|
|                 | Total    | F        | Total    | F        |           |          |                                   |
| Course-research | 4        | 1        | 7        | 2        | 11        | 3        | Double degree: (2) IMT Mines Alès |
| Research-based  | 2        | 0        | 0        | 0        | 2         | 0        |                                   |
| <b>Total</b>    | <b>6</b> | <b>1</b> | <b>7</b> | <b>2</b> | <b>13</b> | <b>3</b> |                                   |

The time series of enrollments and numbers of graduates from 2019 to 2026 is displayed in the following figure. We observe that rate of success (ratio graduate/ M2 enrolled) is 69% in this program.



### **Scholarships**

In this academic year 2025-2026, eight students (3 female) obtain scholarships and funding support: 1 student receive Eiffel scholarship, 1 female student receives ITC-IMT scholarship, 2

students (1 female) receive EU-Cambodia scholarships, 2 students receive NUM scholarships, 1 female student receives Techo scholarship, and 1 student receives DCLab scholarships.

### ***Lecturers***

This program involves over 15 faculty members whose specializations are in electronics, mechanical engineering, control system, mechatronics, robotics, automation, machine learning, and data science, IT, telecommunication engineering, etc. Most of them hold doctoral degrees from Europe, Japan, Korea, and ASEAN. They serve as teaching resources and superiors for the master students M-MIC. Some students are jointly supervised by professors from partner universities. The list of faculty members for M-MIC can be found in Annex 5 or the website of GS-ITC.

### ***Theses and publications***

The list of published theses can be found in Annex 6 or in or the website of GS-ITC.

The list of publications can be found in Annex 7 or in the website of GS-ITC the webpage of GS-ITC or via <https://techno-srj.itc.edu.kh/search?topic=10>

## **3.3.3.8. Program M-TIE**

### ***Program's objective***

Master's Degree Program of Transport Engineering is designed to provide students expertise in research, innovation, and complex problem solving of diverse engineering topics related to transport engineering and public infrastructure. It addresses the solution toward land, air and water transportation issues including traffic congestion and accidents, public transport systems, transport policy, logistic networks, energy consumption, aviation issues, environmental matters, etc.

***Program Coordinator:*** Dr. SAUM Narith

### ***Curriculum and syllabus***

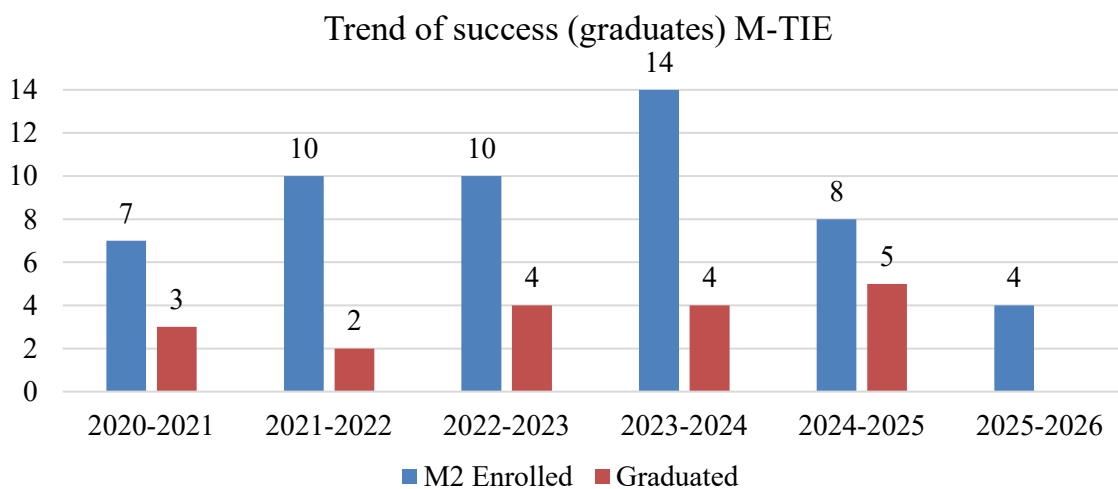
M-TIE is a full-time program, classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 52 credits, 40 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

### ***Alumni and Students***

Starting in academic 2020-2021, in total, 18 students (1 female) graduated from the program. Currently, there are 10 students (2 females) enrolling in the program, and the details are reported in the table below.

| Pathway         | M1       |          | M2       |          | Total     | Female   | Remark |
|-----------------|----------|----------|----------|----------|-----------|----------|--------|
|                 | Total    | F        | Total    | F        |           |          |        |
| Course-research | 0        | 0        | 0        | 0        | 0         | 0        |        |
| Research-based  | 6        | 1        | 4        | 1        | 10        | 2        |        |
| <b>Total</b>    | <b>6</b> | <b>1</b> | <b>4</b> | <b>1</b> | <b>10</b> | <b>2</b> |        |

The records of enrollments in M2 and the number of graduates from 2019 to 2026 are displayed in the following figure. We observe that the rate of success (ratio graduate/ M2 enrolled) is only 37% in this program.



### ***Scholarships***

In this academic year 2025-2026, 4 students obtained scholarships and funding support from EU-Cambodia scholarships.

### ***Lecturers***

This program involves over 14 faculty members whose specializations are in transport engineering, logistics, civil engineering, public infrastructure, etc. Among these, 11 of them hold doctoral degrees from Europe, Japan, Korea, and ASEAN. They serve as teaching resources and superiors for the master students M-TIE. Some students are jointly supervised by professors from partner universities. The list of faculty members for M-TIE can be found in Annex 5 or in the website of GS.

### ***Theses and publications***

The list of published theses can be found in Annex 6 or in the website of GS.

The list of publications can be found in Annex 7 or in the website of GS-ITC or via <https://techno-srj.itc.edu.kh/search?topic=10>.



### 3.3.3.9. Program M-DAS

#### *Program's objective*

Master's Degree Program of Data Science, codeveloped by professionals and experts of IMT and ENSIIE, France, uses real-world problems and situations to prepare graduates for roles as strategic thought leaders who leverage predictive modeling to drive decision making. Students will develop in-depth understanding of key technologies in data science and business analytics: data mining, machine learning, visualization techniques, predictive modeling and Statistics.

**Program Coordinator:** Dr. PHAUK Sokkhey

#### *Curriculum and syllabus*

M-DAS is a full-time program, classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 54 credits, 42 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

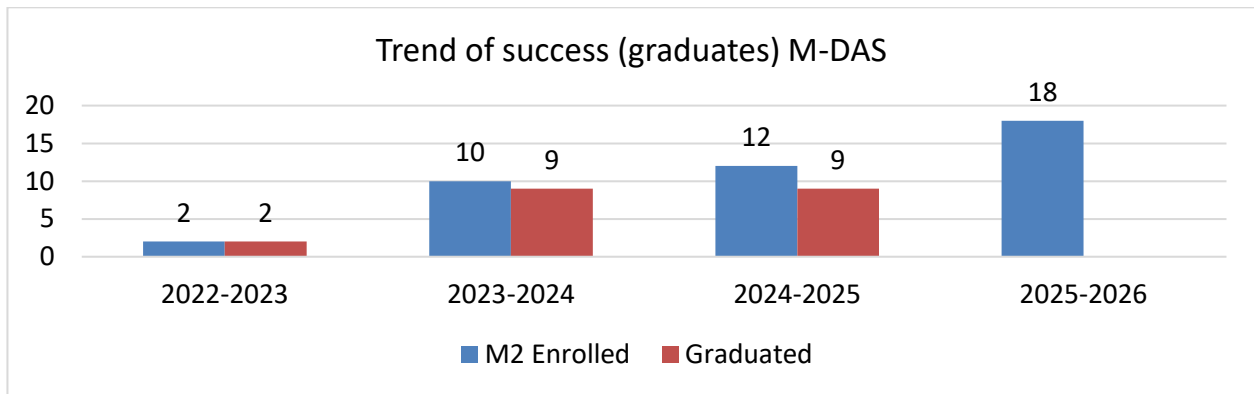
The curriculum of M-DAS is reviewed annually by the program's curriculum committee with consultation with stakeholders and partner universities, especially, with ENSIIE, France--a partner under HEIP project. In 2023, this program was evaluated by external expert panels (both technical and educational aspects) to see whether the program meets the modest standard criteria set by the higher education's educational experts from the MoEYS and the World Bank (WB). The program was evaluated with satisfactory.

#### *Alumni and Students*

Starting in academic 2022-2023, in total, 20 students (6 females) graduated from the program. Currently, there are 34 students (6 females) enrolling in the program and the details are reported in the table below.

| Pathway         | M1        |          | M2        |          | Total     | Female   | Remark |
|-----------------|-----------|----------|-----------|----------|-----------|----------|--------|
|                 | Total     | F        | Total     | F        |           |          |        |
| Course-research | 8         | 1        | 7         | 0        | 15        | 1        |        |
| Research-based  | 8         | 3        | 11        | 2        | 19        | 5        |        |
| <b>Total</b>    | <b>16</b> | <b>4</b> | <b>18</b> | <b>3</b> | <b>34</b> | <b>6</b> |        |

The records of enrollments and numbers of graduates from 2022 to 2026 is displayed in the following figure. We observe that rate of success (Graduates/ M2 enrolled) is 83% in this program.



### ***Scholarships***

In this academic year 2025-2026, 15 students (2 females) obtain scholarships and funding support: 2 INACON Project, 3 HEIP-2, 1 ITC, 1 Techo scholarship, and 8 (2 females) EU-Cambodia scholarship. Four of them also obtain Erasmus+ international mobilities to have study/internship exchanges in partner universities.

### ***Lecturers***

This program involves over 15 faculty members whose specializations are in software engineering, IT, machine learning, deep learning, AI, NLP, data science, data mining, mathematics, and statistics, etc. Among these, 7 of them hold doctoral degrees from Europe, Japan, Korea, and ASEAN. They serve as teaching resources and superiors for the master students M-DAS. Some students are jointly supervised by professors from partner universities. The list of faculty members for M-DAS can be found in Annex 5 or on the website of GS-ITC.

### ***Theses and publications***

The list of published theses can be found in Annex 6 or the website of GS-ITC.

The list of publications can be found in Annex 7, the webpage of GS-ITC or via <https://techno-srj.itc.edu.kh/search?topic=10>.

## **3.3.3.10. Program M-ARC**

### ***Program's objective***

The Master's Degree Program in Architectural Engineering (M-ARC), co-developed in collaboration with professionals and experts from the Université de Liège and the Université Libre de Bruxelles, Belgium, is designed to equip students with advanced knowledge, research competencies, and technical expertise in sustainable building design and urban design.

### ***Curriculum and syllabus***

M-ARC is a full-time program (1 to 3 years), classified into two levels, M1 and M2, and is offered in two pathways: research-based and course-research pathways. For course-research pathway, students are required to take 52 credits, 40 credits for coursework and 12 credits for the last semester report/thesis defense of their final project/thesis. For research-based pathway, students are required to take 54 credits, 12 credits for coursework and 42 credits for research activities, research results, thesis, and thesis defense. Detailed curriculum can be found on the website of GS-ITC.

## *Students*

M-ARC starts in the 2025–2026 academic year, with a total of six students (one female) enrolled.

| Pathway         | M1       |          | M2       |          | Total    | Female   | Remark |
|-----------------|----------|----------|----------|----------|----------|----------|--------|
|                 | Total    | F        | Total    | F        |          |          |        |
| Course-research | 0        | 0        | 0        | 0        | 0        | 0        |        |
| Research-based  | 3        | 0        | 3        | 1        | 6        | 1        |        |
| <b>Total</b>    | <b>3</b> | <b>0</b> | <b>3</b> | <b>1</b> | <b>6</b> | <b>1</b> |        |

## *Scholarships*

In this academic year 2025-2026, 3 students obtain scholarships and funding support from HEIP2 and INACON project.

### **3.3.4. Doctoral Programs**

#### **3.3.4.1. Overview**

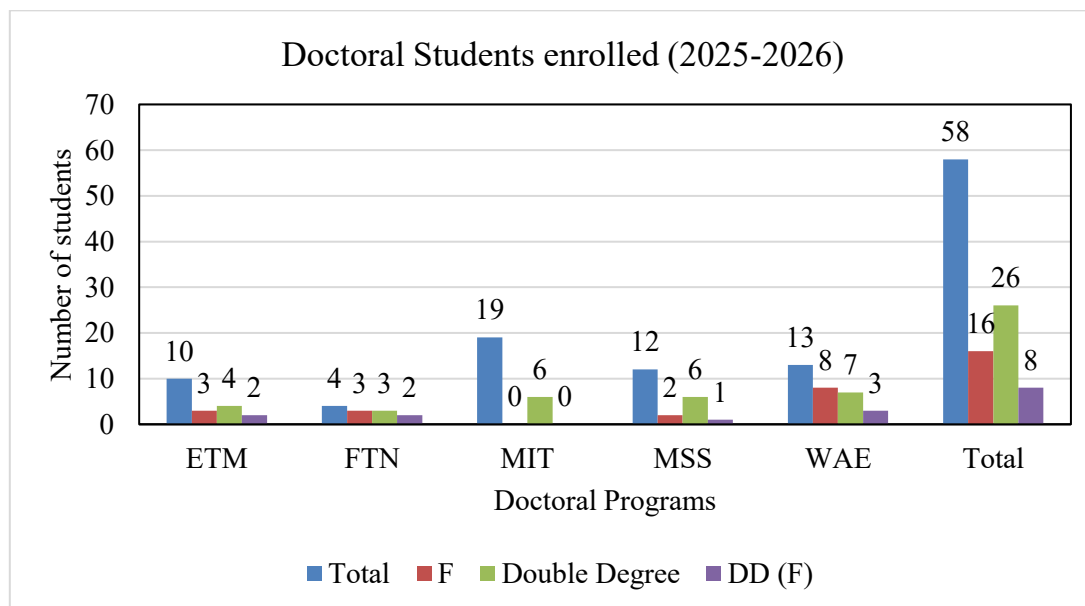
The doctoral programs at ITC were authorized by the Ministry of Education, Youth and Sport by the **Prakas No. 909 AYK. BrK**, dated the 29<sup>th</sup> September 2017, to operate 5 programs as listed in table below.

| No       | Abbrev.     | Name in English                         | First promotion       |
|----------|-------------|-----------------------------------------|-----------------------|
| <b>I</b> | <b>DEng</b> | <b>Doctor of Engineering</b>            | <b>2017</b>           |
| 1        | D-FTN       | Food Technology and Nutrition           | 2017 (Co-supervision) |
| 2        | D-MSS       | Materials Science and Structures        | 2017 (Co-supervision) |
| 3        | D-MIT       | Mechatronics and Information Technology | 2018 (Co-supervision) |
| 4        | D-WAE       | Water and Environment                   | 2018 (Co-supervision) |
| 5        | D-ETM       | Energy Technology and Management        | 2018 (Co-supervision) |

For the 2025-2026 academic year, the doctoral programs enroll 58 doctoral students (15 new), including 16 women (3 new). Notably, 26 students (8 women) are in cotutelle/co-supervision/double degree programs with partner universities—17 based in France and 9 in Belgium. All students enrolled receive financial support from several projects and organizations. Table and Figure below show the overall statistics of PhD students.

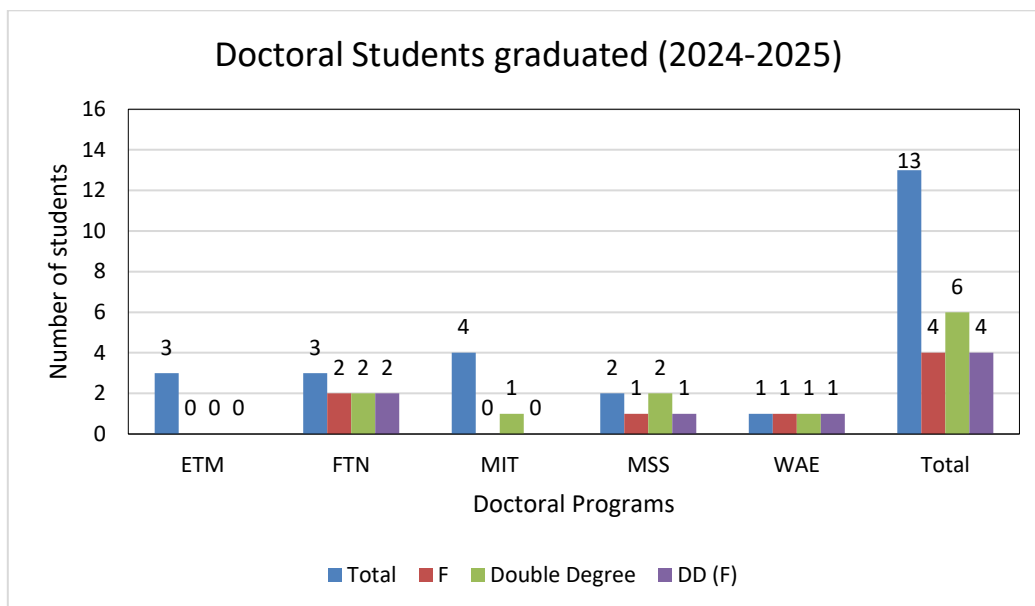
### Statistics of PhD students

| Program                                                                  |           |          |           |          |           |          |           |          |           |          | Total     | F         |
|--------------------------------------------------------------------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|-----------|
| Name                                                                     | D-ETM     |          | D-FTN     |          | D-MIT     |          | D-MSS     |          | D-WAE     |          |           |           |
| Number                                                                   | Total     | F        | Total     | F        | Total     | F        | Total     | F        | Total     | F        |           |           |
| <b>Total number of PhD graduates 2021-2025 (accumulative)</b>            | <b>5</b>  | <b>3</b> | <b>10</b> | <b>6</b> | <b>10</b> | <b>0</b> | <b>8</b>  | <b>4</b> | <b>8</b>  | <b>3</b> | <b>41</b> | <b>16</b> |
| PhD student graduated in 2024-2025                                       | 1         | 1        | 3         | 2        | 4         | 0        | 2         | 1        | 3         | 0        | 13        | 4         |
| <b>Total number of PhD students enrolled in 2025-2026 (accumulative)</b> | <b>13</b> | <b>8</b> | <b>4</b>  | <b>3</b> | <b>19</b> | <b>0</b> | <b>12</b> | <b>2</b> | <b>10</b> | <b>3</b> | <b>58</b> | <b>16</b> |
| PhD enrolled in year 1                                                   | 3         | 2        | 1         | 1        | 7         | 0        | 3         | 0        | 1         | 0        | 15        | 3         |
| PhD enrolled in year 2                                                   | 2         | 1        | 0         | 0        | 3         | 0        | 3         | 1        | 5         | 3        | 13        | 5         |
| PhD enrolled in year 3                                                   | 5         | 3        | 0         | 0        | 1         | 0        | 2         | 0        | 2         | 0        | 10        | 3         |
| PhD enrolled in year 4                                                   | 1         | 1        | 2         | 1        | 2         | 0        | 1         | 1        | 0         | 0        | 6         | 3         |
| PhD enrolled in year 5                                                   | 2         | 1        | 1         | 1        | 6         | 0        | 3         | 0        | 2         | 0        | 14        | 2         |
| <b>Scholarship</b>                                                       | <b>13</b> | <b>8</b> | <b>4</b>  | <b>3</b> | <b>19</b> | <b>0</b> | <b>12</b> | <b>2</b> | <b>10</b> | <b>3</b> | <b>58</b> | <b>16</b> |



For doctoral students graduated, 13 students (4 females) graduated in the academic year 2024-2025. Among the 13 students, 6 of them (4 females) graduated with double degree (3 with French universities and 3 with Belgian universities).

Furthermore, the program has seen a cumulative total of 41 graduates between 2021 and 2025, including 16 women. Of these graduates, 26 successfully obtained double degrees.



### *Sources of funding*

Table below provides the exhaustive list of sources of funding of our students.

| Sources of Funding* | Number of Beneficiaries | Number of Beneficiaries (Female) |
|---------------------|-------------------------|----------------------------------|
| ARES                | 4                       | 1                                |
| ARES-ITC            | 2                       | 0                                |
| ARES-ITC-HEIP       | 1                       | 0                                |
| ARES-COMBOdIA       | 0                       | 0                                |
| ARES-CAMBOFISH      | 2                       | 1                                |
| ARES-Amorce         | 1                       | 0                                |
| BGF                 | 10                      | 4                                |
| BGF-ITC             | 1                       | 0                                |
| HEIP                | 4                       | 2                                |
| HEIP2               | 3                       | 1                                |
| HEIP2-IRD           | 1                       | 0                                |
| HEIP-NUBB           | 1                       | 0                                |
| ITC-Erasmus+/HEIP   | 1                       | 1                                |
| ITC                 | 3                       | 1                                |
| EDC-AFD-EU          | 4                       | 1                                |
| EU                  | 5                       | 2                                |
| Techo scholarship   | 2                       | 0                                |
| NPIC                | 7                       | 0                                |
| NUM                 | 1                       | 0                                |

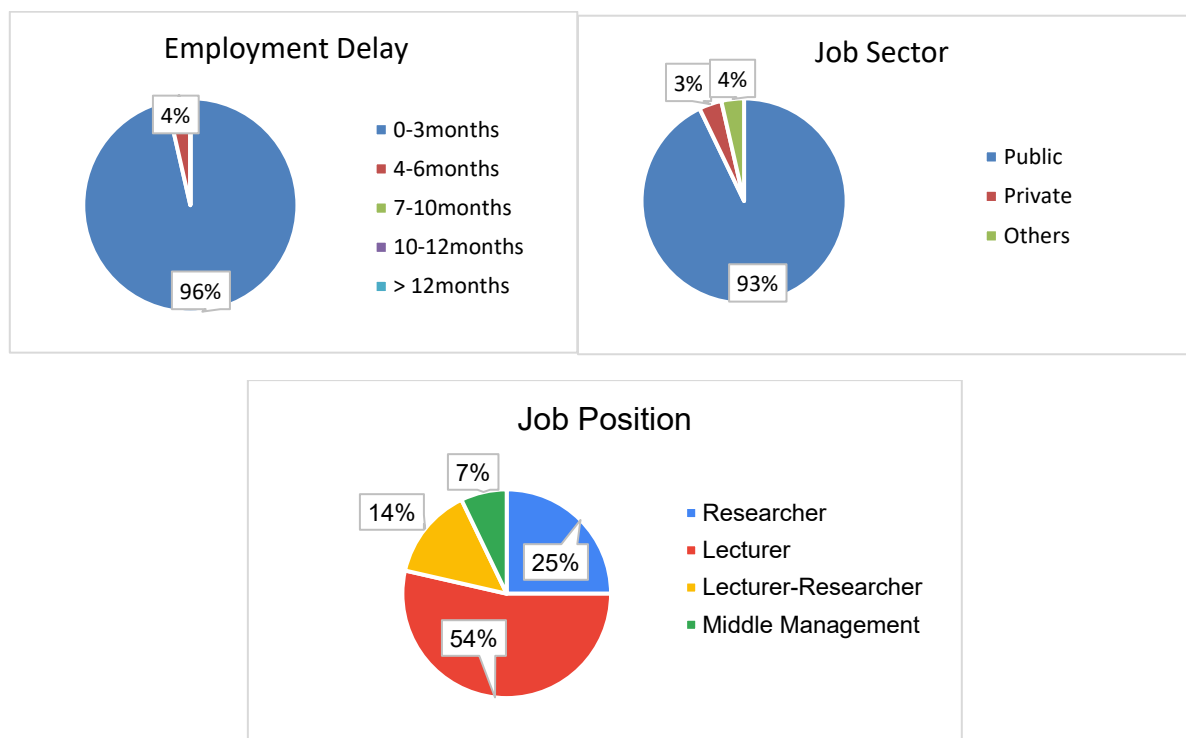
|              |           |           |
|--------------|-----------|-----------|
| UHST         | 1         | 0         |
| USAID-WoM    | 1         | 1         |
| CCCA         | 0         | 0         |
| GAWC         | 1         | 1         |
| Eiffel       | 1         | 0         |
| RAC          | 1         | 0         |
| <b>Total</b> | <b>58</b> | <b>16</b> |

*\*23 (6 females) of the 58 students, who are ITC staffs, receive co-funding from ITC.  
Three students receive tuition fee scholarships from ITC.*

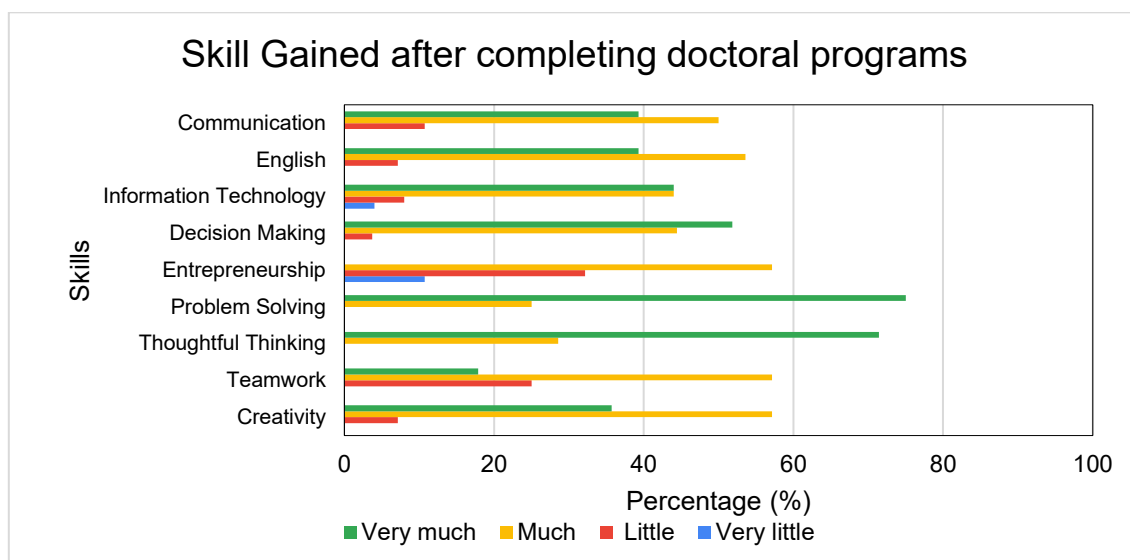
### ***Tracer Study of doctoral programs***

In the exit survey, there were 40 respondents out of 41 graduated students. The employment delay figure shows that 96% of the graduates got employed within 0-4 months, while 4% of them had a job within 4-6 months.

Among them, 93% and 3% are working in public sector and private sector, respectively. Regarding their job position, most of the doctoral graduates are working as researchers or lecturers or both, and only 7% serve in the middle management level.



All the graduates were asked about what skills they had gained during their doctoral program journey. 70-75% of them responded that they gained very much in thoughtful thinking and problem-solving skills. 57% of them answered that they gained much in teamwork, creativity and entrepreneurship, while 36% and 18% of them gained very much in creativity and teamwork, and none of them thought they gained very much in entrepreneurship skills.



### 3.3.4.2. Program D-WAE

#### *Program's Objective*

D-WAE, in conjunction with the Research Unit of Water and Environment under RIC-ITC, is one of the five doctoral programs of ITC, established in 2017. D-WAE was developed by the relevant experts in Water and Environment Engineering such as lecturers and researchers at ITC with the support from partner universities and institutions. Students can register for a single degree at ITC, or a degree under cotutelle (co-supervision) between ITC and a partner university in France. The cotutelle program is selective and upon the agreement between ITC and the partner university.

D-WAE students will develop in-depth understanding of the key technologies in their research area of Water and Environmental Engineering. D-WAE students will work closely with researchers of WAE research unit (generally, one of them is the student's supervisor) and they also can be co-supervised by the professors from our partner universities or research institutions (France, Belgium, Japan, etc.) or other relevant institutions.

#### *Curriculum and syllabus*

D-WAE is a full-time program (3 to 6 years), consist of 54 credits: 21 credits for coursework (Supplementary/Prerequisite and Doctoral courses, and PhD Orientation courses), and 33 credits for research and thesis (3 credits for detailed research proposal, 6 credits for national/international publications, 3 credits for the presentation in scientific conference, 3 credits for seminars, 18 credits for Thesis writing and defense). This program trains doctoral students to be specialized in their advanced research and development field including hydrology, water supply and wastewater, urban environment management, disaster and climate system and other relevant fields. Detailed curriculum can be found on the website of GS-ITC [\*Graduate School of ITC\*](#).

#### *Students and Alumni*

Starting from the academic year 2017-2018 to 2024-2025, five students (3 females) have graduated from the program. In 2025-2026, there are 3 new students (2 female) enrolling in the program and the details are reported in the table below. Please refer to the table "Statistics of PhD students for additional statistic information. The list of graduated students including their including research topic can also be found in the **Annex 9**, and on the website of GS-ITC [\*Graduate School of ITC\*](#).

***List of current D-WAE students in 2025-2026***

| No. | Name                 | Sex | First Reg. | Funding           | Cotutelle  |                           | Research topic                                                                                                                                                                                                            |
|-----|----------------------|-----|------------|-------------------|------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                      |     |            |                   | Yes/<br>No | University                |                                                                                                                                                                                                                           |
| 1   | PEUO Vibol           | M   | 2025       | Techo scholarship | No         |                           | Study the Effect of Mixed Bacteria to Add in an Aquaponics System on the Growth Performance of Nile Tilapia ( <i>Oreochromis Niloticus</i> ) and Giant Prawn ( <i>Macrobrachium Rosenbergii</i> ) in an Aquaponics System |
| 2   | SATH Sithea          | F   | 2025       | BGF               | Yes        | Sorbonne Université       | Spatial and Temporal Variations in Soil Carbon Stocks: A Case Study of the Chrey Bak Long-term Observatory in Cambodia                                                                                                    |
| 3   | VONG Pisey           | F   | 2025       | EU                | No         |                           | Antimicrobials Use and Resistance from Farms to Water Environments in Cambodia                                                                                                                                            |
| 4   | LUN Sambo            | M   | 2024       | HEIP2-IRD         | No         |                           | Understanding Groundwater Dynamics and Socio-Hydrological Interactions for Sustainable Development in the Upper Mekong Delta, Cambodia                                                                                    |
| 5   | PHOL Mengheak        | F   | 2024       | GAWC              | No         |                           | Effect of Different Water-saving Irrigation Methods for Rice Cultivation, Case Study in Cambodia                                                                                                                          |
| 6   | CHAN Ratboren        | M   | 2023       | BGF               | Yes        | Université de Toulouse    | Effect of geomorphological features and land use change on stormflow genesis and stream water quality in headwater catchments of mountainous tropical environment                                                         |
| 7   | CHANTO Monychot Tepy | F   | 2023       | BGF               | Yes        | Université de Montpellier | Circulation of Multi-Drug Resistant Bacteria in Humans, Animals and in the Environment in the province of Takeo, Cambodia                                                                                                 |
| 8   | HENG Chhenglang      | F   | 2023       | BGF               | Yes        | Université de Montpellier | Assessing the effects of land use dynamics on water quality and flood risk using satellite imagery, machine learning and hydrological modeling: the Tonle Sap Lake in Cambodia as a test case                             |



|    |                  |   |      |             |     |                                                |                                                                                                                                   |
|----|------------------|---|------|-------------|-----|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 9  | PEN Chhorda      | F | 2023 | ITC and MME | No  |                                                | Chemical Characterization of Acid Mine Drainage from Gold Mining in Monudulkiri Province, Cambodia                                |
| 10 | SOK Sereyvathana | M | 2023 | BGF         | Yes | Ecole Nationale Supérieure de Chimie de Rennes | Removal of Organic Micropollutants by Coupling Simultaneous Continuous Adsorption and Sedimentation for Drinking Water Production |
| 11 | CHEA Seila       | F | 2022 | USAID-WoM   | No  |                                                | Assessment of Plastic Debris Distribution in Coastal and Mekong River systems of Cambodia towards separation process development  |
| 12 | LAI Chenda       | F | 2020 | HEIP        | Yes | Université de Liège                            | Optimization of Soil Nutrients for Rice Cultivation Using Experimental and Modeling Approach                                      |
| 13 | HIN Chandara     | M | 2020 | NPIC        | No  |                                                | Development of Eco-Friendly and Low-Cost Wastewater Treatment System as an On-site Product                                        |

### ***Lecturers and Supervisors***

This program involves over 15 faculty members whose specializations are in water resources, hydrology, environmental engineering, and relevant fields. All of them hold doctoral degrees from Europe, Japan, and ASEAN. They are involving in the program for teaching or/and supervising the D-WAE students. Some students are jointly supervised by professors from partner universities. The list of faculty members in D-WAE program can be found in Annex 8 or on the website of GS-ITC Graduate School of ITC.

### ***Theses and publications***

Five theses have been published since the academic year 2020-2021. The list of published theses can be found in Annex 9 and on the website of GS-ITC.

Regarding the dissemination and publication, 9 articles were published in international journals. The list of publications is presented in Annex 10 and in the webpage of GS-ITC Graduate School of ITC.

### **3.3.4.3. Program D-ETM**

#### ***Program's Objective***

D-ETM, in conjunction with the Research Unit of Energy Technology and Management under RIC-ITC, is one of the five doctoral programs of ITC. D-ETM was developed by the relevant experts in Energy Technology and Management including the lecturers and researchers at ITC with

support from partner universities and institutions. Students can register for a single degree at ITC, or a degree under cotutelle (co-supervision) between ITC and a partner university in France. The cotutelle program is selective and upon the agreement between ITC and the partner university.

D-ETM students will develop in-depth understanding of the key technologies and engineering in their research area of Energy Technology and Management. D-ETM students will work closely with researchers of ETM research unit (generally, one of them is the student’s supervisor) and they also can be co-supervised by the professors from our partner universities or research institutions (France, Belgium, Japan, etc.) or other relevant institutions.

### ***Curriculum and syllabus***

D-ETM is a full-time program (3 to 6 years), consist of 54 credits: 21 credits for coursework (Supplementary/Prerequisite and Doctoral courses, and PhD Orientation courses), and 33 credits for research and thesis (3 credits for detailed research proposal, 6 credits for national/international publications, 3 credits for the presentation in scientific conference, 3 credits for seminars, 18 credits for Thesis writing and defense). This program trains doctoral students to specialize in their respective advanced research and development fields such as new and renewable energy, energy efficiency and conservation, smart grid, energy management and other relevant fields. Detailed curriculum can be found on the website of GS-ITC [Graduate School of ITC](#).

### ***Students and Alumni***

Starting from the academic year 2017-2018 to 2024-2025, eight students (3 females) have graduated from the program. In 2025-2026, there are 1 new student (0 female) enrolling in the program and the details are reported in the table below. Please refer to the table “Statistics of PhD students for additional statistic information. The list of graduated students including their research topic can also be found in the **Annex 9** and on the website of GS-ITC Graduate School of ITC [Graduate School of ITC](#).

#### ***List of current D-ETM students in 2025-2026***

| No. | Name           | Sex | First Reg. | Funding | Cotutelle  |                           | Research topic                                                                                                                                              |
|-----|----------------|-----|------------|---------|------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                |     |            |         | Yes/<br>No | University                |                                                                                                                                                             |
| 1   | SUK Sievlong   | M   | 2025       | BGF     | Yes        | Université Grenoble Alpes | Distribution Protection with High Penetration of Inverter-Based Resources (IBRs)- Application: A Case Study of Cambodia                                     |
| 2   | ENG Samphors   | F   | 2024       | ARES    | Yes        | University of Mons        | Sustainable Energy System Planning for LV Microgrid Management: A Case Study in Cambodia                                                                    |
| 3   | CHOUN Pheakdey | M   | 2024       | HEIP-2  | No         |                           | Thermal Performance Evaluation and Optimization of Residential Building Stocks: A Study on Topology, Construction Materials, and Passive Cooling Strategies |

|    |                   |   |      |            |     |                           |                                                                                                                                                    |
|----|-------------------|---|------|------------|-----|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 4  | NEOV Yoklin       | F | 2024 | HEIP-2     | No  |                           | Investigating the Application of Reinforcement Learning in Adaptive Hybrid Microgrid Protection: A case study in Cambodia                          |
| 5  | NOP Phornnara     | M | 2024 | EDC-AFD-EU | No  |                           | Regional Area Distribution Networks Reconfiguration and Planning for Power Quality Optimization and Revenue Loss Reduction                         |
| 6  | YON Kanika        | F | 2024 | EDC-AFD-EU | Yes | Grenoble INP              | Contingency Analysis with Variable Renewable Energy and Energy Storage Systems - Case Study in Cambodia                                            |
| 7  | LENG Por          | M | 2023 | EDC-AFD-EU | No  |                           | Power Management and Control of Hybrid LV AC/DC Microgrids with Renewable Energy Sources and Battery Energy Storage                                |
| 8  | SORN Darong       | M | 2023 | EDC-AFD-EU | Yes | Université Grenoble Alpes | Operation and Protection Strategies for Low Voltage Hybrid Grids: Enhancing Efficiency, Reliability, and Resilience                                |
| 9  | CHHENG Monyvathna | M | 2021 | HEIP       | No  |                           | Design and Techno-economic analysis of plug-in electric vehicle-integrated Hybrid solar PV charging system for Cambodia                            |
| 10 | MEAS Saran        | M | 2020 | NPIC       | No  |                           | Optimization of an Integrated Hybrid Onboard Charger with High Efficiency of MPPT Solar Charger for 3-Wheel Solar E-Rickshaw and Electric Vehicles |

### ***Lecturers and Supervisors***

This program involves over 8 faculty members whose specializations are in new and renewable energy, energy efficiency and conservation, smart grid, energy management and relevant fields. All of them hold doctoral degrees from Europe, Japan, Korea, and ASEAN. They are involving in the program for teaching or/and supervising the D-ETM students. Some students are jointly supervised by professors from partner universities. The list of faculty members in D-ETM program can be found in Annex 8 or on the website of GS-ITC [Graduate School of ITC](#).

### ***Thesis and publication***

Eight theses have been published since the academic year 2021-2022. The list of published theses can be found in Annex 9 and on the website of GS-ITC [Graduate School of ITC](#).

Regarding the dissemination and publication, 11 articles were published in international journals. The list of publications is presented in Annex 10 in the webpage of GS-ITC [Graduate School of ITC](#).

### 3.3.4.4. Program D-FTN

#### *Program's Objective*

D-FTN, in conjunction with the Research Unit of Food Technology and Nutrition under RIC-ITC, is one of the five doctoral programs of ITC, established in 2017, recognized by the Ministry of Education Youths and Sports. D-FTN was developed by the relevant experts in Food Science, Food Engineering, Food Technology and Nutrition including the lecturers and researchers at ITC with the support from partner universities and institutions. Students can register for a single degree at ITC, or a degree under cotutelle (co-supervision) between ITC and a partner university in France. The cotutelle program is selective and upon the agreement between ITC and the partner university.

D-FTN students will develop in-depth understanding of the key technologies and engineering in their research areas of Food Science, Food Engineering, Food Technology and Nutrition. D-FTN students will work closely with researchers of FTN research unit (generally, one of them is the student's supervisor) and they also can be co-supervised by the professors from our partner universities or research institutions (France, Belgium, Japan, etc.) or relevant institutions.

#### *Curriculum and syllabus*

D-FTN is a full-time program (3 to 6 years), consist of 54 credits: 21 credits for coursework (Supplementary/Prerequisite and Doctoral courses, and PhD Orientation courses), and 33 credits for research and thesis (3 credits for detailed research proposal, 6 credits for national/international publications, 3 credits for the presentation in scientific conference, 3 credits for seminars, 18 credits for Thesis writing and defense). This program trains doctoral students to specialize in their respective advanced research and development fields such as Food technology development, Food processing and engineering, Food product development, Food quality and safety, Sustainability of food systems, Food contaminant surveillance and control and other relevant fields. Detailed curriculum can be found on the website of GS-ITC [Graduate School of ITC](#).

#### *Students and Alumni*

Starting from the academic year 2017-2018 to 2024-2025, ten students (6 females) have graduated from the program. In 2025-2026, there are 1 new student (1 female) enrolling in the program and the details are reported in the table below. Please refer to the table "Statistics of PhD students for additional statistic information. The list of current and graduated students including their research topic can also be found on the website of GS-ITC [Graduate School of ITC](#).

#### *List of current D-FTN students in 2025-2026*

| No. | Name         | Sex | First Reg. | Funding | Cotutelle |            | Research topic                                                                                                                                                 |
|-----|--------------|-----|------------|---------|-----------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |              |     |            |         | Yes/ No   | University |                                                                                                                                                                |
| 1   | KONG Chhorvy | F   | 2025       | EU      | No        |            | Evaluating Food Packaging as a Source of Contaminants: Per- and Polyfluoroalkyl Substances (PFAS), Microplastics, and Heavy Metals in Street Foods in Cambodia |

|   |                |   |      |                   |     |                     |                                                                                                                              |
|---|----------------|---|------|-------------------|-----|---------------------|------------------------------------------------------------------------------------------------------------------------------|
| 2 | LAY Sovannmony | M | 2022 | ARES-CAMBOFISH    | Yes | Université de Liège | Effects of different smoking and cooking conditions on the fatty acid profile of farmed freshwater fish marketed in Cambodia |
| 3 | MOM Vattana    | F | 2022 | ARES-CAMBOFISH    | Yes | Université de Liège | Improvement of the safety of processed fish farm products                                                                    |
| 4 | MAO Socheata   | F | 2021 | ITC-Erasmus+/HEIP | Yes | Agro-Sup Dijon      | Lactic Acid Bacteria Strain Diversity Depending on the Origin of the Product                                                 |

### ***Lecturers and Supervisors***

This program involves over 6 faculty members whose specializations are in Food technology development, Food processing and engineering, Food product development, Food quality and safety, Sustainability of food systems, Food contaminant surveillance and control and other relevant fields. They hold doctoral degrees from Europe, Japan, US, or ASEAN. They are involving in the program for teaching or/and supervising the D-FTN students. Some students are jointly supervised by professors from partner universities. The list of faculty members in D-FTN program can be found in Annex 8 or on the website of GS-ITC *Graduate School of ITC*.

### ***Thesis and publication***

Ten theses have published since the academic years 2020-2021. The list of published theses can be found in Annex 9 and the website of GS-ITC.

Regarding the dissemination and publication, 14 articles were published in international journals. The list of theses and publication are presented in the webpage of graduate school: The list of publications is presented in Annex 10 in the webpage of GS-ITC *Graduate School of ITC*.

## **3.3.4.5. Program D-MIT**

### ***Program's Objective***

D-MIT, in conjunction with the Research Unit of Mechatronics and Information Technology under RIC-ITC, is one of the five doctoral programs of ITC, established in 2017, recognized by the Ministry of Education Youths and Sports. D-MIT was developed by the relevant experts in Mechanical engineering, robotics, electronics and automation, information and technology including the lecturers and researchers at ITC with the support from partner universities and institutions. Students can register for a single degree at ITC, or a degree under cotutelle (co-supervision) between ITC and a partner university in France and in Belgium. The cotutelle program is selective and upon the agreement between ITC and the partner university.

D-MIT students will develop in-depth understanding of the key technologies and engineering in their research area of mechanical engineering, robotics, electronics and automation, information and technology, data science, computer vision and other related fields. D-MIT students will work closely with researchers of MIT research unit (generally, one of them is the student's supervisor) and they also can be co-supervised by the professors from our partner universities or research institutions (France, Belgium, Japan, etc.).

## ***Curriculum and syllabus***

D-MIT is a full-time program (3 to 6 years), consist of 54 credits: 21 credits for coursework (Supplementary/Prerequisite and Doctoral courses, and PhD Orientation courses), and 33 credits for research and thesis (3 credits for detailed research proposal, 6 credits for national/international publications, 3 credits for the presentation in scientific conference, 3 credits for seminars, 18 credits for Thesis writing and defense). This program trains doctoral students to specialize in their respective advanced research and development fields such as intelligent mechatronics, artificial intelligence, telecommunication and internet of things, optimization for operation research and supply chain, electronics, and communication and other relevant fields. Detailed curriculum can be found on the website of GS-ITC.

## ***Students and Alumni***

Starting from the academic year 2017-2018 to 2024-2025, ten students (0 female) have graduated from the program. In 2025-2026, there are 7 new students (0 female) enrolling in the program and the details are reported in the table below. Please refer to the table “Statistics of PhD students for additional statistic information. The list of current and graduated students including their research topic can also be found in Annex 9, and on the website of GS-ITC [\*Graduate School of ITC\*](#).

***List of current D-MIT students in 2025-2026***

| No. | Name          | Sex | First Reg. | Funding | Cotutelle |                     | Research topic                                                                                               |
|-----|---------------|-----|------------|---------|-----------|---------------------|--------------------------------------------------------------------------------------------------------------|
|     |               |     |            |         | Yes/ No   | University          |                                                                                                              |
| 1   | KHUN Dararith | M   | 2025       | ARES    | Yes       | Université de Namur | Assessment of QUIC Deployments in Non-Terrestrial Networks (NTN) and Delay-Tolerant Networks (DTN)           |
| 2   | LIV Bunthorn  | M   | 2025       | ARES    | Yes       | UCLouvain           | Enhancing Khmer Language Accessibility Through AI-Driven Air-writing Recognition                             |
| 3   | NHIM Malai    | M   | 2025       | ARES    | Yes       | UCLouvain           | Early Detection of Diabetes Mellitus in Young Adults in Cambodia Using Machine Learning-Predictive Modelling |
| 4   | OL Say        | M   | 2025       | EU      | No        |                     | Enhancing E-Learning Accessibility Through Khmer Speech-to-Text and Lecture Summarization                    |
| 5   | PHOK Ponna    | M   | 2025       | EU      | No        |                     | Context-Aware Feature Selection Via Differentiable Graph-Based Learning                                      |
| 6   | THOK Piseth   | M   | 2025       | HEIP2   | No        |                     | High-Frequency GaN-Based Isolated DC–DC Converter: Topology, Planar Magnetics, and Dead-Time Optimization    |

|    |                    |   |      |               |     |                     |                                                                                                                            |
|----|--------------------|---|------|---------------|-----|---------------------|----------------------------------------------------------------------------------------------------------------------------|
| 7  | THY Savrin         | M | 2025 | EU            | No  |                     | AI-Driven Personalized Career Guidance for Cambodian Secondary Education: Linking Student Profiles with Labor Market Needs |
| 8  | EM Hengly          | M | 2024 | ARES-ITC      | Yes | University of Mons  | Enhancing Sleep Apnea Diagnosis with Latent Space Shaping and Explainable AI for Biomarker Extraction                      |
| 9  | LY Tong            | M | 2024 | RAC           | No  |                     | Developing Framework for Predicting University Students' Academic Performance in STEM Majors Using Machine Learning and AI |
| 10 | PEN Chentra        | M | 2024 | ITC           | No  |                     | Applying Artificial Intelligence to early empower students performance academic in blended learning                        |
| 11 | NGIN Kimlong       | M | 2023 | UHST and ITC  | No  |                     | S3AT: Attendance Tracking System based on AI Integrated with Electronic Device for Security Alarm                          |
| 12 | CHIN Chan Daraly   | M | 2022 | BGF-ITC       | Yes | Toulouse INP        | The vehicle as an intelligent thing                                                                                        |
| 13 | SRENG Vichet       | M | 2022 | NUM           | No  |                     | Automatic License plate number recognition system for Vehicle in Cambodia (ALPR)                                           |
| 14 | PICH Reatrey       | M | 2021 | ARES-ITC-HEIP | Yes | Université de Namur | Anomaly Detection in networks based on DNS's data analysis                                                                 |
| 15 | BUN Menghorng      | M | 2021 | HEIP          | Yes | Toulouse INP        | Study of feasibility and control of solar electric tuktuk                                                                  |
| 16 | SOK Song           | M | 2020 | HEIP-NUBB     | No  |                     | Development of Non-Intrusive Appliance Load Monitoring and Diagnostic System for Residential Home                          |
| 17 | CHHOUR Vongchivorn | M | 2020 | NPIC          | No  |                     | Parameter estimation for actuator using Kalman filter                                                                      |
| 18 | PEOU Thura         | M | 2020 | NPIC          | No  |                     | System integration for autonomous navigation for mobile robots using deep learning and ROS                                 |
| 19 | THUOK David        | M | 2020 | NPIC          | No  |                     | Optimization for multi agent in system integrity protection                                                                |

### ***Lecturers and Supervisors***

This program involves over 8 faculty members whose specializations are in mechatronics, electronic and automation engineering, data science, robotics, and relevant fields. They hold doctoral degrees from Europe, Japan, or ASEAN. They are involved in the program for teaching or/and supervising the D-MIT students. Some students are jointly supervised by professors from partner universities. The list of faculty members in D-MIT program can be found in Annex 8 or on the website of GS-ITC [Graduate School of ITC](#).

### ***Theses and publications***

Ten theses have been published since the academic year 2020-2021. The list of published theses can be found in Annex 9 and the website of GS-ITC [Graduate School of ITC](#).

Regarding the dissemination and publication, 25 articles were published in international journals. The list of theses and publication are presented in the webpage of graduate school: The list of publications is presented in Annex 10 in the webpage of GS-ITC [Graduate School of ITC](#).

### **3.3.4.6. Program D-MSS**

#### ***Program's Objective***

D-MSS, in conjunction with the Research Unit of Materials Science and Structure (MSS) under RIC-ITC, is one of the five doctoral programs of ITC, established in 2017, recognized by the Ministry of Education Youths and Sports. D-MSS was developed by the relevant experts in material science, structural engineering, mechanical engineering, and related fields including the lecturers and researchers at ITC with the support from partner universities and institutions. Students can register for a single degree at ITC, or a degree under cotutelle (co-supervision) between ITC and a partner university in France. The cotutelle program is selective and upon the agreement between ITC and the partner university.

D-MSS students will develop in-depth understanding of the key technologies and engineering in their research area of material science and engineering, structural engineering, polymer composites, failure analysis of steel structure and other materials, numerical modeling and experimental analysis of infrastructure and materials. D-MSS students will work closely with researchers of MSS research unit (generally, one of them is the student's supervisor) and they also can be co-supervised by the professors from our partner universities or research institutions (France, Belgium, Japan, etc.).

#### ***Curriculum and syllabus***

D-MSS is a full-time program (3 to 6 years), consist of 54 credits: 21 credits for coursework (Supplementary/Prerequisite and Doctoral courses, and PhD Orientation courses), and 33 credits for research and thesis (3 credits for detailed research proposal, 6 credits for national/international publications, 3 credits for the presentation in scientific conference, 3 credits for seminars, 18 credits for Thesis writing and defense). This program trains doctoral students to specialize in their respective advanced research and development field such as material science and engineering, structural engineering, polymer composites, failure analysis of steel structure and other materials, numerical modeling and experimental analysis of infrastructure and materials and other relevant fields. Detailed curriculum can be found on the website of GS-ITC.



## ***Students and Alumni***

Starting from the academic year 2017-2018 to 2024-2025, eight students (4 female) have graduated from the program. In 2025-2026, there are 3 new students (0 female) enrolling in the program and the details are reported in the table below. Please refer to the table “Statistics of PhD students for additional statistic information. The list of current and graduated students including their research topic can also be found in Annex 9, and on the website of GS-ITC *Graduate School of ITC*.

### ***List of current D-MSS students in 2025-2026***

| No. | Name            | Sex | First Reg. | Funding           | Cotutelle |                        | Research topic                                                                                                                                            |
|-----|-----------------|-----|------------|-------------------|-----------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                 |     |            |                   | Yes /No   | University             |                                                                                                                                                           |
| 1   | AN Siden        | M   | 2025       | BGF               | Yes       | Université d'Artois    | Inspection of Reinforced Concrete Structures by Combining Non-Destructive Testing (NDT) Methods: Ground Penetrating Radar (GPR) and Infrared Thermography |
| 2   | LEAN Karana     | M   | 2025       | ARES-Amorce       | No        |                        | Durability and Microstructural Behavior of Glulam Under Wet–Dry Cycling, Alkaline Aging, and Outdoor Creep                                                |
| 3   | YON Thearith    | M   | 2025       | Techo scholarship | No        |                        | Multi-Hazard Performance-Based Design Framework for Irregular Tall-Buildings with Core-Outrigger and Belt System                                          |
| 4   | AUN Srean       | F   | 2024       | BGF               | Yes       | Université de Rennes   | Hybrid coatings for the Photodynamic inactivation of microbial infections                                                                                 |
| 5   | CHANN Socheata  | M   | 2024       | Eiffel            | Yes       | INSA Rennes            | Experimental and numerical studies of the behavior and durability of foam concrete base on recycled glass and natural fibers                              |
| 6   | NUTH Visal      | M   | 2024       | BGF               | Yes       | Université de Lorraine | Climate-Resilient Soil Stabilization in Cambodia: Adapting to the Challenges of Flooding and Seasonal Variations                                          |
| 7   | PLACK Sokhit    | M   | 2023       | ITC               | No        |                        | Walkability and importance assessment of pedestrian facilities in Phnom Penh City                                                                         |
| 8   | SOM Chansamnang | M   | 2023       | BGF               | Yes       | INSA Rennes            | Effect of the addition of natural fibers on shrinkage, cracking risk and healing capacity of cementitious materials                                       |
| 9   | HENG Muoy Yi    | F   | 2022       | HEIP              | Yes       | Université de Liège    | Quality assurance of concrete pile integrity using Non-destructive method                                                                                 |

|    |             |   |      |          |     |                     |                                                                                              |
|----|-------------|---|------|----------|-----|---------------------|----------------------------------------------------------------------------------------------|
| 10 | LONG Makara | M | 2021 | ARES-ITC | Yes | Université de Liège | Sustainable design conception integrated in architecture project in BIM environment          |
| 11 | HOUR Sokaon | M | 2020 | NPIC     | No  |                     | FEM to Predict Effects of Plastic Deformation on Mechanical Properties of a Structural Steel |
| 12 | KEAT Rayuth | M | 2020 | NPIC     | No  |                     | Study on Furnace Glass Heat Treatment Technology                                             |

### ***Lecturers and Supervisors***

This program involves over 12 faculty members whose specializations are material science and engineering, structural engineering, polymer composites, failure analysis of steel structure and other materials, numerical modeling and experimental analysis of infrastructure and materials, and relevant fields. They hold doctoral degrees from Europe, Japan, or ASEAN. They are involving in the program for teaching or/and supervising the D-MSS students. Some students are jointly supervised by professors from partner universities. The list of faculty members in D-MSS program can be found in Annex 8 or on the website of GS-ITC *Graduate School of ITC*.

### ***Theses and publications***

Eight theses have been published since the academic year 2021-2022. The list of published theses can be found in Annex 9 or on the website of GS-ITC *Graduate School of ITC*.

Regarding the dissemination and publication, 9 articles were published in international journals. The list of publications is presented in Annex 10 in the on the website of GS-ITC *Graduate School of ITC*.

### **3.3.5. Challenges**

(1) Both numbers of Master and PhD graduates in the academic year 2024-2025 were achieved slightly lower than the expected target numbers, mainly due to the delay of publication requirements in both training levels. In current estimate, it takes more than 1.5 years complete Master's degree and more than 4.0 years to complete doctoral degree. To improve this situation, more supports and seminar on research methodology and scientific paper writing will be provided.

(2) The number of new recruitments for 2025-2026 was still increased significantly for Master's degree programs due to increased number of scholarships. However, a few programs still struggle to secure a good number of students. To improve this point, we will do more communications, especially between ITC and stakeholders, about our programs and consider developing blended learning programs in the form of module-based programs (developing more e-learning courses so that students can relax physical presences at school). In so doing, we can enable more bachelor's holders already employed to take part in the programs.

(3) Our current programs, both at Master and PhD levels, seem incapable to address sufficiently on entrepreneurship and business skills that enable students' readiness to become entrepreneurs after graduating. To address this issue, improving entrepreneurship axis in our programs will be reviewed.

### 3.3.6. Conclusion

For this academic year, 9 full-time master programs are operated (with 9 research-based programs). The number of enrollments in academic year 2025-2026 increased by 33%, compared with academic year 2024-2025. Around 52% of our master students are scholarship recipients (full or partial scholarships). 12 students mobilities is realized in 5 programs. There are in total 532 Master graduates (140 females) from our 8 masters' programs. In this number, 69 Master graduates (21 females) in the academic year 2024-2025.

To promote our master programs and attract more students, we will increase our communications, especially between ITC and relevant stakeholders, about our programs and consider developing blended learning programs in the form of module-based programs and provide alternative program pathways.

For doctoral programs, for the academic year 2025-2026, there are 58 students (16 females) enrolled in the 5 fields. Among these, 26 (8 females) doctoral students registered in cotutelle programs with French and Belgian partner universities. In total, 41 students obtained their doctoral degrees (26 double-degree students). To promote our doctoral programs, "*Thèse CIFRE*" style programs should be implemented and collaboration with private sectors is important. Both Master's and PhD programs may need to include more contents on the entrepreneurship and business skills necessary for students to have strong entrepreneurial mindsets after graduation.

## **4. Capacity Building and Professor Dispatch**

## **4.1. Capacity Building (2025-2026)**

### **4.1.1. Long-term overseas capacity building for lecturers and students**

Master's and doctoral level education are now a strategic lever for building the future. It is not limited to the acquisition of knowledge: it shapes innovative minds, capable of meeting the major scientific, technological, and socio-economic challenges of our time. These programs also play a central role in creating bridges between universities, research centers, and the business world, thereby stimulating innovation, competitiveness, and international influence.

The Institute of Technology of Cambodia (ITC) fully embodies this dynamic. For the 2025-2026 academic year, the ITC has 15 faculty members, including 11 doctoral candidates and 4 master's students. In addition, 58 students are pursuing advanced training: 46 master's students, 12 doctoral candidates, and 1 bachelor's student. Remarkably, these talented individuals are spread across partner institutions located around the world, demonstrating the ITC's international outlook and commitment to high-quality, forward-looking education. For more information, please see Annex 11 and 12.

### **4.1.2. Short-term overseas capacity building for lecturers and students**

Short-term professional development assignments abroad play a crucial role in strengthening teachers' pedagogical skills. They offer a valuable opportunity to explore new teaching methods, adopt innovative educational practices, and draw inspiration from best-performing approaches used internationally. These experiences also allow teachers to stay at the forefront of knowledge in their field, whether it be scientific advances, educational trends, or emerging technologies. In turn, this results in more dynamic teaching that is better adapted to students' needs, fostering their academic success.

For students, these stays abroad represent much more than a simple academic trip. They constitute a true cultural immersion, fostering open-mindedness, intercultural understanding, and personal enrichment. This exposure to diverse educational contexts develops their ability to interact in a multicultural environment, an essential skill in an increasingly globalized world.

For the 2025-2026 academic year, the Institute of Technology of Cambodia (ITC) stands out for its strong international mobility: 53 missions abroad are planned for teachers and 17 for students, demonstrating the institution's continued commitment to excellence, innovation and openness to the world. For more information, please see Annex 13 and 14.

## **4.2. Professor dispatch at ITC (2025-2026)**

The presence of international professors in a university is a true asset for open-mindedness, academic innovation, and the continuous improvement of teaching quality. At ITC, these professors from around the world bring different perspectives, diverse teaching approaches, and enriching experiences. Their contribution energizes course content, stimulates students' critical thinking, and fosters an internationally oriented learning culture.

This dynamic is fully aligned with the internationalization of higher education, enabling ITC not only to strengthen its academic standing but also to attract international students. It thus prepares Cambodian students to thrive in a globalized, multicultural, and competitive professional environment.

International professors also play a strategic role in developing academic networks. Through their connections with other universities and research centers, they facilitate the emergence of collaborations, academic exchanges, and internationally relevant scientific projects.

For the first semester of the 2025-2026 academic year, ITC hosted 16 international faculty members on teaching assignments, demonstrating its ongoing commitment to academic excellence and research. For more information, please refer to Annex 15.

## **5. Research and Innovation Center**

## 5.1. Overview

The Research and Innovation Center (RIC) at the Institute of Technology of Cambodia (ITC), established in 2015, plays a pivotal role in promoting research excellence and innovation within the university. To streamline research activities and foster industry collaborations, RIC oversees five specialized research units:

- Energy Technology and Management (ETM)
- Food Technology and Nutrition (FTN)
- Mechatronics and Information Technology (MIT)
- Materials Science and Structure (MSS)
- Water and Environment (WAE)

More detailed information on the research vision and mission, focus areas, outputs, and collaborations of each research unit is provided in Annexes 16 to 20.

RIC coordinates regular meetings—monthly at the unit level, quarterly involving the RIC management team, and semi-annually with all research staff—to review progress, discuss new initiatives, and resolve challenges. These structured engagements ensure continuous assessment and guidance, driving research productivity and innovation across ITC.

This section specifically highlights research activities and innovations conducted during the 2025-2026 academic year and serves as an essential reporting tool to ITC’s International Consortium.

## 5.2. Research Performance & Key Metrics

### 5.2.1. Research Fund

In 2025-2026, ITC researchers submitted a total of 30 research proposals (detailed in Annexes 21 to 25) to various funding agencies, including the second phase of LBE (INACON), MoEYS through the second phase of HEIP, SATREPS, CBRD, Tonle Sap Program of French embassy, ASEAN IVO, Cambodia-China joint research program, ARES, MOST, UNEP and IRD. 28 new projects were funded for 2025-2026. The budget for academic year 2025-2026 for research units is shown in Figure below. It also shows the total budget of new projects in research unit.

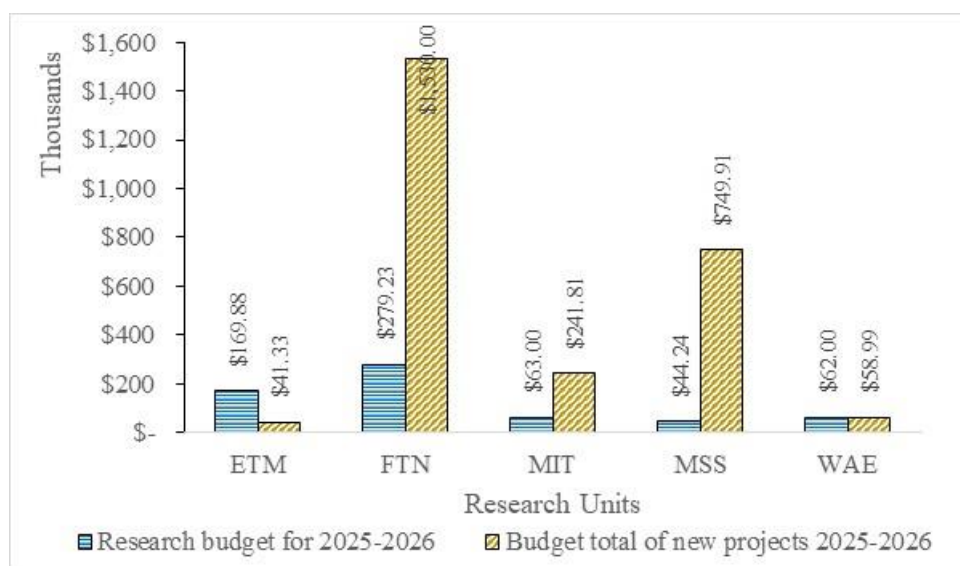


Figure 13. Research budget for 2025-2026 and budget total of new projects 2025-2026.



### 5.2.2. Research Project Portfolio Overview

In the 2025-2026 academic year, 120 researchers are actively engaged in 91 research projects (Annexes 26-30), with 35% of them being female. These projects span across five research units.

- Energy Technology and Management (ETM) – 8 projects (Annex 26) involving 17 researchers: 12 Senior Researchers, 4 Lecturer-Researchers, and 1 Full-Time Researchers.
- Food Technology and Nutrition (FTN) – 16 projects (Annex 27) with 21 researchers: 11 Senior Researchers, 5 Lecturer-Researchers, and 5 Full-Time Researchers.
- Mechatronics and Information Technology (MIT) – 22 projects (Annex 28) supported by 29 researchers: 18 Senior Researchers, 3 Lecturer-Researchers, and 8 Full-Time Researchers.
- Material Sciences and Structure (MSS) – 20 projects (Annex 29) conducted by 19 researchers: 10 Senior Researchers, 0 Lecturer-Researchers, and 9 Full-Time Researchers.
- Water and Environment (WAE) – 25 projects (Annex 30) led by 32 researchers: 12 Senior Researchers, 10 Lecturer-Researchers, and 12 Full-Time Researchers.

Figure 14 illustrates the distribution of research projects and researchers across the five research units. ETM has a relatively low number of projects compared to its researchers, while WAE leads with the highest number of projects.

There were 30 research proposals (Annexes 36-40). 28 new projects were awarded (Figure 15), while 20 projects (Annexes 31-35) were completed during this academic year.

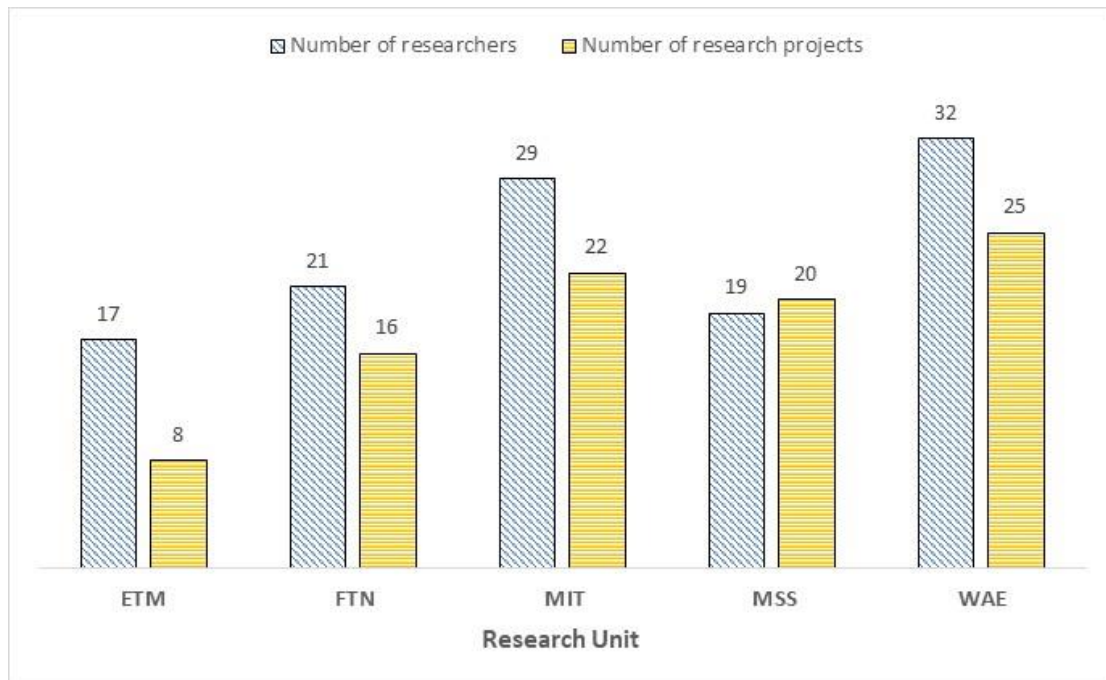


Figure 14. Research projects by each research unit (2025-2026).

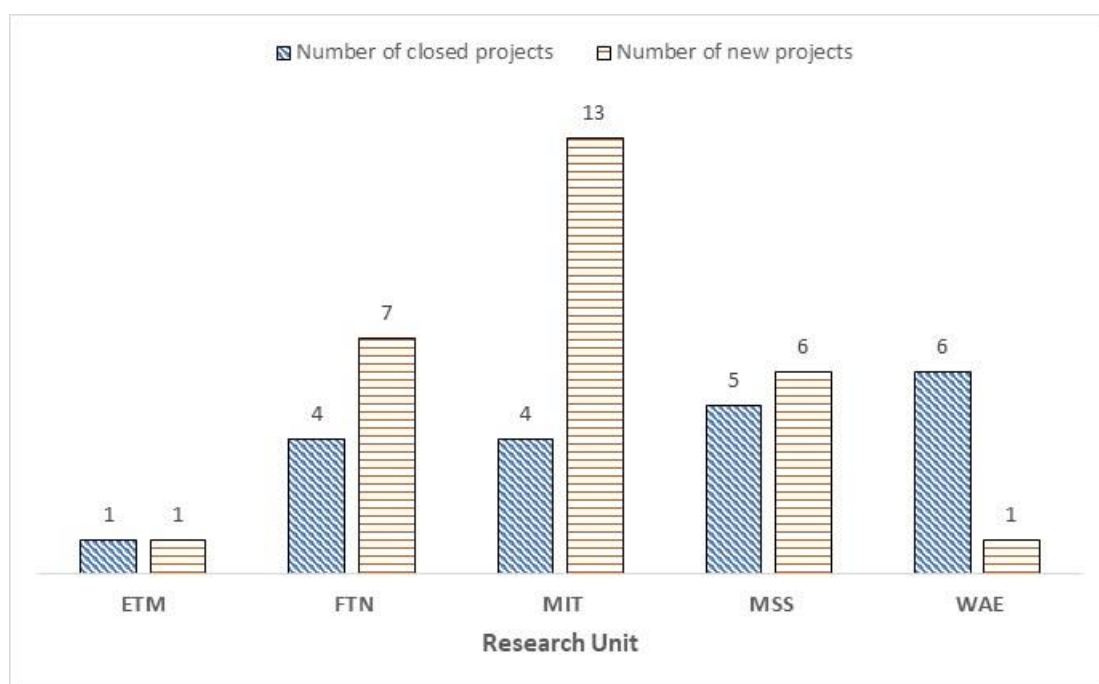


Figure 15. Number of completed and new projects in 2025-2026.

Research activities at ITC are conducted with funding and collaborations from international and national institutions, including:

- Belgium: ARES-CCD
- France: AFD, AgroSup Dijon, AUF, Ambassade de France, INSA de Rennes, Pierre Fable, Research Institute of Development (IRD)
- Japan: JST/JICA, AUN/Seed-Net JICA, JSPS, Kanazawa University, Takashi Foundation, Kurita Foundation
- Cambodia: Cambodia Climate Change Alliance (CCCA), CDRI, HEIP2, GGGI
- Australia: ACIAR
- United States: US Air Force
- United Kingdom: UK Trust Fund

### 5.2.3. Research Publication

In terms of research output, during the period 2025-2026, ITC researchers published a total of 54 research articles in peer-reviewed journals, including both indexed (international journals) and non-indexed publications (local journals and ITC's Techno-Science Research Journal) as shown in Figure 16. A detailed breakdown of these publications is provided in Annexes 41 to 45 for the last five years.

Additionally, ITC researchers actively disseminated their findings through presentations at around 70 national and international conferences and scientific events.

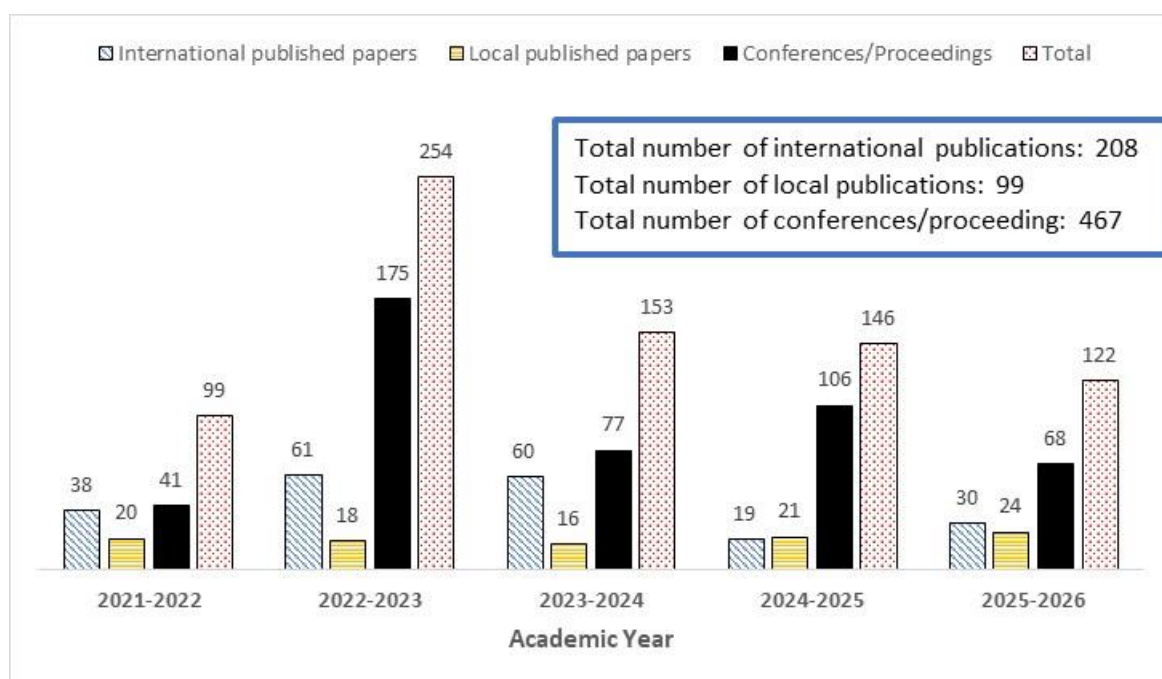


Figure 16. Number of publications in last 5 years

### ***ITC's Techno-Science Research Journal***

The ***Techno-Science Research Journal (Techno-SRJ)***, published by ITC's Research and Innovation Centre (RIC) since 2013, is a peer-reviewed journal dedicated to disseminating research in applied sciences and engineering. The journal covers diverse engineering fields such as water and environmental science and engineering, food technology, geotechnical engineering, electrical engineering, mechanical engineering, informatics, data science, civil engineering, and transportation engineering. By December 2025, Techno-SRJ has published 190 research papers across 19 issues (15 volumes). Research articles are available on the journal's online platform (<https://techno-srj.itc.edu.kh/>, ISSN: 3006-4988, E-ISSN: 3006-4996).

In 2025, the journal published three regular issues within Volume 13 (equivalent to 30 research articles), a Special Issue on *Earth Resources and Geo-environmental Technology* (equivalent to 23 articles), which is output from the 3<sup>rd</sup> International Conference on Earth Resources and Geo-Environment Technology (EraGET2024), and an official Proceedings from the 14<sup>th</sup> *Scientific Day of ITC*. By December 2025, the Techno-SRJ received a total of 40 manuscript submissions. Among these, 8 manuscripts were rejected, representing a rejection rate of 20%. By the end of 2025, 21 manuscripts had been accepted, while the remaining 11 manuscripts were still under review.

Furthermore, as of September 2025, Techno-SRJ has become a member of Crossref. Digital Object Identifiers (DOIs) are now assigned to all published articles, ensuring better citability and permanent digital tracing for our authors' articles. In 2026, the journal plans to publish three regular issues within Volume 14, a Special Issue on *Earth Resources and Geo-environmental Technology* from the 4<sup>th</sup> International Conference on Earth Resources and Geo-Environment Technology (EraGET2025), as well as the official Proceedings from the 15<sup>th</sup> *Scientific Day of ITC*.

Journal's action plan 2026 is strategically designed to elevate the journal's academic standing and international visibility through a multi-faceted approach to improved quality. This plan is the strengthening of editorial policy, which includes the development of an Editorial Chart to clearly

define editorial responsibilities and enhancement of the peer-review process by actively invite external and international experts to join the board. A major milestone of this quality assurance initiative will be the formal DOAJ (Directory of Open Access Journals) application, aiming to align the journal with global open-access standards and increase its discoverability for researchers worldwide.

#### 5.2.4. Prototypes

The Research and Innovation Center (RIC) at ITC produced 6 research prototypes in the academic year 2025-2026 across diverse areas, summarized as follows:

| <i>Description</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <i>Research Unit</i> | <i>Remark</i>                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------|
| <b><i>Prototype Development</i></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                |                      |                                                                                       |
| <b>Mango colla</b><br>The Mango Colla combines the natural sweetness and aroma of ripe mangoes with added collagen to support healthy skin and overall well-being, offering a convenient and nutritious hydration option.                                                                                                                                                                                                                                                          | FTN                  |    |
| <b>Soya VitaMin</b><br>The Soya VitaMin is a fortified soy milk enhanced with micronutrients to improve functionality, nutritional value, and shelf life, targeting consumers seeking plant-based daily nutrition.                                                                                                                                                                                                                                                                 | FTN                  |   |
| <b>Canned Meat (Caramel beef stew)</b><br>A line of ready-to-eat Cambodian-inspired meals including caramel beef, caramel pork, and canned chicken. These products are fully cooked and preserved through high-temperature processing, ensuring long shelf life while retaining authentic flavors.                                                                                                                                                                                 | FTN                  |  |
| <b>Khmer PenPal</b> is an AI-powered Khmer handwriting learning assistant designed to help students and beginners practice writing Khmer letters more effectively. It can detect and recognize handwritten characters in real time, highlight mistakes, and provide instant feedback to improve writing accuracy. The system is built to make Khmer handwriting practice more interactive, engaging, and accessible for all learners.                                              | MIT                  |  |
| <b>DCLab Smart Driver</b> is an advanced motor driver designed to remove the complexity typically involved in driving DC motors by automatically estimating all key motor parameters. Thanks to its built-in adaptive algorithms, users no longer need to know or tune motor constants such as resistance, inductance, torque constant, or back-EMF values—the driver handles everything on its own. The DCLab Smart Driver is built for reliability, precision, and plug-and-play | MIT                  |  |

|                                                                                                                                                                                                                                                                                              |     |                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------|
| operation—ideal for robotics, automation, and research environments where performance and simplicity are essential.                                                                                                                                                                          |     |                                                                                     |
| SPAI Smart Irrigation Controller is a smart irrigation device that automatically turns irrigation on and off based on soil sensors and a timer. It is easy to use, supports a Khmer-language interface, and helps farmers save time and reduce labor costs while improving water efficiency. | MIT |  |

## 5.3. Research Capabilities

### 5.3.1. Researchers

In the 2025-2026 academic year, ITC employed 120 researchers (35% Female), including those holding administrative positions who also engage in research, categorized as senior researchers. The distribution of researchers across senior researchers, lecturer-researchers, and full-time researchers is illustrated in Figure 17.

The number of active research projects are 91 with 43 active projects, 28 new projects and 20 completed project in 2025-2026 (Annexes 26-35). Figure 18 provides a comparative overview of researchers and research projects over the past 5 academic years, starting from 2021-2022.

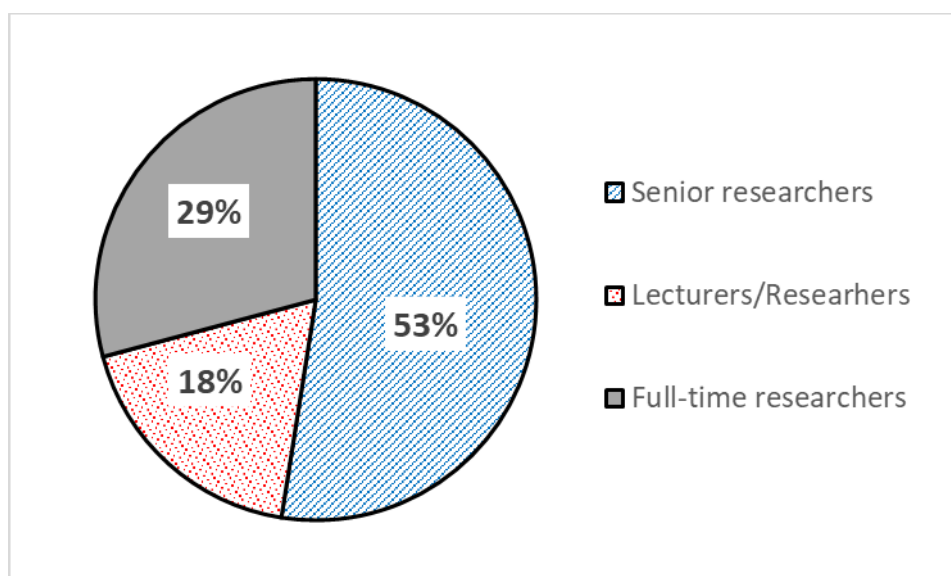


Figure 17. Percentage of category of researchers



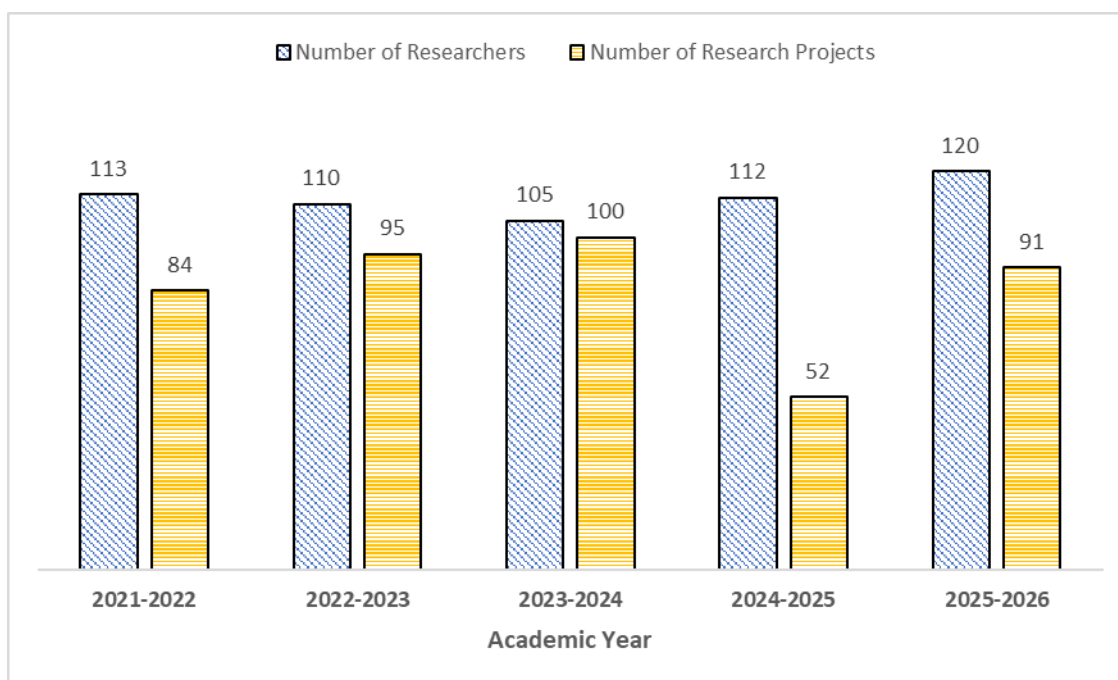


Figure 18. Number of researchers and research projects in last 5 years.

### 5.3.2. Research Facilities

The Research and Innovation Center (RIC) at ITC maintains robust research infrastructure supported through ongoing national and international collaborations. Over recent years, ITC has significantly enhanced its research capability through strategic equipment investments funded by the Government and different partners.

Currently, RIC hosts a comprehensive network of 38 specialized research laboratories, each supporting diverse fields of scientific and technological inquiry. These labs facilitate high-quality research, industry collaboration, and practical teaching activities, reflecting RIC's capability to sustain impactful research despite no major equipment upgrades during the reporting year.

| Research unit | Name of laboratory                                                                                                                                                                                                                                                                                                            |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ETM           | <ol style="list-style-type: none"> <li>1. Power System Lab</li> <li>2. Energy Efficiency Lab</li> <li>3. Biomass Energy Lab</li> <li>4. Geophysics Lab</li> <li>5. Smart Grid Lab</li> <li>6. Fossil Fuel Exploration Lab</li> </ol>                                                                                          |
| FTN           | <ol style="list-style-type: none"> <li>1. Drying technology Lab and Physicochemical Lab</li> <li>2. Cereal Processing Lab</li> <li>3. Bioactive compound Extraction and Separation Workshop</li> <li>4. Healthyrice Lab</li> <li>5. Plant Health Lab</li> <li>6. Fermentation lab</li> <li>7. Food Technology Hall</li> </ol> |

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | 8. Chromatography Lab                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| MIT | <ol style="list-style-type: none"> <li>1. Dynamic and Control Lab</li> <li>2. Control System Lab</li> <li>3. Electronics Fablab</li> <li>4. EMC Lab</li> <li>5. Computer Vision and Natural Language Processing Lab</li> </ol>                                                                                                                                                                                                                                                                              |
| MSS | <ol style="list-style-type: none"> <li>1. Nano-structure and Chemical Analysis Lab</li> <li>2. Glass Structure Lab</li> <li>3. Rubber Processing lab</li> <li>4. Ceramic Lab</li> <li>5. Materials Science and Engineering Lab</li> <li>6. Geotechnical Lab</li> <li>7. Civil Engineering Lab</li> <li>8. XRD and XRF Lab</li> </ol>                                                                                                                                                                        |
| WAE | <ol style="list-style-type: none"> <li>1. HydroMet and Disaster Management Lab</li> <li>2. Water Environment Lab</li> <li>3. Soil Lab</li> <li>4. The Khmer Earth Observation Lab</li> <li>5. Water Supply and Sanitation Lab</li> <li>6. Coastal &amp; Wetland Environmental Lab</li> <li>7. Environmental Chemistry Lab</li> <li>8. Environmental Microbiology Lab</li> <li>9. Air Pollution Analysis Lab</li> <li>10. Air Quality Monitoring Lab</li> <li>11. Pollutant Emission Research Lab</li> </ol> |

## 5.4. High Impact Research and Innovation Projects

### 5.4.1. Establishment of Rist Management Platform for Air Pollution in Cambodia

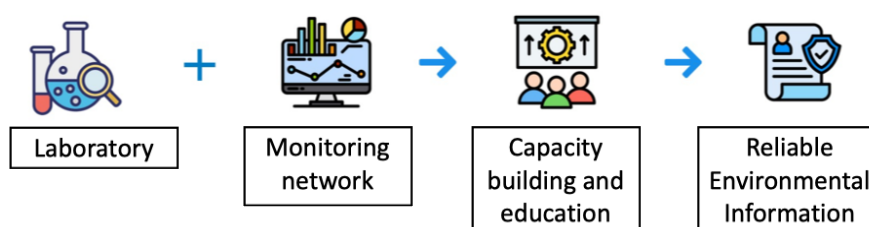


Figure 19. An overview of structure for Platform for Air Pollution Management.

In 2025, significant progress was made in establishing the Platform for Air Pollution Management. The laboratory capacity has been further strengthened through the enhancement of analytical facilities with modern instruments, including Ion Chromatography, High-Performance Liquid Chromatography, and a Carbon Analyzer, enabling more comprehensive analysis of air pollutants. An Advanced Air Quality Analysis Laboratory has been fully established and is operational for

the analysis of particulate matter (PM) to determine their chemical composition such as PM2.5, elemental and organic carbon, ions composition, PAHs, etc. and estimate pollution sources.

In addition, the air quality monitoring network has been put into operation to support continuous data collection and environmental assessment.

The project has actively disseminated research findings to the Ministry of Environment (MoE) and relevant stakeholders. As part of the project outputs, two out of the planned three joint workshops with the Ministry of Environment have been successfully conducted, facilitating exchanges between scientific research and policy development.

In collaboration with the Global Green Growth Institute, the project co-organized the 2025 Annual Event: “Blue Skies and Net Zero 2050 Campaign.” presided by Minister of MoE. Several technical workshops and seminars were also organized to strengthen the capacity of researchers and students in air quality monitoring and analysis.

To date, the project has produced 21 research publications, contributing to scientific knowledge and supporting evidence-based environmental management.

#### **5.4.2. Platform for research and training on power system in Cambodia**

The Research and Training Platform on Smart Grid of Cambodia Project, supported by European Union administered by AFD, has made significant progress in research, education. Key achievements include:

- Academic and Research Activities:
  - Master’s Program:
    - Recruitment of 13 new students of master year 1 for the batch 3 (2025-2027)
  - PhD Programs:
    - Recruitment of 1 new PhD candidate
- International Mobility:
  - Grenoble INP-UGA: 2 interns participated in research in Cambodia.
  - Staff exchanges: 2 staff members from ITC traveled to Grenoble INP-UGA, while 6 staff from Grenoble INP-UGA visited ITC.

#### **5.4.3. Industry-Academic-Community Networks (INACON) Project**

The INACON project, funded by JICA, continues to strengthen engineering education and research in Cambodia by fostering industry-academic-community collaborations. In 2025, the project achieved several key milestones:

- LBE Research Grant 2025-2026 (Oct.2025 to Sep.2026):
  - 22 applications received, with 6 projects selected for funding (max budget: \$12,000 per project).
  - Research areas include food processing, LLM, traffic assessment, soil waste recycling, and Geopark in Cambodia.
  - ITC also helps LBE researches of SRU; IoT-based monitoring system for hydroponic farming, and NUBB; Innovative sensor system for agricultural productivity, and Design and evaluation of an AI-enhanced gamified quiz plugin for moodle.



- Major International Conferences and Symposiums Supported:
  - 4rd International Conference on Earth Resources and Geo-Environment Technology (EraGET 2025) (Dec 11-13, Phnom Penh & Siem Reap) with 500+ participants from 10 countries.
  - International Symposium for Life Mechatronics (LMS2025) (Dec 26, Phnom Penh) with 60+ participants from Japan and Cambodia.
- Support for Capacity Building of Engineering Fields in Cambodia with ITC:
  - 2 future lecturers of SRU (data science) and 2 future lectures of NUBB (architecture and hydrology) were accepted by Master programs of ITC.
  - 2<sup>nd</sup> Career Connections Fair of SRU. More than 1,400 participants joined the fair including SRU students, persons from 12 companies, high school students and principals, and others from local communities.
- Support for Enhancing Academic-Industry-Community Network:
  - 14th Scientific Day in June 2025 was organized with the project and other partners.
  - Continuous discussion to establish the first Geopark in Cambodia with all related ministries, Apsara Authority, and UNESCO.
  - Promotion of ITC to Japan Business Association in Cambodia (JBAC).
  - Support special lectures from Japanese companies.
  - Academic Society for Environmental Engineering is under preparation.
- Others:
  - One lecturer from GEE was accepted by Fukui University under JICA Development Studies Program (STI Program) and start Ph.D. course.
  - 5 Japanese professors were dispatched and discussed about further collaborations, and enhancement of ITC education and research.

#### **5.4.4. ARES Institutional Support Project**

The Institutional Support Program (ISP) 2022–2027 at the Institute of Technology of Cambodia (ITC) aims to achieve international standards in teaching and research and to make research results available and valuable to Cambodian society. To meet these objectives, the project restructures and strengthens research transfer services (R1), notably by developing staff skills in technology transfer (R2); it enhances teaching and knowledge transfer capacities, with the aim of developing programs in line with international standards and accreditation (R3); it improves research organization (R4) and laboratory management (R5). Lastly, it develops documentation resources, notably through active participation in open science and open access (R6).

## **R1: Establishment of a Single Point of Entry for Technology Transfer and Business Development**

The establishment of a Single Entry Point (SEP) for technology transfer at the Institute of Technology of Cambodia (ITC) continued to advance during the reporting period. The SEP is designed to streamline interactions between external stakeholders and ITC's internal units by providing a clear and coordinated access point for both service requests and research collaboration opportunities. This mechanism strengthens coordination among the University–Industry Linkage (UIL), the Research and Innovation Center (RIC), faculties and departments, FabLabs, and the incubator, while improving the visibility and accessibility of ITC's research and innovation capacities.

Under the SEP framework, service-related requests from external partners are first received and coordinated by the UIL, which then connects the request to the relevant faculties, departments, or FabLabs. Research collaboration requests are directed through the RIC, which evaluates the scientific scope of the request and links it to the appropriate research teams or innovation units. This dual coordination mechanism ensures that both industry-oriented services and research collaborations are efficiently managed while maintaining clear institutional oversight.

In parallel, efforts were made to formalize and communicate the operational framework of the SEP within the institution. On 30 January 2026, a dedicated SEP workshop was organized at ITC, bringing together representatives from the UIL, RIC, faculties, FabLabs, and the incubator. The workshop aimed to clarify the service and research request flows, define the roles and responsibilities of each unit, and present the proposed results reporting and financial coordination mechanisms. The discussions helped align stakeholders on the SEP model, including the reporting structure to ITC Direction and the centralized management of financial flows related to services and research collaborations.

Through these efforts, the SEP contributes to strengthening ITC's institutional capacity to engage with industry partners and external stakeholders while improving coordination across research and innovation support units.

### **Business Development Activities Supporting Research Commercialization**

To support the operationalization of the technology transfer pathway, a business developer was recruited under Result 1. The role focuses on structuring the commercialization process, supporting research teams in evaluating the market potential of their innovations, and strengthening connections between researchers and industry stakeholders.

During the reporting period, several prototypes from different research units were systematically assessed using a commercialization-oriented methodology. This assessment framework evaluates technological maturity, potential market demand, and scalability in order to identify innovations with strong prospects for further development and potential market deployment. The process contributes to building a structured pipeline of research-based innovations within the ITC ecosystem.

A key milestone in this effort was the organization of “Venture Spark 2025: Where Ideas Meet Investment,” ITC's first prototype showcase and innovation networking event. The event gathered more than 50 participants, including representatives from the private sector, partner universities, and actors from the national innovation ecosystem. Out of sixteen assessed prototypes, six were selected for presentation across sectors including agriculture, food and beverages, education,

construction, and energy. Breakout sessions facilitated targeted discussions on commercialization strategies, technical improvements, and potential industry partnerships.

Building on the success of the first event, a second event “Venture Spark 2026: Khmer Innovate” was organized on 18<sup>th</sup> February 2026 at ITC. The second edition significantly expanded participation, attracting nearly 150 participants, including investors, private sector representatives, development partners, universities, startup ecosystem actors, and technology innovators. The showcase featured prototypes across sectors such as smart cities and transportation, education technology, agriculture, and consumer products.

Innovations presented included Khmer PenPal, Phnom Penh Transit, the Spai Smart Irrigation Controller, APSOR Natural Perfume Balm, Green Mango Candy, and Golden Kitchen Ready-to-Eat Meals. The event provided innovators with opportunities to present their prototypes directly to investors, industry representatives, and ecosystem stakeholders while receiving technical, market, and business development feedback.

To further support early-stage innovation development, the second edition introduced a seed grant mechanism. Two prototypes presented during Venture Spark 2026 will be selected to receive USD 1,500 each, aimed at supporting further prototype refinement, testing, and scaling toward market readiness.

These activities contribute to strengthening ITC’s innovation ecosystem by supporting the commercialization readiness of research-based innovations and facilitating connections between research teams, investors, and industry partners.

## **R2: Skills Development in Technology Transfer**

R2 complements R1 by ensuring training for the valorization team in communication, legal, and commercial skills. These training sessions are ongoing.

- Legal skills: a local legal service named BUN & Associates was selected to develop some models of contract and agreement. 8 contracts developed, with two trainings by BUN & Associates to ITC lecturer-researcher how to use those contracts. Some contracts such as Non-Disclosure Agreement, Software Evaluation Agreement have been use by UIL office and RIC. The legal service activities needed for ITC in 2026 will be identified by the incubation center.

### **In total 8 contracts with two languages have been developed for ITC**

- 1- Consulting Service Contract: Khmer & English versions;
  - 2- Non-Disclosure Agreement: Khmer & English versions;
  - 3- Copyright Assignment Agreement: Khmer & English versions;
  - 4- Trademark License Agreement: Khmer & English versions;
  - 5- Patent Assignment Agreement (Inventor and ITC): Khmer & English versions;
  - 6- Patent Assignment Agreement (ITC and Business Partner): Khmer & English versions;
  - 7- Spin-Off Agreement: Khmer & English versions; and
  - 8- Software Evaluation Agreement: Khmer & English versions.
- Communication skills: A third training mission by the Belgian expert is scheduled for April 2026. And the third -training of ITC in Belgium is scheduled in June 2026
  - Commercial skills: The business developer recruited under R1 will later provide transversal training in this area.

### **R3: Support for Academic Program Accreditation**

Activities under Result 3 (R3) aim to create an enabling ecosystem for the effective preparation and continuous improvement of ITC's academic programs toward accreditation. The Mentorship Program (MP) strengthens faculty members' scientific capacities and supports the development of high-quality learning resources. Complementary general and specialized pedagogical training enhances teaching competencies in both the short and long term. In parallel, ITC's education specialists are being equipped to prepare self-assessment reports (SARs) required for accreditation. Three local partner universities—KSIT, SRU, and NUBB—have also benefited from these activities.

**Mentorship Program (MP):** Six mentorship themes have been awarded:

- MP1: *Transport Phenomena*, in collaboration with ULB
- MP2: *Food Processing*, in collaboration with ULiège
- MP3: *Sustainable Road Infrastructure Design and Maintenance*, in collaboration with ULiège
- MP4: *Sustainable Road Infrastructure Design and Maintenance*, in collaboration with ULiège
- MP5: *Food Safety, Control, and Risk Management*, in collaboration with ULiège Gembloux
- MP6: *Statistics*, in collaboration with ULB

**Pedagogical Reinforcement:** Two pedagogical training sessions delivered by CAP (ULB) were conducted at ITC in February 2024 and March 2025. An additional training, delivered by IFRES (ULiège), is scheduled for April 2026. Furthermore, six ITC mid-level managers (including heads of office and vice deans) participated in one-week pedagogical training programs in Belgium at ULB and ULiège—four in 2024 and two in 2025.

**Accreditation:** Two training sessions led by an experienced professor from ULiège were conducted in January and September 2025. These sessions assessed the readiness of ITC's programs for accreditation to CTI through the development of self-assessment reports (SARs) and supported the identification of key steps prior to submitting formal applications. Six academic programs have participated in drafting SARs. In combination with ongoing activities under the HEIP 2 project, which also supports preparation for AUN-QA accreditation, all six SARs are expected to be finalized by the end of 2026 to adapt with CTI criteria.

### **R4: Research Project Management Capacities are developed to improve the ITC research management and outreach**

This project is a closed collaboration work between the ITC team and professors from Belgian partner universities. There are, within this project's goal, three main objectives:

- **Objective #1: Capacity building on management skills for research projects, for both technical skills and soft skills.** To achieve this, we organized and will organize a few trainings at ITC: 1) A guide on writing the scientific proposal and article, trained by a Belgian expert Prof. François Verheggenm, for 20 participants from ITC, 2) Management of large information systems for developing systematic research project management, trained by a Belgian expert Prof. Christophe Debruyne, for 13 participants from ITC, 3) A project management and research project/proposal writing, will be trained by Prof. Pierre Cornut and Prof. Barbara Marchi on December 2026, for about 25 participants from ITC.

- **Objective #2: Establish new research projects for staff upgrading their qualifications to Master's and PhD. degree.** Within the support from this project, one PhD and six Master's research projects/titles are established, with co-supervision between Cambodian and Belgian supervisors. The PhD student, Ms. ENG Samphors from ITC's Electrical Engineering Department, began in January 2024. The thesis continues normally (6 months/year at ITC, 6 months/year at UMons). Among six master's students, two (Mr. EM Hengly and Miss. SATH Sithea) are pursuing a PhD. degree in Belgian and French universities. The other four are working as lecturers at ITC.
- **Objective #3: Establish a dynamic platform to manage the project and research at ITC.** The current research project management platform is static and unable to generate the required data or reports. With support from this project, three local developers have been recruited to establish a dynamic platform that can illustrate the database on ITC's research/products, the number of ITC's researchers and their expertise/collaborations, ITC's researchers' networks, etc. This platform is also useful for helping to produce consistency of ITC's research database and to reduce the administrative work on producing the research report. Furthermore, the expectation of a new platform will help to improve the visibility of ITC's research to private firms/partners, to increase the collaborations, and improve the knowledge, such as a database of works and projects.

In conclusion, this ARES-R4 project is progressing well. The outputs and outcomes will surely serve the achievement of ITC's vision and mission on research management and outreach to society.

## **R5: Laboratory Restructuring and Management**

The first workshop titled *“Collecting Inputs on Needs for Building a Robust Laboratory Management System at ITC”* and held on 19<sup>th</sup> May 2025 with 50 participants from different units (RIC, UIL, GS) and departments. The objectives were to gather information on needs and identify the specific tasks and processes that laboratory management must take charge of, as well as to clarify the challenges currently encountered in data management, operational efficiency, and regulatory compliance. This workshop highlighted the disparity between current systems: the coexistence of three types of laboratories (teaching, research, services), separate affiliations (faculties, RIC), leading to a lack of collaboration between laboratories, and a management structure specific to each department, with sometimes several managers within the same laboratory. A proposal for a comprehensive and coherent structure for the laboratory management system at ITC was put forward.

The second workshop titled *“Elevating Laboratory Operations through Preparing Management structure, Robust Documentation, and guidelines”* and held on 4<sup>th</sup> July 2025 with 39 participants. Most of them are head of department, head or vice head of unit (UIL, RIC, GS), Head of laboratory and laboratory assistant. The objectives were to define the effective laboratory management structures (organization chart, roles, responsibilities, collaboration between laboratories, etc.), prepare comprehensive and common guidelines for the implementation of standard operating procedures (SOPs), safety protocols, quality control and other procedures, and improve documentation practices (safety, instrument inventories, maintenance and stocks, etc.). New terminologies have been defined (*workshop, practice room and laboratory*). The knowledge and best practices of the various departments were also shared.

Three laboratories have been selected (one from RIC (PAER Lab), one from Industrial and Mechanical Engineering department (Thermal Lab) and another one from Food and Chemical Engineering department) to implement the SOP, laboratory documentation, 5 S and lab digitalization for the academic year 2025-2026.

## **R6: Support for Documentation Resources and Open Source**

R6 aims to build an institutional repository act as an internal storage about the resource producing by the institute

- There will be a study visit to University of Liege this year in order to learn about the detail functionalities of the system, the procedure, policies and copyrights related issue as well as the strategy for staffs and researchers' visibility on the system
- A few workshops will be conducted on the discussion of institutional repository policy and copyrights issue at Institute of Technology of Cambodia with the support of R2 that has already finalize some legal templates.

In order to achieve this goal, we will purchase the storage server for the institutional repository system this year, with the installation and training support on the software.

Once the hardware and software are implemented, an orientation session will be conducted for our staffs as well as our partners university such as RUA, SRU, KSIT, NUBB.

## **5.5. Techno Incubation Center**

The Techno Incubation Center (TIC) was established at the Institute of Technology of Cambodia (ITC) in 2017 as a strategic initiative to strengthen research valorization, promote technology-based entrepreneurship, and enhance university–industry collaboration.

The creation of TIC responded to key institutional and national needs:

- Limited commercialization of university research outputs
- Weak linkage between laboratory research and market application
- Lack of structured support for student-led startups
- Increasing national emphasis on innovation-driven development

TIC was mandated to:

- Facilitate proof of concept and prototyping
- Provide entrepreneurship training and mentorship
- Support early-stage startup incubation
- Mobilize partnerships, funding, and investment
- Shorten the duration from laboratory development to market entry

TIC operates in coordination with:

- The Research and Innovation Center (RIC), including its five Research Units: Water and Environment (WAE), Food Technology and Nutrition (FTN), Materials Science and Structure (MSS), Mechatronics and Information Technology (MIT), and Energy Technology and Management (ETM)

- University–Industry Linkage (UIL)

Priority innovation domains include:

1. Emerging Technologies (AI, robotics, IoT, automation, Industry 4.0)
2. Food Processing and Food Safety

### 5.5.1. Overview of Activities

The Techno Incubation Center (TIC) has progressively expanded its activities to strengthen innovation, entrepreneurship development, and research commercialization within the Institute of Technology of Cambodia. During the reporting period from 2024 to March 2026, TIC implemented a range of programs designed to support student innovation, develop startup capacities, and build institutional mechanisms for incubation and technology transfer.

Key initiatives included the organization of the Techno Innovation Challenge, implementation of pre-incubation training programs, provision of seed funding to promising startup teams, and the establishment of a dedicated incubation workspace.

In addition, TIC strengthened its governance and operational framework through the development of a Standard Operating Procedure (SOP) and the preparation of an internal innovation registration system to track and support university-developed prototypes.

TIC also actively engaged with the national innovation ecosystem by participating in startup events, supporting entrepreneurship initiatives such as the SNEE program, and exploring collaboration opportunities with external partners for the commercialization of university research outputs. Furthermore, the center expanded its outreach through improved communication platforms and explored international support programs to strengthen its incubation capacity. The following table summarizes the main activities implemented by TIC during the reporting period.

Table 13. Summary of activities of TIC (2024 – March 2026)

| N | Area                        | 2024                                     | 2025                                        | Jan–Mar 2026              |
|---|-----------------------------|------------------------------------------|---------------------------------------------|---------------------------|
| 1 | Techno Innovation Challenge | 136 students, 10 business idea groups    | 163 students, 29 teams, 17 finalists        | Preparation for TICC 2026 |
| 2 | Pre-Incubation Program      | 10 teams                                 | 10 teams (structured modules strengthened)  | Follow-up mentoring       |
| 3 | Seed Funding                | Best ideas awarded                       | 8 teams received USD 500 each               | Continued support         |
| 4 | Incubation Infrastructure   | Limited/shared space                     | Dedicated J101 co-working space established | Operational monitoring    |
| 5 | SOP for Incubation          | Not formalized                           | SOP developed and implemented draft         | Continued                 |
| 6 | Innovation Registration     | Not available                            | Concept note developed                      | Pilot phase planned       |
| 7 | SNEE Initiative             | National guideline & 3-year plan drafted | Institutional committee planning            | Formalization preparation |

|    |                                |                      |                                                       |                                                |
|----|--------------------------------|----------------------|-------------------------------------------------------|------------------------------------------------|
| 8  | Commercialization              | Conceptual stage     | 2 partnership discussions (Spai, LSV)                 | Agreement structuring                          |
| 9  | Communication                  | Limited              | Website + Telegram + Facebook                         | Expanded outreach                              |
| 10 | Programmes de soutien externes | Exploration initiale | Révision du modèle d'évaluation des prototypes (ARES) | Proposition Fulbright Specialist soumise       |
| 11 | Communication                  | Limitée              | Site web lancé                                        | Communication élargie via Telegram et Facebook |

#### **a) Techno Innovation Challenge Cambodia 2025 (TICC 2025)**

The Techno Innovation Challenge is an innovation and entrepreneurship competition at the Institute of Technology of Cambodia, led by the GIC Department. The competition aims to promote innovative ideas and entrepreneurial thinking among ITC students. In 2024, the challenge engaged 136 students forming 10 business idea groups. In 2025, participation increased to 163 students forming 29 teams, with 17 teams selected as finalists. Preparation for the next competition cycle is ongoing in early 2026.

#### **b) Pre-Incubation Program**

The Pre-Incubation Program provides structured training and mentoring for teams selected from the innovation challenge. The program supports teams in developing their innovation ideas into viable business concepts through training sessions on market analysis, value proposition development, financial planning, and investor pitching. In both 2024 and 2025, ten teams participated in the program. The program was further strengthened in 2025 with improved structured modules and mentoring support. Follow-up mentoring continues in early 2026 to support teams in prototype development and startup formation.

#### **c) Seed Funding**

To support the early development of innovative ideas, TIC provides seed funding to selected teams emerging from the incubation pipeline. Initially, seed funding was provided as awards for top-performing teams from the innovation challenge. In 2025, the seed funding mechanism was formalized, and eight teams received financial support of approximately USD 500 each to further develop their prototypes and conduct initial market validation.

#### **d) Incubation Infrastructure**

To strengthen the startup development environment, TIC established a dedicated co-working and incubation space at Building J, Room J101. Prior to 2025, startup teams used limited shared spaces within the university. The new facility provides workstations, meeting areas, internet connectivity, and collaborative working space for startup teams and mentoring activities. The facility has significantly improved the incubation environment and supports collaborative innovation activities within the university. Operational monitoring of the space continues in early 2026 to ensure effective utilization by startup teams.





Zone A (A1-A18): start up team

Zone B (B1-B18): Entrepreneur students

Zone C (C1-C19): PhD Students

### e) Standard Operating Procedure (SOP) for Incubation

To ensure effective governance and sustainability of the incubation program, TIC developed a Standard Operating Procedure (SOP) that outlines the management structure and operational processes for incubation activities. Prior to 2025, incubation activities were conducted informally. In 2025, a draft SOP was developed covering startup admission procedures, incubation services, facility management, mentoring arrangements, and performance monitoring. The SOP continues to be refined in 2026 based on operational experience and feedback from stakeholders.

### f) Innovation Registration System

To strengthen innovation management at ITC, TIC developed a concept note for an internal innovation registration system. The objective of this system is to register prototypes developed by researchers and students, track innovation development, and create linkages between research outputs and incubation or commercialization opportunities. Prior to 2025, no formal mechanism existed to document these innovations systematically. The system is currently under development and is planned for pilot implementation in 2026.

### g) SNEE Initiative

TIC supports national efforts to promote entrepreneurship within higher education institutions through participation in the SNEE initiative supported by AUF. In 2024, TIC contributed to the development of national guidelines and a strategic plan for entrepreneurship development. In 2025, internal institutional planning was initiated to establish a committee structure supporting entrepreneurship activities at ITC. In early 2026, TIC organized a consultation workshop with stakeholders to discuss the implementation of SNEE activities at the institutional level.

### h) Commercialization Activities

TIC initiated discussions with external partners to support the commercialization of research outputs developed within ITC. Two initial collaboration discussions were conducted. The first collaboration involves Spai startup, which is exploring the commercialization of a smart agricultural controlling system developed by an ITC research group led by Mr. HEL Chanthan. The second collaboration involves LSV company, which aims to commercialize a natural detergent product formulated with essential oils and plant extracts developed by Dr. HOUNG Peany's research team. These discussions aim to establish a framework for research-to-market

commercialization involving R&D collaboration, production support, and potential revenue-sharing mechanisms.

### **5.5.2. Conclusion**

During the reporting period from 2024 to March 2026, the Techno Incubation Center (TIC) has progressively strengthened its role in supporting innovation and entrepreneurship at the Institute of Technology of Cambodia. Key achievements include the implementation of incubation and pre-incubation programs, the provision of seed funding for student innovation teams, and the establishment of a dedicated incubation workspace to support startup development.

TIC also contributed to strengthening the university innovation ecosystem by supporting entrepreneurship initiatives, engaging with national startup networks, and initiating discussions with industry partners to explore the commercialization of university research outputs. In addition, efforts were made to improve governance and operational capacity through the development of incubation procedures and the preparation of an internal innovation registration system.

Overall, these activities demonstrate steady progress in building an institutional framework that supports innovation, entrepreneurship, and research commercialization at ITC. Moving forward, TIC will continue strengthening incubation services, expanding partnerships, and supporting the transformation of research ideas into practical solutions and market-oriented innovations.

## **5.6. General Conclusion**

The 2025–2026 academic year highlights the growing maturity and strategic direction of the Research and Innovation Center (RIC) at the Institute of Technology of Cambodia (ITC). Since its establishment in 2015, RIC has played a central role in promoting applied research, innovation, and collaboration within and beyond the institution.

This year, 120 researchers contributed to 91 active research projects, supported by 28 newly funded initiatives. With a publication output of 208 peer-reviewed articles and participation in over 400 scientific events for the last five years, ITC has demonstrated continued leadership in producing high-quality research with national and international relevance.

Many projects focused on applied and developmental research, generating concrete solutions to local and regional challenges—such as biomass energy, energy efficiency, microplastic filtration, sustainable food processing, and smart infrastructure. These initiatives often align with national priorities, reflecting ITC’s role in supporting evidence-based policy and industry innovation.

International collaboration remains a key strength, with successful partnerships involving institutions and funding agencies from France, Belgium, Japan, the United States, Australia, and the UK. Research efforts also received strong support from national entities including MoEYS, HEIP 2, and CCCA.

A robust network of 38 research laboratories continues to support the implementation of cutting-edge research and enhance the university's capacity for both experimentation and advanced training. Despite a decrease in the total number of active projects—attributable to the completion of earlier initiatives—RIC has maintained strong momentum in research output and funding acquisition.

Going forward, RIC will focus on strengthening research governance, enhancing cross-sectoral collaboration, and expanding strategic partnerships, ensuring long-term impact and alignment with Cambodia's development goals.

## **6. National and International Cooperation**

## 6.1. National Cooperation

The University–Industry Linkage (UIL) Office at the Institute of Technology of Cambodia (ITC) plays a key role in strengthening collaboration between academia and the private sector. Through strategic partnerships with industry, government agencies, and international organizations, UIL promotes applied research, professional training, technology transfer, and workforce development.

This report presents an overview of collaborative activities conducted between June 2025 and March 2026, highlighting achievements in industry engagement, training, research collaboration, and partnership development.

During this period, ITC implemented 138 collaborative activities with industry partners, demonstrating the institution’s strong commitment to strengthening the link between higher education and the industrial sector.

### 6.1.1. Overview of Industry Collaboration Activities

The University–Industry Linkage Office coordinates a wide range of activities designed to enhance cooperation between ITC and industry stakeholders. These activities include:

- Seminars and technical workshops
- Participation in external professional events
- Industry visits to ITC
- Field visits to companies for students and lecturers
- Collaborative training, projects and consulting services
- Partnership agreements with industry partners

Table 14. Trends in UIL collaboration activities with industry (2023–2026)

(Source: *UIL Office Activity Records*)

| Type of Activity                             | 2024 | 2025 | 2026 |
|----------------------------------------------|------|------|------|
| Organizing seminars/workshops                | 43   | 40   | 32   |
| Participation in external seminars/workshops | 23   | 16   | 32   |
| Industry visits to ITC                       | 30   | 50   | 37   |
| ITC visits to industry                       | 19   | 17   | 14   |
| Training, projects and consulting services   | 27   | 19   | 12   |
| MoU/MoA agreements with industry             | 9    | 10   | 11   |

Notes: 2023 (June 2022-May 2023); 2024 (June 2023-May 2024); 2025 (June 2024-May 2025); 2026 (June 2025-March 2026)

### **6.1.2. Trends in University–Industry Engagement**

Analysis of the data presented in Table 13 reveals several important trends in the development of ITC’s industry engagement activities.

First, participation in externally organized seminars and workshops increased significantly, rising from 10 activities in 2023 to 32 activities in 2026. This trend reflects ITC’s growing participation in national and international professional networks and its increasing visibility in discussions related to engineering, sustainability, and innovation.

Second, industry visits to ITC remained consistently high, demonstrating continued interest from companies in establishing collaboration with the university. These visits provide opportunities to explore partnerships in research, training, and recruitment.

Third, professional training and consulting activities remain an important component of UIL operations. These activities allow ITC to provide technical expertise to industry partners while strengthening applied research capacity within the institution.

Finally, the steady number of MoU and MoA agreements indicates sustained efforts to formalize long-term partnerships with industry stakeholders.

Overall, these trends demonstrate that ITC is progressively strengthening its role as a national platform for university–industry collaboration and knowledge transfer.

### **6.1.3. Seminars and Workshops**

Between June 2025 and March 2026, ITC organized 32 seminars and technical workshops aimed at enhancing the technical and professional competencies of students, lecturers, and industry professionals (see Annex 47).

The seminars addressed a wide range of topics relevant to emerging technological and industrial challenges, including:

- Artificial intelligence and digital transformation
- Environmental monitoring and water resource management
- Construction engineering and infrastructure technologies
- Electrical and industrial safety
- Engineering innovation and structural rehabilitation
- Career development and internship preparation

These events were organized by different faculties and research units at ITC in collaboration with international universities, research institutes, and private companies.

In addition to internally organized activities, ITC staff and students also participated in 32 external seminars and professional events hosted by ministries, international organizations, and industry associations (see Annex 48). These engagements contributed to strengthening institutional networks and knowledge exchange.

#### **6.1.4. Industry Engagement and Visits**

Industry engagement remains one of the core missions of the UIL Office. During the reporting period, 37 industry representatives visited ITC to discuss collaboration opportunities (see Annex 49).

These visits focused on several key areas:

- Internship and employment opportunities for ITC students
- Joint research and technology development
- Professional training and capacity-building programs
- Technical collaboration in laboratories and applied research

Key organizations visiting ITC included Huawei Cambodia, BYD Auto Co., Ltd., Nippon Koei Co., Ltd., FAO Cambodia, and the Cambodia Chamber of Commerce.

In addition to hosting industry representatives, ITC organized 14 field visits for lecturers and students to industrial facilities (see Appendix Table 4). These visits enabled participants to gain direct exposure to industrial operations and technologies.

Examples of companies and facilities visited include:

- De Heus TMH Cambodia
- Chip Mong Industries
- Mega First Plantation
- Phnom Penh Water Supply Authority
- TotalEnergies Depot

Such visits play a critical role in bridging the gap between academic training and real industrial practices.

#### **6.1.5. Collaborative Training, Projects and Consulting Services**

During the reporting period, ITC implemented 12 collaborative projects and training programs with industry partners (see Annex 51). These initiatives fall into two main categories, professional training program and applied research and innovation projects.

ITC delivered several specialized training programs for industry partners and government agencies, including:

- Minerals, rocks, and soil analysis training
- Wastewater treatment and environmental compliance training
- PLC and SPC technical training for manufacturing industries

For collaborative research with private sector, several research projects were conducted, including:

- Development of innovative food products under the CAPFish project
- Research on pesticide residues in irrigation systems
- Energy efficiency research for buildings in Cambodia

#### **6.1.6. Partnership Agreements with Industry**

Between June 2025 and March 2026, ITC signed 11 Memoranda of Understanding (MoU) and Memoranda of Agreement (MoA) with industry partners and organizations (see Annex 52).

These agreements aim to strengthen collaboration in several strategic areas:

- Student development and internships: Companies such as Wing Bank (Cambodia) Plc. and SNP-PT International Co., Ltd. support internship opportunities and training programs for ITC students.
- Research and innovation: Partnerships with organizations such as China Road and Bridge Corporation, Nippon Koei, and the Wildfowl and Wetlands Trust (UK) focus on collaborative research and technology development.
- Professional training and knowledge exchange: Industry associations including the Cambodia Chamber of Commerce and the Japanese Business Association of Cambodia collaborate with ITC to support workforce development initiatives.

### **6.1.7. Flagship Event: 8th Industry Consortium**

A major highlight of the reporting period was the 8th Industry Consortium, held on 16 January 2026 at ITC.

The consortium brought together representatives from academia, industry, and development partners to discuss strategies for strengthening collaboration in:

- skills development
- professional training
- applied research and innovation

Industry partners emphasized the importance of strengthening soft skills, critical thinking, and problem-solving abilities among engineering graduates.

Participants also identified growing demand for professional training in areas such as:

- automation and artificial intelligence
- digitalization and Industry 4.0 technologies
- construction and project management
- energy efficiency and sustainability

The outcomes of the consortium will guide future curriculum development, training programs, and university–industry collaboration initiatives coordinated by UIL (For more detail: Report of the 8th Industry Consortium.pdf).

### **6.1.8. Conclusion**

Between June 2025 and March 2026, the University–Industry Linkage Office successfully expanded collaboration between ITC and industry through a wide range of activities including seminars, industry visits, research projects, training programs, and partnership agreements.

These initiatives contribute to:

- strengthening graduate employability
- promoting applied research and innovation
- enhancing collaboration between academia and industry
- supporting Cambodia’s industrial and technological development

Through continued collaboration with industry partners, ITC aims to further strengthen its role as a leading institution for engineering education, research, and innovation in Cambodia.



## 6.2. International Cooperation

### 6.2.1. Memorandum of Understanding (MoU) and Framework Cooperation Agreement (MoA)

As part of its internationalization strategy, the Institute of Technology of Cambodia (ITC), like leading academic institutions worldwide, is committed to strengthening and expanding its network of partnerships at the local, regional, and international levels. This approach aims to develop robust academic and scientific collaborations, encourage student and faculty mobility, and foster the exchange of expertise to enrich both the educational experience and research activities.

This momentum materialized during the 2025-2026 academic year with the signing of 18 Memoranda of Understanding (MoUs) and 4 Framework Agreements (MoAs) with various partner institutions. These agreements form the basis for lasting cooperation, paving the way for the implementation of joint projects, academic mobility programs, and collaborative research initiatives.

To date, the ITC has 211 memoranda of understanding and framework agreements signed with partner institutions around the world.

These partnerships are spread across four continents:

- Asia: 136 agreements
- Europe: 64 agreements
- North America: 6 agreements
- Oceania: 5 agreements

The table below presents a summary of the MoU and MoA signed with academic partners, illustrating ITC's continued commitment to being part of a dynamic and promising international academic network.

| No | Nom de l'institution                                           | Pays      | Date       | MoU/MoA | Remarque |
|----|----------------------------------------------------------------|-----------|------------|---------|----------|
| 1  | China International Water & Electri Corperation                | China     | 22-05-2025 | MoA     |          |
| 2  | Ecole Polytechnique                                            | France    | 05-12-2025 | MoU     | Renew    |
| 3  | Ecole primaire 5 Mars                                          | Cambodia  | 06-03-2026 | MoU     |          |
| 4  | Ecole primaire SDAO                                            | Cambodia  | 06-03-2026 | MoU     |          |
| 5  | ESME Engineering School                                        | France    | 28-11-2025 | MoU     |          |
| 6  | Faculty and Graduate School of Agriculture of Kyoto University | Japan     | 26-02-2026 | MoA     | Renew    |
| 7  | Faculty and Graduate School of Agriculture of Kyoto University | Japan     | 26-02-2026 | MoU     | Renew    |
| 8  | Guangxi Polytechnic of Construction                            | China     | 13-05-2025 | MoU     |          |
| 9  | Institut Teknologi Sepuluh Nopember (ITS)                      | Indonesia | 10-10-2025 | MoU     |          |
| 10 | Korea University OJEong Resilience Institute (OJERI)           | Korea     | 11-02-2026 | MoU     |          |

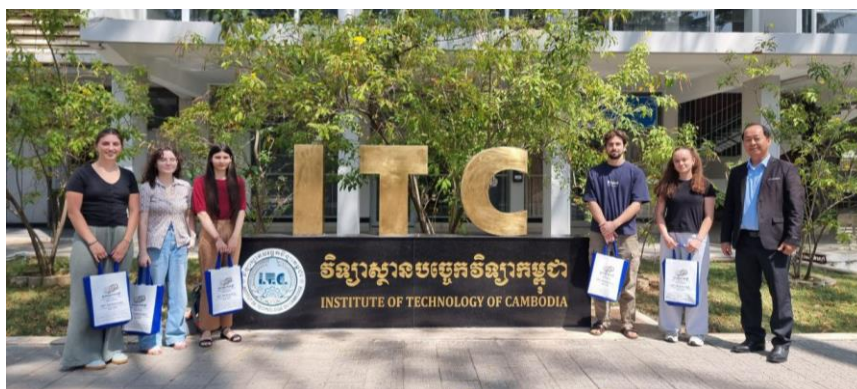
|    |                                                 |             |            |     |       |
|----|-------------------------------------------------|-------------|------------|-----|-------|
| 11 | Ministry of Environment (MoE)                   | Cambodia    | 11-02-2026 | MoU |       |
| 12 | Norwegian Institute for Water Research (NIVA)   | Norway      | 15-06-2025 | MoU |       |
| 13 | Rotterdam University of Applied Sciences (RUAS) | Netherlands | 05-01-2026 | MoU |       |
| 14 | SNV Netherlands Development Organisation        | Netherlands | 30-06-2025 | MoU |       |
| 15 | Università Politecnica delle Marche (UNIVPM)    | Italy       | 29-09-2025 | MoU |       |
| 16 | Université de Toulon                            | France      | 21-10-2025 | MoU | Renew |
| 17 | Université de Toulon                            | France      | 21-10-2025 | MoA |       |
| 18 | University of Science and Technology of Hanoi   | Vietnam     | 08-10-2025 | MoU |       |
| 19 | University of Science and Technology of Hanoi   | Vietnam     | 08-10-2025 | MoA |       |
| 20 | University of the Philippines                   | Philippines | 09-09-2025 | MoU |       |
| 21 | University of Yamanashi                         | Japan       | 02-09-2025 | MoU |       |
| 22 | Yellow River Conservancy Technical University   | China       | 16-12-2025 | MoU |       |

### 6.2.2. International students at ITC (Inbound students)

As part of its multilateral inter-university exchange program, the Institute of Technology of Cambodia (ITC) continues to strengthen its international dimension. For the 2025-2026 academic year, 60 international students were welcomed to the institution.

The arrival of these international students and researchers not only enriches the academic experience but also serves as a genuine catalyst for development. It helps to create a stimulating multicultural environment that benefits both local students and faculty. Such diversity fosters open-mindedness, encourages the exchange of ideas, and enhances the quality of education.

From an institutional perspective, attracting international students increases ITC's visibility and prestige on the world stage. It also facilitates the establishment of new partnerships and strengthens academic and scientific collaborations. Detail information is shown in Annex 53.



### 6.2.3. ITC students abroad (Outbound)



For the first semester of the 2025-2026 academic year, 76 students from the Cambodia Institute of Technology benefited from an international mobility opportunity. This initiative reflects the institute's commitment to promoting academic openness and offering its students learning experiences beyond national borders.

These students participate in various types of mobility. Some undertake short-term mobility, such as a semester of study, internships, exchange programs, or specific academic projects at partner universities. Others participate in long-term mobility, allowing them to pursue several semesters of study, or even an entire program, abroad.

This experience represents a significant step in their academic and personal development. It allows them to discover new teaching methods, deepen their scientific and technical knowledge, and strengthen their language skills. Furthermore, international mobility fosters cultural awareness, independence, and adaptability in students within multicultural environments.

Upon returning to Cambodia, these students bring with them new knowledge, international perspectives, and enriching experiences that they can share with their peers and teachers. Thus, international mobility contributes not only to the students' education but also to the academic reputation of the Cambodian Institute of Technology.



### 6.2.4. Foreign Organizations on ITC campus

As the Institute of Technology of Cambodia places greater emphasis on research and innovation, we have foreign organizations on our campus involved in various research fields, working in collaboration with ITC researchers. These international organizations are:

- Agence Universitaire de la Francophonie (AUF-3)
- Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD-4)
- Institut de Recherche pour le Développement (IRD-20)
- JICA INACON Project (2)
- Establishment of Risk Management Platform for Air Pollution (ERMPAP-SATREPS Project-1)
- ECAM LaSalle (1)

These organizations employ 31 people of various nationalities who are actively working on their projects.

# **Annex**

## Annex 1. Minutes of the International Consortium Meeting on 26-27 March 2025.



### COMPTE-RENDU DE LA REUNION DU CONSORTIUM

#### INTERNATIONAL D'APPUI A L'ITC

Les 26 et 27 mars 2025, à l'ITC, Phnom Penh

### MEMBRES DU CONSORTIUM 2025

#### I. Établissements étrangers

| No | Nom de l'établissement                                                            | Sigle               | Pays      |
|----|-----------------------------------------------------------------------------------|---------------------|-----------|
| 1  | Ministère de l'Éducation, de la Jeunesse et des Sports                            | MoEYS               | Cambodge  |
| 2  | Ambassade de France                                                               | AF                  | France    |
| 3  | JICA Cambodia Office                                                              | Jica                | Japan     |
| 4  | Ministère des Mines et de l'Énergie                                               | MME                 | Cambodge  |
| 5  | Agence Universitaire de la Francophonie                                           | AUF                 | AUF       |
| 6  | Centre international de recherche agricole pour le développement                  | CIRAD               | France    |
| 7  | Chambre de Commerce et d'Industrie France Cambodge                                | CCIFC               | France    |
| 8  | DevKhmer SARL                                                                     | DevKhmer            | Cambodge  |
| 9  | École Nationale Supérieure de l'informatique pour l'Industrie et l'Entreprise     | ENSIIE              | France    |
| 10 | École Catholique des Arts et Métiers                                              | ECAM LaSalle        | France    |
| 11 | École Nationale des Ponts et Chaussées                                            | ENPC                | France    |
| 12 | École Nationale Supérieure en Génie des Technologies Industrielles (ENSGTI), UPPA | ENSGTI              | France    |
| 13 | IMT Mines Alès, représentant Institut Mines-Télécom                               | IMT Mines Alès      | France    |
| 14 | INSA Lyon                                                                         | INSA Lyon           | France    |
| 15 | INSA Toulouse                                                                     | INSA Toulouse       | France    |
| 16 | Institut National des Sciences appliquées de Rennes                               | INSA Rennes         | France    |
| 17 | Institut de Recherche pour le Développement                                       | IRD                 | France    |
| 18 | Institut National Polytechnique de Toulouse                                       | INP Toulouse        | France    |
| 19 | Institut Pasteur du Cambodge                                                      | IPC                 | Cambodge  |
| 20 | Institut Universitaire de Technologie d'Orsay                                     | IUTO                | France    |
| 21 | IUT de Saint-Nazaire                                                              | IUT                 | France    |
| 22 | Kasetsart University                                                              | KU                  | Thaïlande |
| 23 | Kyushu University                                                                 | KU                  | Japon     |
| 24 | Montpellier SupAgro                                                               | Montpellier SupAgro | France    |
| 25 | Northeastern Illinois University                                                  | NIU                 | USA       |
| 26 | Polytech Lille                                                                    | Polytech Lille      | France    |
| 27 | Schoolab / Hexagon                                                                | Schoolab            | France    |
| 28 | Institute of Science Tokyo                                                        | Tokyo Tech/IST      | Japon     |

|    |                                             |                        |          |
|----|---------------------------------------------|------------------------|----------|
| 29 | Université catholique de Louvain            | UCLouvain              | Belgique |
| 30 | Université de la Réunion                    | UR                     | France   |
| 31 | Université de Liège                         | ULiège                 | Belgique |
| 32 | Université de Liège, Gembloux Agro-Bio Tech | Gembloux Agro-Bio Tech | France   |
| 33 | Université de Mons                          | UMONS                  | Belgique |
| 34 | Université de Namur                         | UN                     | Belgique |
| 35 | Université de Rennes                        | UNIV Rennes            | France   |
| 36 | Université Libre de Bruxelles               | ULB                    | Belgique |
| 37 | Université Paris-Sud                        | UPS                    | France   |
| 38 | Université Paul Sabatier                    | UPS                    | France   |
| 39 | Université Sorbonne Paris Nord              | UP 13                  | France   |
| 40 | VOLTRA Co., Ltd.                            | VOLTRA                 | Cambodge |

## II. Partenaires institutionnels

1. M. Pierre VINCENT, Conseiller de coopération et d'action culturelle, Ambassade de France au Cambodge et Directeur de l'Institut Français du Cambodge
2. Mr. Einosuke KAMEGAI, Second Secretary for Economic & ODA Section, Embassy of Japan
3. S.E. le Dr. OM Romny, Secrétaire d'État au ministère de l'éducation, de la jeunesse et des sports
4. S.E. Mme PEN Chhorda, Secrétaire d'État au ministère des mines et de l'énergie
5. M. Nicolas MAINETTI, Directeur Asie-Pacifique de l'AUF
6. Mme BOUCHER Sandrine, Directrice au Cambodge chez l'AFD
7. M. KOICHIRO Watanabe, Senior Advisor of JICA
8. M. Luc LE CALVEZ, Représentant de l'IRD au Cambodge
9. M. ROGER François, Directeur régional Asie-Pacifique, Centre international de recherche agricole pour le développement (CIRAD)
10. M. JULLIARD Charles, Chambre de Commerce et d'Industrie France Cambodge (CCIFC)

## III. Entreprises

11. M. Franck TOUCH, DevKhmer SARL Co., Ltd.,
12. M. VAUDIN Yann, VOLTRA Co., Ltd.,

## IV. Membres invités

13. Mme Thi Anh-Dao TRAN, Attachée de Coopération Universitaire et Scientifique, Ambassade de France au Cambodge
14. M. IM Kravong, Représentant AUF-Cambodge
15. M. JUN-ICHI Takada, Executive Vice President for Global Affairs, Institute of Science Tokyo
16. M. THOEUN Vongdy, JICA Cambodia Office
17. Mme TRIA Assia, IMT Mines Alès
18. Mme ANDRÉ Françoise, IMT Mines Alès
19. M. DESPLANCHE Didier, ECAM LaSalle de Lyon
20. M. AUBERT Pascal, Université Paris-Saclay
21. M. VINCKE Bastien, Université Paris-Saclay
22. Mme THIBON Isabelle, Institut National des Sciences appliquées de Rennes
23. M. SPIEGEL André, Institut Pasteur du Cambodge
24. M. VERLEYSSEN Michel, Université catholique de Louvain
25. M. DEBASTE Frédéric, Université Libre de Bruxelles et Représentant des Belges
26. M. CARLETTI Timoteo, Université de Namur
27. Mme DASNOY Christine, Université de Liège
28. Mme LEROY Christine, Attachée et Gestionnaire Appui Institutionnel-ARES

29. M. GOSSELIN Bernard, Université de Mons
30. M. ENGLERT Yvon, Expert, AH&J
31. M. ANGLES Paul, INSA Toulouse
32. M. SKRZYPEK Thibaut, École nationale des ponts et chaussées
33. M. CYR Martin, Université Paul Sabatier
34. M. MAUSSION Pascal, INP Toulouse
35. M. OBRECHT Christian, INSA de Lyon
36. M. Kévy JOHANNES, INSA de Lyon
37. M. KUZNIK Frédéric, INSA de Lyon
38. Mme KASEL Alexandra, Ambassade de France
39. M. DARRACQ Bruno, Institut Universitaire de Technologie d'Orsay
40. M. SANGLEBOEUF Jean-Christophe, Université de Rennes
41. Mme WARAPA Mahakarnchanakul, Kasetsart University
42. Mme CHAISERI Siree, Kasetsart University
43. Mme LEGEAIS Béatrice, IUT de Saint-Nazaire
44. Mme SESTER Mathilde, CIRAD
45. Mme Chikako SASAKI, Industrial Linkage/Project Coordinator JICA/ INACON Project
46. M. Kotaro Yonezu, KYUSHU University
47. Mme Stéphanie LEROY, CNRS - Laboratoire Archéomatériaux et Prévion de l'Altération/Institut de Recherche sur les ArchéoMATériaux (CNRS/Université Paris Saclay)
48. Mme AVALLONE Sylvie, Montpellier SupAgro
49. Mme LENCZEWSKI Melissa, Northeastern Illinois University
50. M. PHALIP Vincent, Polytech Lille
51. M. CHABRIAT Jean-Pierre, Université de la Réunion
52. M. JAN Bogaert, Université de Liège, Gembloux Agro-Bio Tech
53. M. COLBEAU-JUSTIN Christophe, Université Paris-Sud
54. M. CHARLES Yann, Université Sorbonne Paris Nord
55. M. DOSSANTOS-UZARRALDE Pierre, École Nationale Supérieure de l'informatique pour l'Industrie et l'Entreprise
56. M. MERCADIER Jacques, École Nationale Supérieure en Génie des Technologies Industrielles (ENSGTI), UPPA
57. M. GURRIN Cathal, Dublin City University

## **V. Équipe de direction de l'ITC**

### **V. 1. Direction**

58. S.E. le Dr. PHOEURN Sackona, Présidente du Conseil d'Administration et ministre de la culture et des beaux-arts
59. S.E. le Prof. PO Kimtho, Directeur de l'ITC
60. M. SOY Ty, Directeur adjoint
61. M. BUN Kim Ngun, Directeur adjoint
62. M. NGUON Kollika, Directeur adjoint
63. M. Ludovic PROTIN, Directeur honoraire de l'ITC
64. M. CHUNHIENG Thavarith, Conseiller pour la coopération
65. M. NUTH Sothân, Conseiller pour les affaires académiques
66. M. PENH San, Conseiller pour l'administration

### **V.2. Facultés, départements et sections**

67. M. OR Chanmoly, Directeur du centre de recherche et d'innovation ((RIC)
68. M. LIN Mongkolser, Vice-directeur du centre de recherche et d'innovation et Chef du département des mathématiques appliquées et statistiques (AMS)
69. M. SIM Tepmony, Directeur de l'École doctorale (GS)
70. M. HAN Virak, Doyen de la faculté de génie civil (GCI)
71. M. CHHUON Kong, Doyen de la faculté d'hydrologie et des ressources en eau (GRU)

72. M. IN Sokneang, Doyenne de la faculté de génie chimique et alimentaire (GCA)
73. M. ENG Chandoeum, Doyen de la faculté de génie de géo-ressources et de géotechnique (GGG)
74. M. CHRIN Phok, Vice-doyen de la faculté de génie électrique et Chef de département de génie électrique et énergétique (GEE)
75. M. CHAN Sarin, Vice-doyen de la Faculté de génie électrique et chef du département de génie industriel et mécanique (GIM)
76. M. LAY Héng, Doyen de la faculté de génie électrique et chef du département de génie informatique et communication (GIC)
77. M. PHUN Veng Kheang, Chef du département de génie des transports et des infrastructures (GTI)
78. Mme SREY Malis, Chef du département de Tronc Commun (TC)
79. Mme KHEMTRAN Krasel, Coordinatrice de la Section de français (SF)
80. M. SO Phea, Head of English Section (SA)
81. Mme HANG Vichothy, Head of Administration Office
82. M. SOK Kimheng, Head of the Library STEM
83. Mlle SANG Davin, Deputy-head of University-Industry Linkage (UIL)
84. M. SRENG Sochenda, Vice-Dean of the Faculty of Electrical Engineering in charge of the department de Génie de Télécommunications et Réseaux (GTR)
85. M. SRANG Sarot, Head of ECAM Engineering Program at ITC and Head of Dynamics and Control Laboratory (DCLab)
86. Mme HANG Leakhena, Chef du bureau de l'assurance de qualité interne (QA)
87. M. CHEA Samneang, International Program Manager
88. M. KHIEV Samnang, Responsable du service informatique (IT)
89. M. SIEANG Phen, Head of International Relations Office (IRO)

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Cette année, la réunion du Consortium international d'appui à l'ITC a repris son rythme habituel, soit une journée et demie. Malgré tout, étant donné que certains de nos membres étaient dans l'impossibilité de déplacement pour diverses raisons, nous avons décidé d'organiser une réunion hybride pour les séances plénières et les discussions dans les départements respectifs. Pour comprendre plus précisément, nous vous invitons à lire l'ordre du jour présenté ci-dessous:

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### **Jour 1 : Mercredi 26 mars 2025**

**7h30 - 8h30 : Accueil des participants**

**8h30 - Session plénière dans la salle A-110**

**8h30 - 10h30 :**

- Discours de bienvenue de S.E. PHOEURNNG Sackona, Présidente du CA de l'ITC
- Méthodologie de travail et objectifs de la réunion du consortium 2025
- Bilan d'activités 2024 - 2025
  - Événements marquants (S.E. M. PO Kimtho)
  - Bilan des études, e-learning et bibliothèque (M. SOY Ty)
  - Bilan de recherche, coopération, cellule d'interface (M. Bun Long)

**10h30 - 11h00 : Pause-café**

**11h00 - 12h00 : Perspective et Stratégie 2025-2026 (M. BUN Kimngun)**

**12h00 - 13h00 : Déjeuner à l'ITC**

**13h00 Sessions par 5 groupes : Groupe 1 (AMS, GIC, GTR, MIT), Groupe 2 (GCI, GAR, GTI, GGG, MSS), Groupe 3 (GEE, GIM, ECAM, ETM), Groupe 4 (GCA, GRU, WAE&FTN), Groupe 5 (DTC)**



13h00 - 17h30 : Travail en groupe  
13h00 - 14h00 : Présentation  
14h00 - 17h30 : Discussion (avec la pause-café)  
18h30 - Dîner convivial organisé par la direction de l'ITC

## **Jour 2 : Jeudi 27 mars 2025**

### **08h30 : Session plénière dans la salle A-110**

08h30 - 12h00 Présentation des synthèses des groupes de travail

Départements : 8 minutes par département

Pause-café

3ème cycle (Master et Doctorat) : 15 minutes

Recherche et Innovation : 15 minutes

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En introduction, **S. E. Mme PHOEURNG Sackona**, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC, salue tous les membres et surtout les nouveaux membres du Consortium international d'appui à l'ITC, de France, du Japon, de Belgique, de Thaïlande et d'autres pays, en présentiel et en ligne. Ce regroupement multilatéral permet toujours de renforcer le développement de l'ITC. Votre présence d'aujourd'hui témoigne bien de votre fidélité. L'IRD, le CIRAD, l'AFD, l'ARES, La JICA et bien d'autres partenaires sont des piliers cruciaux pour que l'ITC devienne ce qu'il est actuellement.

« Votre appui depuis plus de 30 ans contribue davantage au développement durable de l'ITC. L'existence d'un tel Consortium international et d'un tel Conseil d'administration, c'est un record au Cambodge », a-t-elle ajouté.

Vous savez, quand vous me rappelez le CIC, Comité international de coordination – Angkor. Sachant que depuis 1993, le CIC-Angkor est un mécanisme international de coordination de l'assistance offerte par différents pays et organisations à la sauvegarde et au développement du site historique d'Angkor. Son rôle est aussi comme celui du Consortium international de l'ITC.

On voit donc que ces soutiens occupent une place prépondérante pour le développement durable du Cambodge.

Par ailleurs, on voit aussi la présence de la nouvelle génération qui assume une grande responsabilité pour maintenir la qualité de formation et de recherche à l'ITC. L'avenir de l'ITC vous appartient.

Je tiens à toutes et à tous remercier grandement pour toutes les grandes réalisations que nous avons réalisées ensemble.

Après le tout de table, elle a invité la représentante de l'Ambassade de France, Mme TRAN Thi Anh-Dao, Attachée de coopération universitaire et scientifique, qui glisse ses petits mots comme les suivants :

.....  
**Mme TRAN Thi Anh-Dao, Attachée de Coopération Universitaire et Scientifique de l'Ambassade de France au Cambodge**

Merci votre excellence,

Bonjour à toutes et à tous,

L'Institut de Technologie du Cambodge est un institut de référence dans le domaine de la formation des ingénieurs et des techniciens. Il s'agit d'un rayonnement non seulement régional mais international. La France, à travers l'ambassade, s'efforce de renforcer le rayonnement international de l'ITC depuis 1993, à la fois par la formation et le soutien au partenariat de double diplomation délocalisée, également dans

la mobilité des étudiants que ce soit dans le cadre des programmes d'échange ou à travers des bourses de mobilité, que nous, l'ambassade de France, s'efforçons de développer chaque année. Et puis, il y a aussi le partage de connaissance par l'échange d'expertise, nous soutenons autant que ça se peut des missions de professeurs et chercheurs provenant de France et également l'envoi des professeurs et chercheurs de l'ITC vers nos établissements français pour ce genre de mission. Je dirais aussi que l'ITC a le rôle de dissémination et de valorisation via les journées scientifiques que l'ITC organise chaque année. Je tiens à saluer l'ampleur et la densité des activités à la fois en matière de formation et de recherche que l'ITC développe au cours du temps. Je ne citerai pas tous les outils de coopération que l'Ambassade de France met à la disposition aux établissements cambodgiens et en l'occurrence l'ITC. Nous avons soutenu des projets de 12 mois ou 2 ans. Je tiens aussi à souligner le soutien que nous souhaitons apporter au travers des ressources humaines. L'ITC a accueilli, je ne vais pas m'étaler sur cette partie triste, un expert technique international qui est devenu votre conseiller et qui n'est plus parmi nous, M. Bruno DAGUES. Vous savez également, consolider un partenariat, en accueillant nos instituts de recherche qui sont ici devant moi, l'IRD mais aussi le CIRAD, représenté par François Roger. Dans un environnement tout à fait international puisque vous accueillez aussi sur votre campus des partenaires de la région mais également d'Europe. Je vois le représentant de l'institution belge. Ici, je vois aussi le représentant de Jica du Japon. J'aimerais terminer avec mon dernier constat. En échangeant un instant avec son excellence Dr. OM Romny, je vois qu'il est toujours attaché à cet institut. Je me félicite de la qualité des ressources humaines de l'ITC qui sont formées, à la fois par le renforcement des capacités et également par les formations montées ici. Félicitations pour le partenariat international bien solide dont l'ITC est doté et je vous souhaite bonne continuation. Au nom de l'ambassadeur de France, je tiens à remercier l'ITC pour nous avoir invités à ce consortium international. Merci madame la Présidente.

**S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci madame. Le soutien de la France contribue davantage à notre développement. Nous avons aussi le représentant des collègues belges qui sont partenaires de l'ITC depuis 1997. La parole est accordée maintenant à M. Michel VELEYSSEN.

**M. Michel VERLEYSSEN, Université catholique de Louvain**

Votre excellence Madame Sackona,  
Monsieur Romny,  
Monsieur Kimtho,  
Et chers collègues de l'ITC,

C'est un privilège d'être parmi vous, accompagné, je pense cette année, d'une dizaine de collègues belges impliqués dans différents projets, entre les universités belges francophones et l'ITC. Comme vous le savez, le projet que nous appelons « Appui institutionnel », c'est un peu la colonne vertébrale de tous les projets de collaboration que mes collègues et moi-même menons depuis près de 20 ans avec l'ITC. Je sais que vous allez en parler aujourd'hui ou en tout cas que ça se trouve dans le rapport que nous venons de recevoir. Je voulais juste dire maintenant que nous sommes tous particulièrement heureux de pouvoir aujourd'hui continuer à accompagner le développement de l'ITC depuis pour ces années. Quel développement !!! Chacun d'entre nous qui travaillent depuis longtemps avec vous a vu l'évolution d'année en année des compétences de l'ITC de son organisation et ce à une vitesse phénoménale. J'espère qu'au fur et à mesure des évolutions de l'ITC, nous avons également pu faire évoluer nos outils de collaboration, à titre d'exemple l'appui institutionnel tel que nous connaissons aujourd'hui, ça n'a rien à avoir avec la collaboration il y a 10 ans et j'espère que cela convient à vos aspirations. Et en tout cas ça convient à nous, à mes collègues à moi-même qui nous présentons en mars cette semaine en est la meilleure preuve. Comme vous le savez, la coopération internationale est aujourd'hui menacée dans beaucoup d'endroits dans le monde soit pour des questions politiques pour des questions purement budgétaires et la Belgique malheureusement n'échappera pas ses restrictions budgétaires dans l'avenir. Nous sommes aussi ici pour affirmer que nous croyons fermement au futur des collaborations entre les universités belges l'ARES et l'ITC et que nous continuerons à défendre l'attribution de projet et de budget à cet effet. Nous comptons aussi sur vous pour cela parce que dans un contexte et de plus en plus en plus, excusez-moi, concurrentiel pour l'attribution des projets, il s'agit aussi de déposer auprès de l'ARES,

c'est auprès des universités belges sur leur budgets respectifs des projets de grande qualité que ce soit en recherche en enseignement ou en organisation comme l'appui institutionnel.

Merci pour votre attention.

**S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci monsieur le professeur pour votre témoignage qui nous touche au fond du cœur. Je donne par la suite la parole à monsieur M. Nicolas MAINETTI, Directeur Asie-Pacifique de l'AUF.

**Prof. M. Nicolas MAINETTI, Directeur Asie-Pacifique de l'AUF**

Merci madame la ministre, votre excellence. Juste quelques mots au nom de l'Agence Universitaire de la Francophonie, que je représente pour l'Asie Pacifique. J'en profite pour vous dire aussi que l'ITC est un fleuron francophone scientifique, en Asie Pacifique mais aussi à l'international et dans d'autres régions. C'est un exemple qui d'une part est cité pour la conception de sa gouvernance et le consortium d'aujourd'hui en est la preuve de réunion d'experts internationaux et de spécialistes et aussi pour la qualité de ses résultats et de ses réalisations que l'AUF mène avec l'ITC et les perspectives puisque l'AUF est définie par des stratégies qui sont quadriennales et que nous préparons actuellement notre assemblée générale près de tous les quatre ans et qui aura lieu cette année à Dakar au mois de novembre et qui va définir nos actions et la stratégie pour les années 2025 à 2029.

Tout d'abord dire qu'on est très heureux que l'ITC s'est inscrit dans notre stratégie actuelle qui consistait à mettre l'accent sur l'employabilité et c'est ainsi que nous avons un centre d'employabilité francophone un CEF qui est hébergé et qui est porté donc par l'ITC dans ses locaux et nous travaillons actuellement donc sur la province de KEP sur la ville de KEP, à l'ouverture d'un autre CEF, un CEF de plus sur le campus de l'ITC et ça c'est très intéressant pour renforcer la place de la Francophonie comme outil d'insertion professionnelle. Nous nous souhaitons aussi mettre l'accent sur l'accélération de la transition numérique avec un certain nombre de dispositifs qu'on a déployé mais dans l'ITC qui a été tout de suite volontaire et à apporter ses actions et en particulier sur la promotion des ressources éducatives libres que nous avons menée. Une expertise régionale dont le rapport est finalisé et va sortir prochainement mais qui est porteur de beaucoup d'avenir et de projet sur le sur le Cambodge et sur l'ITC. Nous souhaitons aussi nous avons déposé récemment avec les ambassades de France qui sont qui sont les porteurs de ce projet de France au Cambodge pour Laos et au Vietnam un projet qui s'appelle Fonds Equipe France (FEF) et l'industrie 4.0 et l'utilisation des enjeux numériques pour l'industrie 4.0 au niveau de l'enseignement donc ça c'est quelque chose d'innovateur auquel on pense beaucoup et donc j'espère que c'est un projet qui aboutira et que l'ITC là aussi bénéficiera de ses actions. Et toujours dans le cadre de tous les enjeux numériques, c'est plutôt du côté recherche nous sommes en train de pousser un consortium de recherche sur l'utilisation des enjeux numériques et de l'intelligence artificielle dans les situations extrêmes de gestion et là aussi avec le réchauffement climatique et les catastrophes climatiques pour lesquels il y a beaucoup de choses à faire et donc là aussi j'espère que l'ITC sera un membre éminent du Consortium de recherche.

Un autre un autre point sur lequel nous mettons beaucoup d'accent et au lycée est un partenaire très précieux concerne les entrepreneuriats et l'innovation et en particulier je voudrais citer le « programme entreprendre » qui a un programme intergouvernemental porté par l'AUF, essentiellement sur des pays d'Afrique et de l'océan Indien Madagascar et donc le Cambodge a été le premier pays d'Asie a accepté d'intégrer ce programme qui a été lancé l'année dernière et qui vise en particulier la reconnaissance du statut d'étudiant entrepreneur et donc là l'ITC bien entendu, nous appuie beaucoup dans ce programme et donc on espère qu'à l'avenir l'accent sera mis sur les actions autour de l'innovation et de l'entrepreneuriat en particulier je pense au concours SCAPA qui veut dire Smart Campus Asie-Pacifique, actuellement porté par l'Université de Danang mais qu'on souhaite internationaliser et donc cette année nous l'organisons à Danang mais j'espère qu'en 2026, il pourra être organisé à l'ITC au Cambodge et de façon concomitante au sommet de la Francophonie qui se tiendra au Cambodge, en 2026. Là, c'est l'occasion de valoriser les actions et les possibilités d'entrepreneuriat et les projets d'étudiants qui sont aussi appuyés par les structures d'appui et d'accélération.

Enfin, je voudrais citer le programme PIMEF que nous souhaitons venir en appui à la mobilité internationale étudiante nationale. PIMEF, c'est le programme international de la mobilité et d'employé francophone qui va être lancé à l'automne 2025 et se déployer sur les quatre prochaines années et j'espère là aussi que l'ITC sera un partenaire précieux puisqu'il s'agit d'accueillir et d'envoyer sur une base d'échange et de réciprocité. Je remercie vraiment l'ITC pour toutes ces belles collaborations et donc je suis persuadé que nous avons encore un bel avenir et je vous félicite en tous les cas pour les succès passés.

**S. E. Mme PHOEURNNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci monsieur le directeur. Vous savez que l'ITC a beaucoup développé la formation initiale, continue et la recherche. Nous avons beaucoup d'institutions qui sont nos partenaires.

Je donne maintenant la parole à Monsieur VAUDRON Paul, chercheur de l'ITC et représentant de Monsieur Luc LE CALVEZ, représentant de l'IRD au Cambodge.

**M. Paul VAUDRON, chercheur et remplaçant de M. Luc LE CALVEZ, représentant au pays de l'IRD**

*Mes respects à son excellence Phoeurng Sackona et à leur Excellence, Mesdames et Messieurs ;*

*Nos excuses pour l'absence de Luc Le Calvez, Représentant de l'IRD au Cambodge, qui a été requis pour une réunion à l'Ambassade de France. Il nous rejoindra au repas de midi.*

*Je suis Paul Baudron, chercheur IRD en accueil à l'ITC depuis août 2023. Plusieurs de mes collègues sont également présents aujourd'hui.*

L'IRD est l'Institut de Recherche pour le Développement, un institut public français de recherche partenariale. Il est impliqué dans plus de 50 pays, notamment en Asie du Sud-Est, en phase avec les objectifs de développement durable (ODD).

Plusieurs chercheurs de IRD sont disponibles aujourd'hui. Mes collègues et moi-même sommes disponibles pour toute discussion. Je suis Paul Baudron, chercheur de l'IRD, en accueil à l'ITC depuis août 2023.

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L'IRD apprécie grandement la collaboration quotidienne avec l'ITC, qui nous accueille depuis 2019

- L'ITC accueille 5 des 9 chercheurs IRD en affectation au Cambodge, plus 10 à 20 agents recrutés localement dans le cadre des différents projets de recherche.
- Cette collaboration croissante s'est traduite par l'établissement en 2020 d'un bureau de représentation de l'IRD au Cambodge, que l'IRD a choisi d'installer à l'ITC

Nos missions à l'ITC visent à accompagner le renforcement de la capacité en recherche via :

- Formation (accompagnement à la recherche par la recherche)
- Structuration de la recherche (accompagnement à la création de laboratoires)
- Création d'infrastructures de recherche

La collaboration s'est structurée depuis 2019 sous la forme de la création de 4 laboratoires, co-dirigés par des chercheurs IRD et ITC :

- Healthy-Rice : laboratoire de santé et qualité du riz
- Coastal and Wetland Environmental Research lab: sur les ressources en eau
- ECOLAB: sur le fonctionnement écologique et durable des sols
- KHEOBS - Khmer Earth Observation Laboratory: sur le suivi de l'environnement et du climat par satellite

Pour accompagner ces laboratoires sur le long terme, l'IRD met en place différents dispositifs qui ont été implémentés à l'ITC :

- JEAI (Jeunes équipes de recherche) sur 3 ans : afin de monter une équipe de recherche ITC et déployer des activités scientifiques
- LMI (laboratoire mixte) sur 5-10 ans : initiatives multi-partenariat qui connectent différents laboratoires, tel que le LMI LEAD sur la riziculture durable

D'autres mécanismes IRD permettent de soutenir la formation et l'organisation de conférences.

- Une quinzaine d'initiatives (formations et conférences) sur les trois années passées, qui ont rassemblé une trentaine d'étudiants et de partenaires.
- Les chercheurs seniors interviennent également dans la formation initiale à l'ITC.

L'IRD permet également d'accéder à des financements particuliers de la France :

- Via l'Agence Nationale de la Recherche, via l'Europe et particulièrement via l'Ambassade de France au Cambodge (FEF), l'Agence Française de Développement (AFD) et potentiellement l'AUF
- Pour accompagner la mise en place de laboratoires, d'infrastructures et de projets de recherche.
- Pour accompagner de jeunes chercheurs
  - o En 2024-2025 : 9 étudiants Master et 4 PhD
  - o Plusieurs diplômés sont maintenant lecturer ou researcher à l'ITC
  - o Plusieurs se sont démarqués à l'international, notamment Dr Kakada Oeum au trophées de l'innovation

Nous apprécions grandement la collaboration quotidienne avec l'ITC. Nous sommes enthousiastes à l'idée de poursuivre son développement et sommes pleinement investis pour soutenir et collaborer avec l'ITC, dans les années à venir.

Les ateliers de cet après-midi promettent des échanges riches et ouverts

**S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci monsieur et je donne la parole à M. François Roger, directeur régional du Centre international de recherche agricole pour le développement

**M. François Roger, directeur régional du Centre international de recherche agricole pour le développement (CIRAD)**

Merci beaucoup pour cette opportunité de prendre la parole.

Le CIRAD est présent en Asie du Sud-Est depuis une trentaine d'années, notamment au Cambodge, au Laos, en Thaïlande et au Vietnam. En Birmanie, nous maintenons encore quelques activités, malgré un contexte difficile. Nous développons également des actions en Indonésie et aux Philippines, et cherchons à établir des coopérations plus étroites avec la Chine sur certains thèmes.

Au Cambodge, le CIRAD compte actuellement neuf chercheurs, répartis autour de plusieurs grands axes thématiques :

- L'agroécologie
- L'aquaculture
- La gestion de la ressource en eau
- L'approche « Une seule santé » (One Health) — en partenariat notamment avec l'Institut Pasteur du Cambodge.

Il y a une chercheuse basée ici à l'ITC, spécialisée en agroécologie. C'est l'occasion de remercier l'ITC pour la collaboration de longue date que nous avons pu construire ensemble.

Le CIRAD collabore également avec d'autres établissements d'enseignement supérieur au Cambodge, notamment l'Université Royale d'Agriculture et l'Université de Battambang.

Nous souhaitons continuer à renforcer ces partenariats, en particulier autour de deux piliers majeurs que sont l'agroécologie et l'approche One Health. Nous pensons qu'il est essentiel de créer des ponts entre ces deux approches, et de ne pas réduire One Health à une simple étude des maladies animales transmissibles à l'humain. Il s'agit aussi d'intégrer les pratiques agricoles, les systèmes alimentaires, et la santé des écosystèmes dans une vision plus intégrée, où la santé des plantes, des sols, des animaux et des humains est interdépendante.

Nous espérons que ce consortium contribuera à renforcer cette interdisciplinarité et à favoriser de nouvelles synergies entre nos institutions.

Merci beaucoup.

**S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci M. François Roger, directeur régional du Centre international de recherche agricole pour le développement.

Comme vous le savez, on a fait le tour en termes de partenariat. Avant de continuer, je voudrais rebondir ce que la représentant de l'ambassade de France vient d'évoquer. Je voudrais vous rappeler l'un de nos meilleurs amis, M. Bruno DAGUES qui était le dernier conseiller de l'ITC. C'était un ami de Toulouse qui aimait vraiment le Cambodge et l'ITC. Il a décidé de passer sa vie ici. On a admiré sa décision de nous quitter définitivement. L'ITC l'a accompagné jusqu'à la fin de son séjour au Cambodge. Pour lui rendre hommage, je vous demande de vous lever pour une minute de silence.

Merci beaucoup. Ensuite, Dr. PO Kimtho va présenter le suivi des avis du Consortium et les décisions du CA 2024.

**S. E. Prof. Dr. PO Kimtho, Directeur de l'ITC**

Merci Madame. Je vous présente en premier lieu le suivi du Consortium international 2024 et en second lieu les événements marquants de l'ITC.

**Le suivi des avis du Consortium et des décisions du CA 2024:**

| No | Avis du Consortium et des décisions du CA 2024                                                                                                  | 2024-2025      |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 1  | Valorisation de la transversalité des cours entre les départements                                                                              | En réalisation |
| 2  | Création de: Master of Architectural Engineering (GS)                                                                                           | Réalisé        |
| 3  | Création de : Artificial Intelligence Engineering and Cybersecurity (GIC-International Program)                                                 | Réalisé        |
| 4  | Création de: IT Network and Programming (GIC-Associate)                                                                                         | Réalisé        |
| 5  | Création de : Industrial Engineering (GIM-Associate)                                                                                            | Réalisé        |
| 6  | Création de : Geotechnical Engineering (GGG-Associate)                                                                                          | Réalisé        |
| 7  | Changement du nom: Materials Science and Structure” to “Materials and Built Environment” (RIC)                                                  | Réalisé        |
| 8  | New PathWay of ECAM LaSalle “Second years of International Program can go directly to 3rd year at ECAM LaSalle” (ITC-ECAM-Kasetsart University) | Réalisé        |

**Les événements marquants**

Pour cette partie, permettez-moi de vous la présenter en anglais. In 2025 there were so many events but today I present some of the most important ones.

Pour ne pas alourdir ce compte-rendu, permettez-moi de ne pas tout transcrire. Je peux vous citer seulement les grands titres :

- Lancement du réseau CCUN « Cambodian Cyber University Network ;
- Les 13<sup>ème</sup> Journées scientifiques
- Fête de 60 ans de l'ITC
- 3<sup>ème</sup> Conférence Internationale sur la technologie de la Terre et du géo-environnement 2024
- Symposium International sur « Life Mechatronics 2024 »
- Signature du MoU avec le Ministère des Ressources en eau et de la météorologie
- Construction du Centre de recherche et de transfert de technologie
- Ouverture d'un autre campus à Kep
- Récompenses aux groupes de robot
- Signature du MoU avec l'université de Central Missouri, USA
- Signature du MoU avec l'université de Macquarie, Australie
- Inauguration du Centre de formation en climatisation et signature du protocole d'accord avec PANASONIC

**M. SOY Ty, Directeur adjoint de l'ITC, chargé des affaires académiques**

M. SOY Ty présente les activités des études 2024-2025.

Pour ne pas alourdir le texte, on n'en cite que les grandes lignes de sa présentation.

- Formation des ingénieurs et techniciens
- Formation du 3<sup>ème</sup> cycle
- Activités du Centre E-learning à l'ITC
- Renforcement des capacités
- Partenariat et collaboration locaux
- Contribution sociale
- Accès aux ressources électroniques

**M. BUN Long, Directeur adjoint de l'ITC, chargé de coopération et de recherche**

M. BUN Long présente les activités du centre de recherche et d'innovation (RIC).

Pour ne pas alourdir le texte, on n'en cite que les grandes lignes de sa présentation.

- Contexte du RIC
- Infrastructures de recherche
- Fonds de recherche attribués pour 2024-2025
- Publication des résultats de recherche
- Faits saillants des impacts de recherche
- Recherche sur la qualité de l'air et gestion des risques-Projet SATREPS
- Centre de recherche Côtière du Cambodge
- Projet d'approvisionnement en eau et d'assainissement en province
- Plateforme de recherche et de formation sur les réseaux électriques du Cambodge
- Projet ARES
- Bureau d'incubation Techno
- Statut National d'étudiant entrepreneur
- Techno Innovation Challenges (Saison 7)
- COOPERATION ET PERFECTIONNEMENT
- Perfectionnement de courte durée à l'étranger

**S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci beaucoup. Je crois que ces deux présentations vous apporte des informations liées à un certain nombre d'activités réalisées en 2024-2025. Si vous avez des questions ou remarques. N'hésitez pas.

**Mme Assia TRIA, Directrice de l'IMT Mines Alès**

J'ai une question concernant la propriété intellectuelle et le dépôt de brevet dans la présentation en fait, il n'y avait rien qui concernait ce sujet. Est-ce que ça veut dire que vous ne déposez pas et si vous déposez est-ce qu'il y a une politique incitative pour les chercheurs à déposer un brevet à créer de la propriété intellectuelle et puis à valoriser aussi ce patrimoine pour l'Institut de Technologie du Cambodge.

**M. BUN Long, Directeur adjoint de l'ITC, chargé de coopération et de recherche**

Yes, madam, Intellectual property document is developing with the support from CapFish-UNIDO. They also they already provided the template of the IP document and now we are adapting that IP document to be the guideline for ITC. But frankly speaking, we are at the early stage of IP in Cambodia. So even if we developing something new, it costly to fall the IP to relevant institute but we believe it's very important because since now we have many development projects. So, IP is very important. We start to have some small issue related to the intellectual property sometime between students and professor and sometime between University and University. So, in conclusion I can say that we are still in the very early stage so hopefully we can finish our guideline very soon.

**Mme TRAN Thi Anh-Dao, Attachée de Coopération Universitaire et Scientifique de l'Ambassade de France au Cambodge**

J'ai une question d'éclaircissement concernant les statistiques. A la page 58, vous dites qu'il y a 28 docteurs au total et ensuite, de 2022-2023, ils étaient 57. Vous avez donc les doctorants qui sont encore là ? Je ne comprends pas bien ces tableaux.

**M. SOY Ty, Directeur adjoint de l'ITC, chargé des affaires académiques**

En fait, en 2023-2024, il y a eu 28 docteurs diplômés et les nouveaux doctorants pour 2024-2025 sont 57. En fait, ce tableau regroupe les étudiants actuels et ceux de l'an dernier.

**M. Timoteo CARLETTI, Université de Namur, Belgique**

Je voudrais venir sur la question précédente en fait à propos des brevets donc dans la première institutionnelle on s'occupe entre autres des brevets mais surtout ce qu'on fait c'est essayer d'établir des contrats et les brevets c'est pas forcément ce qui va rapporter le plus. C'est difficile de rentabiliser un brevet mais à toute une série d'autres contrats qui sont liés au transfert de technologie des contrats d'exploitation des contrats de confidentialité et on a une association pour l'instant avec une société de conseiller juridique externe qui met en place tous ces contrats pour l'ITC et ma croyance que tôt ou tard l'épaisseur d'intérêt envisager la possibilité d'un service juridique interne et l'ITC parce que je pense qu'il y a peu d'universités qui n'ont pas ça. Donc, je sais pas combien quels sont les besoins réels du Cambodge à ce niveau mais je pense que ça peut être quelque chose pour implémenter tôt ou tard.

**Dr. BUN Kim Ngun, Directeur adjoint de l'ITC, chargé des projets**

Dr. BUN Kim Ngun va présenter la partie perspectives et stratégies

**S. E. Mme PHOEURNNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci beaucoup. Félicitations pour tout ce que l'ITC a réalisé et surtout de nouvelles perspectives et stratégies. On voit que cette année, on ne voit pas la demande d'ouverture de nouveaux programmes. J'ai vu la mise en place d'un nouveau programme pour le département d'architecture. Nous voyons par contre de nouvelles propositions qui viennent renforcer les programmes qui existent déjà. Ça, c'est une remarque de ma part. Je souhaite que ce soit bien organisé.

Pour cet après-midi, je vois pas mal de modifications de programmes qui ont besoin des remarques et recommandations des membres du Consortium. J'espère que cette discussion en binôme collègue-etc et partenaires internationaux peuvent travailler ensemble pour trouver un consensus.

Pour le rapport du CA, je vois que ces recherches sont couteuses, vous pouvez mettre dans ces budgets dans le budget consolidé ou de fonctionnement du rapport financier du CA. Vous pouvez mettre en pourcentage de ces budgets parmi d'autres. Ça vaut le coup que ce soit visible. C'est tout simplement ma suggestion et c'est à vous de voir monsieur le directeur pour la réunion du CA en juin.

Pour l'internat sur le nouveau campus, selon SEM le directeur, il est destiné non seulement aux étudiantes mais aussi aux enseignants de l'ITC.

Voilà mes remarques. Si vous avez des questions, elles sont les bienvenues...

**M. Yann VAUDIN, CEO Voltra Co., Ltd**

J'ai une petite question. D'abord, félicitations pour le nouveau campus de l'ITC à côté du monument gagnant-gagnant. Je vois qu'il y aura une grosse capacité et qu'il se trouve à 20km de Phnom Penh. Est-ce que vous prévoyez des bus qui servent de navettes entre le campus principale et là-bas? Est-ce que vous en avez parlé avec la municipalité de Phnom Penh? Parce que les étudiants ne peuvent pas faire aller-retour sur la Nationale 6 tous les jours.

**S. E. Mme PHOEURNNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci pour cette question. Oui, je reconnais que la circulation à cette destination n'est pas facile. Non seulement pour l'ITC mais aussi pour l'Université des Beaux-Arts. Cette zone est de plus en plus peuplée et pas mal d'institutions ont déménagé là-bas. On va demander au ministère de l'éducation et à la municipalité de Phnom Penh pour que les lignes de bus publics aillent jusque là-bas. Pour le moment, nous avons une seule ligne 6 qui va jusque là-bas.



**M. Michel VERLEYSEN, Université catholique de Louvain**

Oui pour la même remarque. Il s'agit des mêmes étudiants et professeurs qui sont sur les deux campus. Pour moi, c'est un peu compliqué si le chercheur travaille sur les deux campus en même temps.

**S. E. Prof. Dr. PO Kimtho, Directeur de l'ITC**

Oui, c'est une bonne question. Je vais réfléchir et discuter avec la direction comment on peut mettre en marche ce nouveau campus. Pour moi, pour les programmes des techniciens, comme vous le savez. On a deux nouveaux programmes : en génie informatique et génie industriel. Ils seront là-bas. Nous allons mobiliser certaines unités de recherche mais on ne sait pas encore lesquelles.

**S. E. Mme PHOEURNNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Quelle que soit la solution, on essaye de réduire dans la mesure du possible le déplacement des étudiants et professeurs. L'Université Royale des Beaux-Arts (URBA) a aussi ce problème. Elle a deux campus, l'un à côté du Palais Royal et l'autre dans la zone dont on est en train de parler. Les premières et deuxième années vont là-bas.

**S. E. Dr. OM Romny, Secrétaire d'État au Ministère de l'Éducation, de la Jeunesse et des Sports et Directeur honoraire de l'ITC**

Je dirais que les 3<sup>ème</sup> et 4<sup>ème</sup> années méritent d'être là-bas parce que nous avons pas mal de laboratoires bien équipés. Je ne crois pas que les moyens de transports ne nous posent pas de problèmes parce que nous avons les campus de l'ITC, de l'URPP, de l'ERA et du ministère de l'économie et des finances. C'est donc sûr et certain que les autorités y pensent et trouvent une solution.

## **DISCUSSIONS DANS LES DÉPARTEMENTS RESPECTIFS**

Le 27 mars 2025 / March 27, 2025

Présentation des synthèses par département / Presentation of summaries by department

Plan de présentation des synthèses

- 1) Département of Applied Mathematics and Statistics (AMS)
- 2) Département de génie Informatique et Communication (GIC)
- 3) Département de GTR
- 4) Faculté de Génie Civil (Civil, Architecture, Transport) (GCI)
- 5) Département de GGG
- 6) Département de GEE
- 7) Département de GIM-ECAM
- 8) Faculté de génie Chimique et Alimentaire (GCA)
- 9) Faculté d'Hydrologie et des Ressources en Eau (GRU)
- 10) Département de Tronc Commun (TC)
- 11) École Doctorale (GS)
- 12) Centre de Recherche et d'Innovation (RIC)

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**S. E. Mme PHOEURNNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

On a écouté toutes les présentations. Est-ce que vous avez remarques ou commentaires?

**M. DEBASTE Frédéric, Université Libre de Bruxelles**

Oui, madame la présidente. J'ai vu certains départements parler de l'importance des relations avec les entreprises. Je crois que vous avez raison. Nous, on est là pour vous aider à aller dans ce sens-là, non seulement à court-terme mais aussi à long-terme. Mais je suggère que AMS et GGG renforcent un plus les relations avec le secteur privé.

**M. Michel VERLEYSEN, Université catholique de Louvain**

Merci Madame Sackona. Juste pour rebondir ce que Frédéric vient de dire. Dans les discussions hier, on a beaucoup discuté des valorisations des résultats de recherche et des liens avec le monde des entreprises.

On beaucoup insisté dans notre groupe sur la nécessité que pour arriver un jour à avoir toute la chaîne entre la recherche fondamentale, la recherche appliquée, le prototypage là les possibilités éventuellement de collaboration avec l'entreprise ou de commercialisation d'un certain nombre d'invention ou de réalisation. En fait, c'est plus qu'une chaîne qui ne peut pas être aux mains d'une même personne. On disait un peu voilà en rigolant hier mais un chercheur dans le monde académique, ça reste un chercheur dans le monde académique. C'est pas quelqu'un qui peut exploiter des résultats. Il s'agit de deux mondes différents. Il faut donc aider le chercheur à réaliser toute cette chaîne de transmission entre les résultats de la recherche et les possibilités d'exploitation. et donc c'est sur ça que c'est un nombre de collègues travaillent actuellement avec l'ITC alors que ce soit dans l'aspect institutionnel ou dans d'autres projets. On a vu hier plusieurs initiatives. Donc, Frédéric a insisté sur le fait que ces initiatives doivent être coordonnées. On a un petit peur qu'un projet financé par l'ARES et un autre qui réfléchit pas tout à fait toujours assez de coordination entre ces projets. Donc, ça c'est une chose mais je pense qu'il est aussi extrêmement important que l'ITC ait une vision à long terme de ce qui va arriver dans cette chaîne de valorisation et en fait il y a pas de miracle si on veut que cette chaîne de valorisation fonctionne, il faut un moment qu'il y ait à l'ITC, à terme, qui s'occupe des aspects de valorisation, des aspects commerciaux, des aspects légaux, de la propriété intellectuelle et je pense que c'est un c'est un mâle dans le monde académique aujourd'hui partout dans le monde, les universités commencent à avoir des cellules de valorisation pour aider le chercheur à réaliser ce pas vers le monde de l'entreprise et donc il faut il faut vraiment avoir cette vision à long terme et se dire que l'ITC devra prendre ça en charge. Il faudra investir et c'est sur et certain qu'il y aura un retour important vers l'ITC.

**S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci beaucoup pour cette intervention. Vous savez, c'est pas facile. Il faut travailler et avoir de l'expérience. J'avoue que c'est tout nouveau pour l'ITC. L'ITC s'occupe de la formation initiale, de la formation continue, et de la recherche. On a besoin de votre appui ou dans la région, de Singapour, de Thaïlande. C'est important de commencer dès maintenant. C'est tout à fait possible parce que nous avons tous les moyens informatiques qui nous aident. Monsieur le Directeur, notez bien cela.

En ce qui me concerne, je vois que quand j'étais ici à l'ITC, les infrastructures de l'ITC n'étaient pas suffisantes. Il manquait pas mal de choses. Mais à l'heure actuelle, avec les financements de plusieurs bailleurs de fonds, on en a de plus en plus.

Au niveau des ressources humaines, le ministère de la culture et des Beaux-Arts a besoin des chercheurs de l'ITC pour nous aider pour la rénovation de certains sites et temples de Preah Vihear, par exemple. Nos partenaires internationaux ont beaucoup apprécié la qualité du travail de nos chercheurs de l'ITC. Mais j'ai une chose à vous demander aussi. Pendant la pandémie du Covid-19, l'ITC a développé pas mal de cours en ligne pour lui-même et aussi pour le ministère de l'éducation, de la jeunesse et des sports. Cependant, le Covid n'est plus avec nous. Nous cherchons donc à valoriser les cours en présentiel sauf si le professeur est en France ou ailleurs.

Je vois que dans le département GCI, ce type de cours est prévu en 2027. Je me demande donc pourquoi.

**M. LAY Hég, Doyen de la faculté de génie électrique et chef de département de génie informatique et communication (GIC)**

Yes, we have some courses offered online as part of our CCUN. We need to send programs that will be converted to e-learning. In fact, this includes Agro-industry, Data Science, and Computer Science. We want to convert the master's program to two years, not five. This is not the program for engineers.

**S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

For this master's program, are you taking only online courses for 2 years?

**M. LAY Hég, Doyen de la faculté de génie électrique et chef de département de génie informatique et communication (GIC)**

Yes, for the lecture, we support to do it online for the blended model, for the lab activity, they need come to the laboratory.

**S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

When you discussed with your colleagues in the Consortium yesterday afternoon, what were their ideas?

**M. SIM Tepmony, Directeur de l'École doctorale**

May I clarify something, Madam? Good morning, everyone. I'm sitting the course online actually we plan to develop the coexisting online and on site. So, we use the blended method. So, this mean that something that can provide to students that they can join from distance and do and for all the practical purpose, they have to come to ITC. So I think in these initiative, we try to develop the guidelines. It's not that we can make the quality in our hand. So, the I think at least the document will be produced and we have a project to support and we will see if eventually the degree can be done through this but now we will not have any commitment to the degree. We just provide simultaneously the course online available and the activity on site so that we can attract more students to join and this is the initiative of from the Samdech Prime minister also, to make this available to those who already have job or work from ministry from other something like that so it's for equity purpose. Thank you.

**S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Yes, I understand very well, but we also need to think about quality. Attracting students is one thing, and maintaining the quality of training must go hand in hand. One cannot exist without the other. I well understand now. This master's degree is intended for people who work and who don't have time to come and study on site most of the time.

I agree but do it carefully otherwise it can destroy ITC's reputation. Why am I mentioning this? Because now we have many universities competing with ITC.

Okay, now, I let GEE present their discussion results.

**Mme Isabelle BOKHARI, Conseillère du vice Premier ministre et Ministre de l'Éducation, de la Jeunesse et des Sports**

Madame Sackona, Monsieur le Directeur et chers collègues, Merci. Comme madame Sackona l'a dit, je viens de rejoindre les travaux donc je n'ai pas de prétention à apporter des choses extraordinaires. Les spécialistes, c'est vous. Tout simplement deux points : la conférence sur l'éducation annuelle au Cambodge a eu lieu tout récemment et son excellence HANG Choun Naron, vice Premier ministre et ministre de l'Éducation, de la Jeunesse et des sports, a bien précisé au côté d'autres membres du gouvernement que l'un des objectifs principaux de l'éducation au Cambodge, était justement la transition ou en tout cas aider à la transition économique du Cambodge pour qu'il atteigne le niveau de revenu intermédiaire supérieur. J'ai été ravie d'entendre la notion de d'approche par compétence, bien sûr, qui fait référence au métier et donc aussi en filigrane à l'insertion professionnelle. Le docteur HANG Choun Naron a aussi souligné que le fait qu'il fallait intégrer encore davantage à communiquer parentale. La communauté scolaire et la communauté parentale dans le sens où effectivement, ce sont les parents et on l'a vu dans deux représentations la visibilité des programmes de l'enseignement supérieur disponible au Cambodge mais pas toujours forcément visibles dans les provinces du Cambodge les possibilités de financement non plus, voilà. Choisir des secteurs, oui effectivement donc je ne sais pas bien sûr il y a plusieurs possibilités mais peut-être penser au secteur prioritaire de développement du Cambodge et accès donc les domaines de recherche à ces domaines de développement souhaités une suggestion, voilà. Je m'arrêterai là. Je vous remercie beaucoup. J'ai appris beaucoup de choses aussi de vous. Bonne fin de séjour à tout le monde. Merci.

**S. E. Mme PHOEURNG Sackona, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci madame. Oui, tout à fait, on travaille dans ce sens-là : le développement des ressources humaines, de l'économie etc. Merci pour votre remarque.

Madame la Présidente a remercié tous les membres du Consortium qui ont consacré leur précieux temps à une riche discussion du Consortium international ITC-2025 et elle précise que la date de la réunion du Conseil d'administration sera le 26 juin 2025 et que le prochain Consortium international aura lieu la 4<sup>ème</sup> semaine du mois de mars 2026.

Elle a terminé son discours par accorder une importance particulière de l'expertise de tous les membres du Consortium en faisant allusion au concept de Bouddha qui dit que marcher sans lumière devant soi, c'est pas facile. Elle voulait considérer tous les membres du Consortium comme une lumière fondamentale dont « les jeunes de la nouvelle génération » de l'ITC ont besoin pour que l'ITC puisse garder sa bonne formation et une recherche plus avancée à l'échelle nationale, régionale et internationale.

Les trois points auxquels la réunion a accordé son importance sont les suivants :

- 1) Développer plus de relations et d'actions avec le secteur privé, surtout le GGG et l'AMS ;
- 2) Déterminer les composantes qui méritent de déménager au nouveau campus ;
- 3) Rendre faciles et efficaces les transports à destination du nouveau campus en contactant les autorités compétentes.

Il est à noter que les facultés et les départements n'ont présenté que les perspectives et les actions à venir dans les facultés et les départements respectifs pour lesquelles les membres du Consortium n'avaient pas d'objection.

Par ailleurs, en ce qui concerne le changement et la modification des programmes pour l'année à venir, le tableau suivant illustre les détails et les avis des membres du Consortium.

| No | Avis du Consortium 2025/département GEE                                                                                                                                               | Département | AVIS      |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------|
| 1  | New course for 3 <sup>rd</sup> Year semester 1<br>(C:16 ; TD:0 ;TP:0)<br><b>Mastering skills by using IA Tool</b>                                                                     | GEE         | Favorable |
| 2  | Combine Analog Filter with Analog Electronics for 3 <sup>rd</sup> Year semester 1<br>(C:32 ; TD:16 ;TP:16)<br><b>Fundamental of Electronics</b>                                       | GEE         | Favorable |
| 3  | <b>Energy Conversion</b><br>Move to 4 <sup>th</sup> Year Semester II<br>(C:32 ; TD:16 ;TP:32)                                                                                         | GEE         | Favorable |
| 4  | <b>Power System Analysis and Optimization</b><br>Move to 4 <sup>th</sup> Year Semester I<br>(C:32 ; TD:16 ;TP:32)                                                                     | GEE         | Favorable |
| 5  | <b>Data Science</b> : Modify 7 courses in total, in which 4 courses modified names, 1 course is moved to semester 2, 1 course is modified the duration, and 1 course is a new course. | AMS         | Favorable |
| 6  | <b>Financial Engineering</b> : All courses in year 3 are the same name in Data Science program. Some courses in year 4 and year 5 are the same name in Data Science program.          | AMS         | Favorable |
| 7  | Traffic Management and Modeling will be replaced by <b>Traffic Engineering, Management and Simulation (I3-S2)</b>                                                                     | GTI         | Favorable |
| 8  | Transport Systems of Freights and Traveler will be replaced by <b>Transport Modeling and Planning (I3-S2)</b>                                                                         | GTI         | Favorable |

## **Annex 2. Minutes of meeting of the Board of Trustees Meeting on 26 June 2025.**



### **COMPTE-RENDU DE LA REUNION DU 33<sup>EME</sup> CONSEIL D'ADMINISTRATION DE L'ITC, LE 26 JUIN 2025, A PHNOM PENH**

#### **Membres de droit**

1. S. E. Mme PHOEURNNG Sackona, présidente du conseil d'administration et ministre de la culture et des beaux-arts
2. S. E. M. PELLET Jacques, ambassadeur de France au Cambodge
3. S. E. M. UENO Atsushi, ambassadeur du Japon au Cambodge
4. S. E. M. OM Romney, secrétaire d'État au ministère de l'éducation, de la jeunesse et des sports
5. S. E. Mme PEN Chhorda, secrétaire d'État du ministère des mines et de l'énergie
6. S. E. M. CHOU Kimleng, secrétaire d'État du ministère de l'économie et des finances
7. S. E. M. PO Kimtho, directeur de l'ITC
8. M. MAINETTI Nicolas, directeur de l'AUF Asie-Pacifique
9. M. LAY Méng Sun, directeur de la SKD et représentant du secteur privé
10. M. DEBASTE Frédéric, représentant de l'ARES-ex CUD et des universités francophones de Belgique

#### **Membres invités**

11. M. PROTIN Ludovic, Directeur honoraire de l'ITC
12. M. VINCENT Pierre, Conseiller de Coopération et d'action culturelle de l'Ambassade de France et directeur de l'Institut Français du Cambodge
13. Mme TRAN Thy Anh-Dao, Attachée de coopération universitaire et scientifique, Ambassade de France au Cambodge
14. Mr. Kazumasa Sanui, Chief Representative of JICA Cambodia Office
15. M. KOICHIRO Watanabe, Senior Advisor of JICA
16. M. JUN-ICHI Takada, Executive Vice-President for global affairs at Institute of Science Tokyo (Science Tokyo)
17. M. Luc LE CALVEZ, Country Representative of IRD and Representative of Consortium
18. M. MAUSSION Pascal, Vice-président des Relations Internationales INP-Toulouse
19. M. IM Kravong, Représentant – AUF Cambodge
20. M. THOEUN Vongdy, Program Officer, JICA Cambodia Office
21. Mrs. SASAKI Chikako, Industrial Linkage/Project Coordinator JICA/ INACON Project

#### **Direction de l'ITC et ses coéquipiers**

22. M. SOY Ty, Directeur adjoint de l'ITC
23. M. BUN Kim Ngun (Assoc. Prof. Dr.), Directeur adjoint
24. M. NGUON Kollika (Asst. Prof. Dr.), Directeur adjoint
25. M. BUN Long (Assoc. Prof. Dr.), Directeur adjoint
26. M. CHUNHIENG Thavarith (Dr.), Conseiller chargé de la coopération et de la recherche
27. M. NUTH Sothân, Conseiller de l'ITC, Conseiller chargé de la pédagogie et des études
28. M. OR Chanmoly (Assoc. Prof. Dr.), Directeur du Centre de Recherche et d'Innovation (RIC)

29. M. SIM Tepmony (Assoc. Prof. Dr.), Directeur de l'école doctorale (GS)
30. M. LIN Mongkulser (Assoc. Prof. Dr.), Directeur adjoint du Centre de Recherche et d'Innovation et Chef du département de Mathématiques Appliquées et Statistiques (AMS)
31. M. HAN Virak (Assoc. Prof. Dr.), Doyen de la faculté de génie civil (GCI)
32. M. CHHUON Kong (Asst. Prof. Dr.), Doyen de la faculté d'hydrologie et des ressources en eau (GRU)
33. M. CHRIN Phok (Dr.), Vice-doyen de la faculté de génie électrique et Chef du département de génie électrique et énergétique (GEE)
34. Mlle IN Sokneang (Assoc. Prof. Dr.), Doyenne de la faculté de génie chimique et alimentaire (GCA)
35. M. ENG Chandoeun (Assoc. Prof. Dr.), Doyen de la faculté de génie de géo-ressources et de géotechnique (GGG)
36. M. LAY Heng, Doyen de la faculté de génie électrique et chef de département de génie informatique et communication (GIC)
37. M. SRENG Sochenda (Asst. Prof. Dr.), Vice doyen de la faculté de génie électrique et chef du département de Génie de Télécommunications et Réseaux (GTR)
38. Mme SREY Malis, Chef du département de tronc commun (TC)
39. M. CHAN Sarin (Asst. Prof. Dr.), Vice-dean of Faculty of Electrical Engineering and Head of Industrial and Mechanical Engineering Department (GIM)
40. M. PHUN Veng Kheang (Assoc. Prof. Dr.), Chef du département Transports et Infrastructures (GTI)
41. Mme YIN Molika (Asst. Prof. Dr.), Head of University-Industry Linkage (UIL)
42. Mme KHEM TranKrasel, Coordinatrice de la Section de français
43. M. SO Phea, Head of English Section
44. M. SOK Kimheng, Head of the STEM Library
45. M. SRANG Sarot (Asst. Prof. Dr.), Head of ECAM Engineering Program at ITC and Head of Dynamics and Control Laboratory (DCLab)
46. M. KHIEV Samnang, Responsable du service informatique (IT)
47. M. CHEA Samneang, International Program Manager
48. M. HASH Chanly, Head Department of Architectural Engineering (GAR)
49. M. SIEANG Phen, Head of International Relations Office (IRO)

Accueil des participants et ouverture de la réunion :

En introduction, **S.E. Dr. Sackona PHOEURN**G, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'administration a salué tous les participants à travers son discours.

So I will start with my welcome speech. Je peux commencer mon discours et après je vais demander à d'autres personnalités, membres de droit de faire les leurs.

- *Son Excellence Monsieur le secrétaire d'État au Ministère de l'éducation, de la jeunesse et des sports,*
- *Son Excellence Monsieur l'ambassadeur,*
- *Son excellence, Madame, Monsieur,*  
*Les représentants de différents institutions et ministères,*
- *Mesdames, messieurs les membres du Conseil d'administration et chers partenaires et amis de l'ITC,*

C'est avec un grand plaisir que je vous souhaite la bienvenue au Consortium de l'Institut de Technologie du Cambodge. Je tiens à remercier chaleureusement chacun d'entre vous pour votre présence et votre engagement constant envers l'ITC.

Je souhaite exprimer ma profonde gratitude à la France, à la Belgique, au Japon, à l'AUF et aux autres institutions pour leurs appuis incontournables. Leurs accompagnements technique et financier sont cruciaux pour le renforcement des capacités de notre institut et, surtout, de l'enseignement qui y est dispensé.

*I think our colleagues in Japan are okay now.*

Permettez-moi de souligner le rôle très actif des ministères tels que le Ministère de l'Éducation, de la Jeunesse et des Sports, le Ministère des Mines et de l'Énergie, et le Ministère de l'Économie et des Finances, grâce auxquels nous avons une vision claire de l'enseignement technologique au Cambodge. Dans le cadre de la réforme en cours de notre système éducatif, nous nous efforçons d'aligner la formation des ingénieurs sur les besoins du pays. L'ITC s'inscrit pleinement dans ce dynamisme pour former des ingénieurs compétents, créatifs et responsables qui contribuent à la transformation économique et environnementale du Cambodge.

À cet égard, la contribution du secteur privé est également déterminante pour les stages, la recherche appliquée, l'employabilité de nos jeunes diplômés ainsi que pour la co-construction des programmes académiques. Nous avons à nos côtés des entreprises cambodgiennes et les membres du Consortium international qui participent activement à l'enracinement de l'ITC. Nos expertises sont au service du développement économique du pays. La formation, la recherche et la participation des industries sont au cœur de notre stratégie.

Nous sommes également résolus à accroître le rayonnement de l'ITC à l'échelle nationale, régionale et internationale. Nos partenaires universitaires jouent aussi un rôle important en termes de mobilité des enseignants et des étudiants en Asie-Pacifique et au-delà. Je tiens aussi à féliciter l'équipe de direction de l'ITC pour son travail remarquable, ainsi que les professeurs, les chercheurs, le personnel et les techniciens, dont le dévouement quotidien est la clé de notre réussite.

Enfin, j'adresse tous mes remerciements aux pays amis, aux partenaires institutionnels et aux entreprises pour leur fidélité et leur engagement au profit de l'ITC. Ensemble, nous avons bâti une institution forte et reconnue pour l'avenir.

Je souhaite un grand succès à notre réunion du Conseil d'administration, dans un esprit de collaboration constructive et de vision partagée pour le développement de l'institut et du pays. Je vous remercie.

**S.E. M. OM Romny, secrétaire d'État au ministère de l'éducation, de la jeunesse et des sports**

Pour commencer, on peut maintenant accorder notre temps de parole à son excellence Dr. OM Romny, secrétaire d'État au ministère de l'éducation, de la jeunesse et des sports.

- *Merci beaucoup.*
- *Madame la Présidente du Conseil d'administration de l'ITC qui est aussi ministre de la Culture et des beaux arts du Cambodge,*
- *Son Excellence Monsieur Jacques PELLET, ambassadeur de France au Cambodge,*
- *Excellences, Mesdames, Messieurs et collègues,*

Je m'exprime aujourd'hui au nom du Ministère de l'Éducation, de la Jeunesse et des Sports. Cette réunion du Conseil d'administration est, à mes yeux, primordiale : elle définit les orientations de l'ITC, institution clé pour la formation des ingénieurs de notre pays.

L'ITC est au cœur de la vision de Monsieur le Ministre de l'Éducation, qui insiste sur l'exigence d'une formation de qualité et sur le développement de la recherche. Notre institut bénéficie du soutien de partenaires financiers majeurs — la Banque mondiale, la Banque asiatique de développement et l'Agence française de développement — notamment pour la construction d'infrastructures dédiées aux STEM.

Le Ministère place désormais les STEM au centre de ses priorités dès l'enseignement secondaire. Dans cette perspective, l'appui de l'ITC est indispensable. À ce titre, je remercie l'Ambassade de France pour la mobilisation de ses partenaires universitaires, qui œuvrent au développement de l'institut et de l'ensemble du ministère.

**S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci votre excellence.

Excellences, Mesdames, Messieurs et chers collègues,

Nous avons l'honneur aujourd'hui d'accueillir son Excellence Jacques PELLET, ambassadeur de France au Cambodge. J'en profite pour vous dire aussi que l'ITC est devenu ce qu'il est actuellement, c'est grâce à l'appui de l'ambassade de France. Historiquement, la coopération française au sein de l'ITC a commencé juste après les accords de paix de Paris. Je vous rappelle également que l'ambassadeur de France est aussi membre de droit de notre Conseil d'administration. SEM Jacques PELLET a accompli beaucoup de choses pour le Cambodge en général et l'ITC en particulier. La mission de la France au Cambodge concerne non seulement le domaine scientifique mais aussi la culture. Je regrette donc que sa mission arrive à terme dans un mois. Nous en sommes vraiment désolés mais en khmer, on dit : « Comme la terre est ronde, un jour, on se croiera évidemment. Encore une fois, votre excellence, votre présence à l'ITC est un grand honneur pour nous et je vous laisse la parole. »

**S.E. M. Jacques PELLET, Ambassadeur de France au Cambodge**

- *Madame la ministre,*
- *Monsieur le secrétaire d'État au ministère de l'Éducation, de la Jeunesse et des Sports.*
- *Monsieur le secrétaire d'État au ministère de l'Économie et des Finances,*
- *Madame la secrétaire d'État au ministère des mines et de l'énergie,*
- *Mesdames et messieurs,*
- *Chers partenaires internationaux,*

Je n'ai pas préparé de discours formel, mais je suis très heureux de pouvoir vous adresser quelques mots.

Je suis venu pour la première fois à l'ITC en 1995, à l'occasion de ma première mission en tant que jeune diplomate. Je me souviens que c'était une période de renouveau, et l'ITC était déjà pleinement intégrée dans l'accord de coopération signé à cette époque. Cet accord est à l'origine de toutes les actions de partenariat que nous menons aujourd'hui avec le Cambodge. Trente ans plus tard, je constate le chemin considérable parcouru par votre institution.

Lors de ma dernière visite dans vos locaux, pour le 60ème anniversaire, nous avons pris une photo de groupe avec l'équipe de France qui travaille en partenariat avec vous ici, à l'ITC. Je pense bien sûr à l'IRD, à toutes les universités françaises représentées. Je suis donc très heureux de voir qu'en trois décennies, cette coopération non seulement s'est maintenue, mais s'est considérablement développée. Je vois émerger de nouveaux projets de partenariat et de mobilité internationale entre l'ITC, la France et l'Europe. C'est une grande satisfaction.

Comme vous le savez, je vais quitter le Cambodge dans un mois. Je ne pouvais pas manquer de revenir une dernière fois devant ce Conseil d'administration pour être avec vous. J'ai le plaisir de vous le confirmer, Excellence : l'ITC est une institution centrale dans la formation des ingénieurs et des scientifiques du pays.

Je me réjouis tout d'abord de la vitalité de la Francophonie ici. Le Cambodge accueillera l'année prochaine le Sommet de la Francophonie. Ce sera la plus grande réunion diplomatique jamais organisée dans le royaume, une ouverture historique sur le monde francophone dans toute sa diversité. J'espère que ce sera un moment fort pour valoriser la francophonie cambodgienne, qui s'exprime dans l'ingénierie, la médecine, le militaire, les arts et la culture. Ce sommet sera marqué par la visite du Président de la République française, qui se rendra au Cambodge pour la première fois. Il attend cette échéance avec impatience.

Ce que je tenais à souligner, c'est que l'ITC est une institution unique par son contexte multilatéral. Elle offre un terrain d'échange entre différents ministères, des ONG, le secteur privé et des institutions partenaires. C'est une institution multilingue, ouverte sur l'international et parfaitement intégrée dans le



paysage scientifique. Vous avez reçu le consortium international en mars – il n'y a pas d'autre endroit au Cambodge où des acteurs aussi variés se réunissent au nom de l'éducation et de la science. Vous avez aussi organisé en juin des journées scientifiques sur la valorisation de la recherche pour la croissance et l'innovation. Cela illustre parfaitement la contribution de l'ITC au développement du royaume.

Je tiens à rappeler que depuis 1993, la France accompagne l'ITC. Nous continuerons, sans aucun doute. Depuis 2019, 19 doctorants de l'ITC ont été diplômés grâce à des bourses France Excellence, cofinancées avec le Ministère de l'Éducation, de la Jeunesse et des Sports, et 10 autres sont en cours. Nous avons aussi 35 étudiants de l'ITC qui ont bénéficié des programmes très sélectifs des bourses France Excellence et Eiffel. Pour 2025-2026, 7 nouveaux étudiants en bénéficieront (4 en Master, 3 en doctorat). Je signale également que deux étudiants de l'ITC ont été admis à l'École Polytechnique pour 2024-2025, l'institution la plus prestigieuse de France en sciences. Nous en comptons 30 depuis le début. Une grande partie des enseignants-chercheurs qui contribuent au succès de l'ITC ont été formés en France (environ 17 à 20%). Ces chiffres me rendent très fier de ce partenariat.

Côté recherche, nous avons 7 projets financés par les "Fonds Équipe France" pour un total de 2 millions d'euros. Ces fonds ont permis la création de laboratoires mixtes internationaux, comme le Laboratoire d'Excellence en Agrosystèmes Durables porté par l'IRD. Quatre laboratoires conjoints ont été créés par l'IRD depuis 2019. Nous avons aussi trois collaborations via les partenariats Hubert Curien, et un solide réseau de 38 laboratoires soutenant des projets innovants.

L'accueil d'organismes français comme l'IRD et le CIRAD est le signe d'un engagement profond en matière de coopération scientifique. Je constate également la multiplication des conventions avec des écoles d'ingénieurs et universités françaises, et des projets comme celui avec l'IMT Mines Albi qui visent à favoriser la mobilité internationale via le programme Erasmus+.

Je crois qu'il est important de convaincre que le français est un atout majeur pour la carrière des ingénieurs. Je suis très heureux de voir que sur le chantier majeur de la station de Bakheng, qui fournit l'eau potable à Phnom Penh, travaillent de nombreux ingénieurs formés à l'ITC. J'espère que nous aurons d'autres projets d'infrastructures pour démontrer la valeur ajoutée des francophones.

Je vois que l'ITC a de nombreux projets de développement, un nouveau campus et de nouveaux programmes prometteurs, notamment en intelligence artificielle et en cybersécurité. Le Cambodge a participé au sommet sur l'IA à Paris cette année, et nous avons une coopération active dans ce domaine, par exemple avec la CDT.

Je vous laisse maintenant la parole et aurai peut-être quelques questions. En tout cas, merci beaucoup. Nous sommes très fiers de ce partenariat.

J'aurai évidemment un successeur qui arrivera début août. Avec l'accord des autorités, je peux vous annoncer qu'il s'agit de M. Olivier Richard, actuellement directeur adjoint à la Direction de la Mondialisation. C'est une personne très expérimentée, qui connaît très bien l'Asie et les enjeux de coopération. Je lui dirai bien sûr de venir à l'ITC dès le début de sa mission, et n'hésitez pas à l'inviter ou à le contacter. Madame Anh-Dao assurera toujours le lien. Je la remercie pour tout ce qu'elle fait pour cette relation.

Pour conclure, je tiens à rappeler que la France est très fière d'être membre du Conseil d'administration de l'ITC.

**S. E. Dr. Sackona PHOEURNNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci votre excellence pour votre témoignage très touchant. Votre discours a tout résumé. On est là ensemble depuis plus de 30 ans. Merci pour tout ce que nous avons travaillé ensemble avec votre successeur.

Maintenant, on invite notre collègue de Belgique, Prof. Frédéric DESBASTE à prendre la parole. Il représente les collègues belges et aussi le projet ARES.

**Prof. Frédéric DEBASTE, Représentant du projet ARES et des universités de Belgique**

Merci madma la Ministre.

Merci de me permettre d'y participer à distance. Je suis vraiment désolé de ne pas être présent parmi vous. L'ARES a eu une réunion avec votre Conseil la semaine passée et lors de laquelle on a souligné la qualité de notre partenariat dans le cadre de notre projet insitutionnel. On a souligné aussi que l'ITC est un partenaire particulier qui contribue davantage au développement du Cambodge. Cette année, nous avons encore deux projets. Ensemble, nous continuons à développer de nouvelles choses. Via ces projets, on est là ensemble jusqu'en 2027. Merci beaucoup madame la présidente.

**S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Ok, thank you very much Professor and now we would like to invite our colleague from Japan to take the floor. We have two friends from Japan, Professor Takada and Professor Watanabe. I would like to mention that Prof. Watanabe is from Headquarter of JICA in Tokyo. I would also like to say that our two institutions began their cooperation in the year 2000. That makes it more than 20 years ago. A big thank you to Japan and the ASEAN partners who are in the same network. Prof. Watanabe is a colleague who has been here for a long time, contributing to various technological aspects. He is very loyal to the ITC. Professor, I would like to give you the floor.

**Prof. KOICHIRO Watanabe, Representative of Jica in Tokyo**

Thank you, Madam Sackona. I am KOICHIRO Watanabe, Senior Advisor of JICA in Tokyo, professor emeritus, and member of AUN/SEED-Net. Two weeks ago, I was also at the ITC. I am very happy to join this meeting. I have been working with the ITC for almost 20 years. I had the opportunity to visit the ITC Campus in Kep, organized by Prof. PO Kimtho. I'm glad to know you have three campuses. This new campus in Kep is a good place for international students for short-term internships/stay, and I also think it's a good location for international meetings. We are currently promoting the second phase for the LBE project. Thank you, Madam Sackona and thank you for your time.

**S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Thank you, Professor. As I just said, the development of ITC is possible thanks to the support of different partners from France, Belgium, and Japan. It is therefore a shared pride.

Nous avons un autre partenaire très important de l'ITC, l'AUF représentée par son directeur régional Prof. Nicolas MAINETTI. La parole est à vous monsieur le directeur.

**Prof. Nicolas MAINETTI, Directeur régional de l'AUF – Asie- Pacifique**

- S.E. Mme Phoeurng Sackona, Présidente du CA de l'ITC et Ministre de la Culture et des Beaux-arts,
  - S.E. M. Om Romny, Président Honoraire de l'ITC et Secrétaire d'Etat MEJS,
  - S.E. M. Jacques Pellet, Ambassadeur de France,
  - S.E. M. Po Kimtho, Directeur général de l'ITC,
  - Excellences Mesdames et Messieurs les représentants des ministères,
- Chers collègues et partenaires,

C'est un honneur pour moi, au nom de l'Agence Universitaire de la Francophonie et de sa direction régionale Asie-Pacifique, de prendre la parole, malheureusement pour moi à distance, à l'occasion de ce 33ème Conseil d'Administration de l'Institut de Technologie du Cambodge. Je tiens tout d'abord à remercier l'ITC pour son accueil toujours chaleureux envers l'AUF et à saluer l'engagement sans faille de son équipe dirigeante, de ses enseignants-chercheurs et de ses personnels, qui œuvrent chaque jour au rayonnement de cette institution d'excellence.

**L'ITC, un pilier de la formation et de l'innovation au Cambodge**

Depuis sa création, l'ITC s'est affirmé comme un acteur majeur du développement du Cambodge, en formant des générations d'ingénieurs et de scientifiques qui contribuent à la transformation économique et sociale du pays. L'ITC est aujourd'hui reconnu pour la qualité de ses formations, la pertinence de ses

recherches et sa capacité à tisser des liens solides avec les réseaux académiques francophones et anglophones, tant au niveau régional qu'international.

La mission de l'ITC – former des étudiants hautement qualifiés dans les domaines de l'ingénierie, des sciences et des technologies, et développer des transferts de technologies innovants – résonne pleinement avec la vision de l'AUF : soutenir l'excellence, l'innovation et la coopération au service du développement durable et de l'employabilité des jeunes.

### **Des réalisations remarquables et des perspectives ambitieuses**

L'année écoulée a été marquée par des avancées majeures. Je tiens à souligner notamment :

- La création de nouveaux programmes d'ingénierie, dont le Génie de l'Intelligence Artificielle et Cybersécurité, ainsi que le Master en Génie Architectural, qui témoignent de l'adaptation constante de l'ITC aux besoins émergents du marché et de la société cambodgienne.
- Le lancement de projets structurants, tels que la Plateforme de Gestion des Risques pour la Pollution de l'Air, le Centre de Recherche et de Transfert de Technologie (CRTT), et le Centre de Formation Régional en Intelligence Artificielle, qui renforcent le positionnement de l'ITC comme moteur de l'innovation et de la recherche appliquée.
- Le développement d'infrastructures modernes, à l'image du nouveau campus Win-Win Monument, du Makerspace Avancé ou encore de la future bibliothèque STEM, qui offriront aux étudiants et chercheurs des conditions d'apprentissage et de travail à la hauteur des standards internationaux.

L'ITC s'est également illustré par sa capacité à fédérer des partenaires académiques, industriels et institutionnels, à travers des projets collaboratifs soutenus par des agences telles que la Japan International Cooperation Agency, l'ARES pour la Belgique, l'Agence française de développement, la Banque Mondiale ou encore l'Asie Banque asiatique de développement, etc. Cette dynamique de réseau, chère à l'AUF, est essentielle pour relever les défis de la transformation numérique, de la transition écologique et de l'internationalisation de l'enseignement supérieur.

### **L'AUF, un partenaire engagé aux côtés de l'ITC**

L'Agence Universitaire de la Francophonie est très heureuse de la coopération avec l'ITC, qui je le rappelle, abrite notre bureau national AUF Cambodge, ainsi que le Centre d'Employabilité Francophone de Phnom Penh. Nous saluons particulièrement la démarche de l'ITC en faveur de l'ouverture, de la diversité linguistique et de la promotion du français, qui demeure un atout pour l'insertion professionnelle et la coopération internationale.

### **Des défis à relever ensemble**

En accompagnement de ces succès, des défis importants sont à considérer, en particulier :

- L'adaptation continue des programmes aux évolutions technologiques, économiques et sociétales ;
- Le développement de partenariats encore plus étroits avec le secteur privé, pour favoriser l'employabilité et l'entrepreneuriat des diplômés.

Je suis très heureux d'annoncer à ce sujet que le projet de renforcer l'industrie 4.0 dans les pays d'Asie du Sud Est a été validé avec quelques modifications par les autorités françaises. Ce projet de 1M €, qui est un Fonds équipe France régional, et qui s'ajoute à ceux que l'Ambassadeur de France a cités, vise à renforcer les compétences des enseignants universitaires en Asie du Sud-Est dans l'usage d'outils numériques de haute performance liés à l'Industrie 4.0, produire des contenus académiques dans les disciplines des Sciences de l'ingénieur et diffuser largement cette expertise auprès des étudiants, et l'ITC est un des piliers de ce grand projet structurant qui pourra ainsi commencer dès cet automne.

L'AUF réaffirme sa volonté de travailler main dans la main avec l'ITC, les autorités cambodgiennes et l'ensemble des partenaires, pour relever ces défis et faire de l'ITC un modèle d'excellence et d'impact en Asie du Sud-Est.

## Conclusion

L'ITC incarne aujourd'hui l'ambition d'un Cambodge tourné vers l'avenir, ouvert sur le monde, résolument engagé dans la voie de l'innovation et de la qualité.

Je vous souhaite des travaux fructueux et réitère mes félicitations à toute la communauté de l'ITC pour ses réalisations et ses perspectives prometteuses.

Je vous remercie de votre attention.

### **S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci beaucoup, Monsieur le Directeur. Vous avez tous entre vos mains le programme d'aujourd'hui et l'ordre du jour.

Normalement, nous commençons par les décisions du Conseil d'Administration de l'année passée avant de faire une petite pause. Ensuite, nous aborderons les dossiers pédagogiques de l'année universitaire 2025-2026 ainsi que le rapport financier. Enfin, nous procéderons à la nomination de l'équipe de direction.

Je vous invite donc à lire l'ordre du jour. Si vous n'avez pas d'objection, je propose à S.E. Prof. Dr. PO Kimtho de lire le suivi du CA 2024 et les propositions du Consortium 2025.

### **S. E. Prof. Dr. PO Kimtho, Directeur de l'Institut de Technologie du Cambodge**

Merci beaucoup, Madame la présidente du CA. Vous avez tous entre vos mains le programme d'aujourd'hui et l'ordre du jour.

- S.E. M. Om Romny, Président Honoraire de l'ITC et Secrétaire d'Etat MEJS
- S.E. M. Jacques Pellet, Ambassadeur de France
- S.E. M. CHOU Kimleng, Secrétaire d'Etat au Ministère de l'économie et des finances
- S.E. Mme PEN Chhorda, Secrétaire d'Etat au Ministère des mines et de l'énergie
- Excellences, Mesdames et Messieurs,

Pour ne pas alourdir le texte, veuillez consulter les deux tableaux ci-dessous qui touchent le relevé de décision du CA 2024 et les avis du Consortium 2025.

#### **Relevé de décision du CA 2024**

| No | Relevé de Décision du CA 2024                                                                                                                   | 2024-2025           |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 1  | Valorisation de la transversalité des cours entre les départements                                                                              | Réalisé             |
| 2  | Création de: Master of Architectural Engineering (GS)                                                                                           | Réalisé             |
| 3  | Création de : Artificial Intelligence Engineering and Cybersecurity (GIC-International Program)                                                 | Réalisé             |
| 4  | Création de: IT Network and Programming (GIC-Associate)                                                                                         | Réalisé             |
| 5  | Création de : Industrial Engineering (GIM-Associate)                                                                                            | Réalisé             |
| 6  | Création de : Geotechnical Engineering (GGG-Associate)                                                                                          | Réalisé             |
| 6  | Changement du nom: Materials Science and Structure” to “Materials and Built Environment” (RIC)                                                  | Le même nom : ‘MSS’ |
| 6  | New PathWay of ECAM LaSalle “Second years of International Program can go directly to 3rd year at ECAM LaSalle” (ITC-ECAM-Kasetsart University) | Réalisé             |

### Les AVIS du Consortium 2025

| No | Avis du Consortium 2025                                                              | Favorable |
|----|--------------------------------------------------------------------------------------|-----------|
| 1  | Modification du Cuuriculum de l'option Électrique et Automation, <b>GEE</b>          | X         |
| 2  | Modification du Cuuriculum de l'option Électrique et Énergétique, <b>GEE</b>         | X         |
| 3  | Modification du Cuuriculum de l'option la science des données, <b>AMS</b>            | X         |
| 4  | Modification du Cuuriculum de l'option Génie financier, <b>AMS</b>                   | X         |
| 5  | Modification du Cuuriculum de l'option Génie Transport et Infrastructure, <b>GTI</b> | X         |

**S. E. Dr. Sackona PHOEURNNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci beaucoup. Vous pouvez de présenter les événements marquants.

**S. E. Prof. Dr. PO Kimtho, Directeur de l'Institut de Technologie du Cambodge**

Merci Madame la présidente du CA. Je me permets de vous présenter les événements marquants de l'ITC, durant l'année scolaire 2024-2025.

Pour ne pas alourdir le compte-rendu, veuillez consulter la liste ci-dessous regroupant les événements marquants de l'ITC :

- 1) Lancement du Cambodian Cyber University Network (CCUN),
- 2) Fête de 60 ans de l'ITC,
- 3) La 3e Conférence internationale sur la technologie de la terre et du géo-environnement 2024 (EraGET2024),
- 4) Symposium international sur la "Life Mechatronics »,
- 5) Construction du Centre de recherche et de transfert de technologie,
- 6) Un autre campus de l'ITC dans la province de Kep,
- 7) Une récompense aux groupes Robots de l'ITC,
- 8) Protocole d'accord avec l'Université de Central Missouri, USA,
- 9) Protocole d'accord avec l'Université de Macquarie, Australie,
- 10) Inauguration du centre de formation en climatisation et signature d'un protocole d'accord,
- 11) Visite de haut niveau de la Banque mondiale à l'ITC,
- 12) Visite d'étude de la Banque mondiale à l'ITC,
- 13) ITC, institut d'accueil pour le panel de recherche en Asie,
- 14) 14ème journée scientifique,
- 15) Honda Y-E-S Award Program 2024.

**S. E. Dr. Sackona PHOEURNNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci beaucoup. Vous voyez, nous avons eu beaucoup d'activités au niveau nation et international. Ensuite, Monsieur SOY Ty va présenter le résumé des activités des études.

**M. SOY Ty, Directeur adjoint chargé des affaires académiques**

Pour ne pas alourdir le texte, on ne cite pas tout mais seulement les commentaires et les remarques à ce sujet.

**Dr. BUN Long, Directeur adjoint chargé de la coopération et de la recherche**

Il présente les parties recherche et coopération. Pour ne pas alourdir le texte, on ne cite pas tout mais seulement les commentaires et les remarques à ce sujet.

**S. E. Dr. Sackona PHOEURNNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci beaucoup. Now we can begin the discussion. The floor is yours.

**S.E. M. Jacques PELLET, Ambassadeur de France au Cambodge**

Oui, j'ai quelques mots.

Anh-Dao, si vous avez des remarques, n'hésitez pas. Je suis très impressionné par la vitalité de l'institution, de l'Institut, dans l'ensemble de ses domaines : enseignement, recherche et partenariats. Ces partenariats, aussi bien avec des institutions de formation étrangères qu'avec le secteur privé, sont particulièrement remarquables.

Je suis également très heureux de constater que le taux d'employabilité est élevé, ce qui montre que les formations correspondent bien aux besoins du pays. Je perçois aussi la capacité de l'institution à s'adapter aux nouveaux enjeux qui se dessinent.

J'aurais ensuite quelques questions. Peut-être n'ai-je pas bien lu ou bien compris : lors du concours d'entrée à l'ITC, quel est le nombre d'étudiants admis ? Combien d'étudiants se présentent au concours ? Et quel est le pourcentage d'admis à l'issue du concours d'entrée ?

J'avais aussi une autre question par rapport à la formation des doctorants, à la page 26. Je me demande pourquoi le nombre de diplômés est plus bas.

**M. SOY Ty, Directeur adjoint chargé des affaires académiques**

En fait, le bleu représente le nombre total des doctorants. Normalement, chaque année, nous avons environ 10 nouveaux inscrits.

**S.E. M. Jacques PELLET, Ambassadeur de France au Cambodge**

D'accord. Donc, en 2020-2021, il y avait 30 nouveaux inscrits et ensuite ça diminuait.

**Mme TRAN Thi Anh-Dao, Attachée de coopération scientifique et universitaire**

Les chiffres aux pages 61 et 62 sont exacts. C'est là où l'on voit que vous avez 20 étudiants en 5<sup>ème</sup> année et ils ont pris un plus de temps pour obtenir leur diplôme.

**Dr. SIM Tepmony, Directeur de l'école doctorale**

En 2020-2021, on a reçu 12 étudiants de NPIC pour suivre la formation doctorale, avec le financement du ministère de l'économie et des finances. C'est pourquoi le nombre était important.

**S. E. Dr. Sackona PHOEURN, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

D'autres remarques, s'il vous plaît ?

Bon on passe à une autre partie, le dossier pédagogique pour 2025-2026.

**Dr. BUN Kim Gnun, Directeur adjoint de l'ITC**

Il présente la perspective de l'ITC pour 2025-2026.

**S. E. Dr. Sackona PHOEURN, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci pour la présentation.

Après avoir examiné le dossier pédagogique pour l'année universitaire 2025-2026, je souhaiterais revenir sur quelques points importants.

Tout d'abord, concernant la présentation des projets, il n'y a pas de remarque particulière. Globalement, tout le monde semble d'accord.

Nous avons également vu le nombre d'étudiants à recruter pour 2025-2026. Les démarches restent inchangées :

- un concours d'entrée pour les ingénieurs,
- et une sélection sur dossier pour les techniciens.

En ce qui concerne le recrutement, l'ITC dispose de trois campus : Phnom Penh, Tbong Khmum et Kep.

Les droits de scolarité, qu'il s'agisse des ingénieurs, des étudiants ou des techniciens, ne changent pas. J'en viens maintenant aux trois propositions, qui sont étroitement liées entre elles.

**Première proposition : le choix du département dès l'inscription au concours**

À partir de l'année prochaine, les candidats au cursus d'ingénieur pourront choisir leurs départements de préférence dès leur inscription au concours. Ce n'était pas le cas auparavant, ce qui a entraîné de nombreux abandons. Certains étudiants ont même quitté l'ITC pour rejoindre d'autres universités.

**Deuxième proposition : ramener la durée du cursus d'ingénieur à quatre ans**

En Asie du Sud-Est, la formation d'ingénieur dure généralement quatre ans. Jusqu'à présent, l'ITC proposait un cursus de cinq ans, comprenant deux années de formation générale incluant le français et l'anglais. Cette durée est plus longue que celle proposée dans d'autres universités au Cambodge, et ce point a été discuté hier avec l'équipe de direction.

Concernant les langues, et surtout le français, l'enseignement sera maintenu, mais il fonctionnera différemment. Le volume horaire diminuera, toutefois l'objectif restera le même : à la fin de la formation, chaque étudiant devra maîtriser couramment le français ou l'anglais et obtenir le diplôme requis, par exemple le niveau B2. L'ITC souhaite également donner la priorité aux jeunes issus de provinces éloignées.

**Troisième proposition : le déménagement de l'ITC de Tbong Khmum vers Phnom Penh**

À l'origine, ce campus visait à faciliter l'accès aux études d'ingénieurs pour les jeunes de cette région. Aujourd'hui, l'Université Heng Sarin de Tbong Khmum peut également assurer cette formation.

Nous pourrions donc demander aux étudiants de venir s'installer sur le campus principal de l'ITC, situé près du monument du Gagnant-Gagnant. Ce nouveau campus dispose d'un internat, et nous pourrions aussi leur accorder des bourses afin de faciliter leur vie à Phnom Penh.

Cette solution permettrait de réduire les déplacements des enseignants et de diminuer les dépenses de l'ITC.

Enfin, nous demanderons également l'avis du Consortium sur l'ensemble de ces propositions.

**Dr. OM Romny, Secrétaire d'État au ministère de l'éducation, de la jeunesse et des sports**

Regarding the proposals raised by the Chair of the Board, I'd like to add a few points.

The first proposal, concerning reducing the engineering program to four years, I believe corresponds to the length of the program in the region. I think this is one of the valid reasons. Historically, we felt that the basic knowledge acquired by our high school graduates was quite limited. However, the Ministry is currently implementing a reform aimed at strengthening STEM education in secondary school so that students are prepared for university studies. Therefore, it's time to implement this reduction to save time. Another reason is that ITC uses two foreign languages: French and English. Students are free to learn either French or English outside of ITC. Ideally, students should have the required level of proficiency by the end of their program. They can learn French or another language; it doesn't matter. Personally, I support this proposal. I will inform the Minister of this proposal.

Another point regarding the transfer of the ITC from Tbongkhmum to Phnom Penh: I am also in favor of it. I want to tell you that initially, this university had no students after its opening. At that time, the Minister thought that to get the university up and running, the Ministry should ask the ITC to go and help. At that time, I discussed this with the Chairwoman of the Board of Directors when I was the Director of the ITC. The expenses were obvious to start training engineers there, but we decided to do it, though not permanently. Now, it's time to return home, but don't forget to discuss this with the Director of Heng Samrin Tbongkhmum University, and I will pass this message on to the Minister of Education.

Another possible location for development is the Kampong Cham campus, which is not far from there.

**S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci pour votre intervention. Pour moi, il vaut mieux ne pas l'apporter au ministre parce que c'est le début de la discussion seulement. Nous avons deux collègues qui lèvent la main pour prendre la parole. Je donne la parole à Frédéric DESBASTE and then Prof. TAKADA.

**Prof. Frédéric DEBASTE, Représentant du projet ARES et des universités de Belgique**

Okay, thank you very much for all the presentations and for pointing out the key points. I just wanted to make a comment on the move from five years to four years, which is a really ambitious move. You clearly explained why it is important for the strategy of ITC, and I can fully agree with that. However, because it is very ambitious, I think it will require a lot of work.

I also think that if we really want to make good use of the Consortium for pedagogical advice, it is important that the Consortium is made aware of this change at an early stage. This year, typically, within the Consortium, we had the opportunity to follow five program changes, which were in fact quite limited. If the goal is to change the whole ITC engineering program from five years to four years, this implies a lot of changes, including fundamental pedagogical changes. This is not something that can simply be discovered during a Consortium meeting and then assessed on the spot. It requires time to think, to analyze, and to really dig into the program.

So, my remark would be that, in order to be able to receive meaningful and effective advice from the Consortium, it is essential that the Consortium is informed early about this change, and that we can review the documents related to the proposed program modifications well in advance of the Consortium meetings.

That was my comment on this point, and once again, thank you for these very nice presentations.

**Prof. Jun-Ichi TAKADA, Executive Vice President for Global Affairs and Chair of TAIST-Science Tokyo**

Okay, thank you very much. I also have some comments regarding the four-year transition. I fully support this proposal, and I also agree with the document from Prof. DESBASTE. By shortening the duration, you really need to redesign the whole structure, and this is the key issue that should be discussed today.

If this transition is decided, it will be a very big task for ITC faculty members to redesign the curriculum and reorganize the courses to fit within four years. However, this is a very important process, particularly for regional harmonization. At least in our region, the engineering education system has already been unified into a four-year system.

Let me also share a small experience related to the five-year program. Every year, we appreciate that around ten ITC graduates apply to our master's programs. However, because the five-year engineering program is not the regional standard, our admissions division often requests additional documents to prove that this engineering degree is higher than a bachelor's degree. Unfortunately, in some cases, students submit their applications too late, and these additional certificates cannot be provided on time. As a result, those applicants cannot even take the entrance examination.

I have repeatedly discussed this issue with our admissions division, but they insist that the program is not fully in line with the regional standard, and therefore additional documentation is required. Considering that the four-year system is now the regional standard, I believe that adopting this system will also facilitate student mobility in the future.

Thank you very much.

I would also like to add one comment and one question.

My comment concerns the visiting professor and professor emerita system. I strongly support the implementation of this system, as it makes it easier to mobilize resources from outside, particularly from



partner universities in France, Belgium, Japan, and other countries. I believe this system can further enhance the internationalization of ITC.

My question is related to the introduction of generative AI in the library, as mentioned by Dr. Kim Gnun. I have observed that ITC staff members are already extensively using generative AI in a very positive way. However, particularly for students, I think it is important to establish ethical guidelines. I would therefore like to ask what kind of guidelines are currently being considered for the ethical use of generative AI by students.

Thank you very much.

**S.E. M. Jacques PELLET, Ambassadeur de France au Cambodge**

Je ne suis pas professeur. Mon avis n'est pas très précis que les vôtres, Prof. DESBASTE et Prof. Je ne suis pas professeur, donc mon avis est peut-être moins précis que le vôtre, Professeur DESBASTE et Professeur TAKADA. Mais, de toute manière, il est important que tous les partenaires soient bien informés, afin qu'ils puissent vous donner leurs opinions et leurs retours.

Concernant l'enseignement des langues, je me pose une question : pourquoi faudrait-il chercher à le réduire ou à l'adapter de cette manière ? Il ne faut pas lâcher. Je ne pense pas que l'on puisse laisser aux étudiants la responsabilité d'apprendre les langues seuls, chacun de leur côté, même si aujourd'hui il existe de nombreux outils numériques.

Nous sommes toutefois tout à fait prêts à réfléchir à cette question ensemble. Ici, à l'Institut, nous disposons notamment d'un centre de langues, et nous pouvons envisager de nouvelles manières d'enseigner. Nous serions très intéressés à entrer en dialogue avec l'ITC sur ce sujet. Il est vraiment important que nous réfléchissions collectivement.

Il me semble, en tout cas, que la dimension linguistique, que ce soit en anglais ou en français, est fondamentale pour l'Institut.

Enfin, concernant le nouveau campus, c'est une très bonne initiative pour répondre à vos besoins. Mais il serait important de réfléchir plus précisément aux activités qui y seront développées.

Comment l'IRD et le CIRAD pourront-ils intervenir ?

Y aura-t-il des enseignements de spécialité en français ?

Et en termes d'équipements, seront-ils suffisants ?

Ce sont, à mon sens, des points qui méritent d'être discutés ensemble.

**Mme TRAN Thi Anh-Dao Attachée de coopération scientifique et universitaire**

Je voulais juste compléter les interventions des collègues de Belgique et du Japon, en ce qui concerne la formation de 5 ans à 4 ans. A l'heure actuelle, la formation d'ingénieurs est constituée de deux ans de classe préparatoire et après, vous passez aux formations d'ingénieurs. Parfois des écoles d'ingénieurs français intègrent la prépa, donc on parle de prépa intégrée, mais ça fait toujours 5 ans. Du coup, je me dis que si vous allez en discuter avec vos partenaires du Consortium, sans doute, certaines écoles d'ingénieurs françaises vont vous poser des questions : comment va-t-on pouvoir établir des mobilités, accueillir des étudiants et après quand est-ce qu'ils vont pouvoir candidater pour les masters en France ? Est-ce que cela va être reconnu par les écoles françaises si votre formation est raccourcie, il va avoir des implications de mobilité de l'ITC vers la France. Je vois qu'il y a des étudiants qui postulent pour des écoles à l'heure actuelle, aux bourses.

**S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci, je comprends votre préoccupation. Je vais tenter d'éclaircir certains points, même si l'exercice n'est pas facile. En résumé, je suis convaincue que le transfert du campus de Tbong Khmum vers Phnom Penh ainsi que le choix du département dès la rentrée ne posent pas de problème.

Vous le savez, l'idée de réduire d'une année la durée de la formation des ingénieurs existe depuis longtemps, bien avant de vous être proposée. C'est pour cette raison que je souligne que la discussion vous revient à tous, afin de permettre des comparaisons au niveau régional et international. Avec cette réduction du volume horaire des cours, la qualité de la formation demeure notre priorité. Après plusieurs années d'études et de réflexions, il nous semble aujourd'hui possible de vous soumettre cette proposition. Notre équipe de travail continue, par ailleurs, à approfondir ce dossier.

Concernant le français, l'ITC n'y renonce pas : il s'agit de notre valeur ajoutée. La maîtrise de deux langues étrangères nous rend particulièrement fiers lorsque nos étudiants partent poursuivre leurs études à l'étranger. Nous constatons d'ailleurs que, parmi les 10 % d'étudiants qui partent à l'international, beaucoup figurent parmi les 20 meilleurs. Dans cette optique, nous faisons tout notre possible pour que le français soit enseigné et appris différemment. Le français fait partie intégrante de l'histoire de l'ITC. S'agissant de la mise en place du nouveau campus, aucun changement n'est envisagé dans le fonctionnement de la coopération avec nos partenaires français ou autres. L'IRD et le CIRAD continueront à travailler comme aujourd'hui. La JICA restera également à nos côtés. Plus nous avons de partenaires, plus notre coopération se renforce. Par ailleurs, le directeur de l'AUF a indiqué que le bureau de l'AUF pourrait être transféré au Cambodge.

En ce qui concerne la mobilité, nous sommes actuellement en discussion avec nos collègues afin de trouver une solution. Il est important qu'il existe un lien logique entre le financement, les compétences acquises et leur reconnaissance. Je m'interroge, par exemple, sur l'accueil en France d'ingénieurs formés au Vietnam ou à Singapour, où la formation d'ingénieur dure également quatre ans. Vous voyez qu'il s'agit de trouver des points communs. Nous avons besoin de vos conseils, car cette situation ne concerne pas uniquement le Cambodge, mais bien l'ensemble de la région.

Comme l'a souligné M. Romany OM, le niveau en STEM des élèves du secondaire est actuellement renforcé. Ils disposent donc de prérequis suffisamment solides pour entreprendre des études universitaires.

Nous solliciterons les avis de nos collègues français, belges et japonais, et nous espérons recevoir leurs retours à ce sujet afin de retenir les meilleures propositions.

Nous passons maintenant à la présentation du rapport financier, qui sera faite par le Dr PO Kimtho.

**S.E. Prof. Dr. PO Kimtho, directeur de l'ITC**

Pour ne pas allonger le compte-rendu, on ne reprend que les commentaires.

**S.E. M. CHOU Kimleng, Secrétaire d'État au ministère de l'économie et des finances**

Merci madame la présidente. Après avoir écouté attentivement, en qualité de membre du CA et représentant du ministère de l'économie et des finances, j'ai l'honneur de vous présenter la performance budgétaire de l'ITC. Basé sur les chiffres dans le rapport financier, tout est transparent et bien réalisé. Malgré tout, j'ai quelques remarques.

Premièrement, c'est l'évaluation globale de la performance budgétaire 2024-2025. Nous avons le budget adopté par le CA en 2024, soit environ 18 millions de dollar américain mais on a dépensé seulement 12 millions. Cela veut dire que le taux d'exécution global est de 67% à peu près. C'est un peu bas. Je voudrais vous rappeler que pour l'année 2023-2024, le taux de réalisation était presque pareil, soit 66%.

Le budget de l'ITC est composé de trois choses : indemnité et salaire des personnels, investissement, fonctionnement courant.

Quant aux sources de financement, elles sont les frais de scolarité, le ministère de l'éducation, de la jeunesse et des sports, le projet HEIP/S4C etc. On voit que l'indemnité et le salaire ont été bien réalisés mais une composante semblait dépasser le budget prévu, indemnité ATOS et chercheurs.

Pour l'investissement, vous avez réalisé quelque 55%. Mais la manifestation scientifique et la coopération régionale, elles dépassent aussi le budget.

En ce qui touche le fonctionnement courant, il s'est bien passé.

Pour tout dire, on voit que certaines choses sont bien dépensées mais d'autres ont dépassé le budget.

À mon sens, il vaut mieux mentionner aussi les appréciations qualitatives où il existe des points positifs quand même, la maîtrise salariale. L'exécution était conforme au plan. C'est une bonne planification. Mais pour le fonctionnement courant. Environ 80% sont réalisés, sauf l'investissement seulement 55% à peu près. Les causes étaient liées à cela, monsieur le directeur les a citées.

À titre de recommandation, il vaut mieux identifier toutes les causes possibles, améliorer le suivi. Pour résumer, la performance budgétaire de l'ITC pour 2024-2025 était globalement satisfaisant, en termes de salarial et fonctionnement. Pour l'investissement, il vaut mieux à revoir.

**S. E. Dr. Sackona PHOEURNG, Ministre de la Culture et des Beaux-Arts et Présidente du Conseil d'Administration de l'ITC**

Merci, Monsieur le Secrétaire d'État. Je crois que vous avez présenté une analyse complète du budget de l'ITC, couvrant les salaires, les investissements et les dépenses de fonctionnement. Monsieur le Directeur de l'ITC a pris note de l'ensemble de vos observations. Pour ma part, j'ai relevé uniquement les points qui ont été acceptés et jugés satisfaisants. À la suite de ces recommandations, le bureau de la comptabilité de l'ITC assurera le suivi nécessaire. Quoiqu'il en soit, à l'ITC, tout se fait dans la transparence, et c'est grâce à cette transparence que l'ITC a pu fonctionner jusqu'à ce jour.

Je tiens à exprimer mes sincères remerciements pour vos recommandations, Votre Excellence Monsieur Chou Kimleng, membre de notre Conseil d'administration depuis de nombreuses années. C'est une évolution positive, d'autant plus que l'ITC s'apprête à se transformer en établissement public à caractère administratif.

Afin de faciliter la mémorisation, le tableau suivant présente l'ensemble des décisions prises par le Conseil d'administration (CA) en 2025.

| No | Relevé de décision du CA 2025                                                          | Avis                         |
|----|----------------------------------------------------------------------------------------|------------------------------|
| 1  | L'étudiant peut choisir son département dès l'inscription au concours d'entrée         | Favorable                    |
| 2  | Modification du programme d'ingénieur de 5 à 4 ans                                     | Demande d'avis du Consortium |
| 3  | Modification of curriculum of Electronic and Automating Engineering program/GEE        | Favorable                    |
| 4  | Modification of curriculum of Electrical Energy Engineering program/GEE                | Favorable                    |
| 5  | Modification of curriculum of Transport and Infrastructure Engineering program/GTI/GCI | Favorable                    |
| 6  | Modification of curriculum of Data Science program/AMS                                 | Favorable                    |
| 7  | Modification of curriculum of Financial Engineering program/AMS                        | Favorable                    |

Pour conclure, j'aimerais aborder deux points. Le premier concerne la candidature de l'IMT Mines Albi, qui souhaite adhérer à notre Consortium international. La reprise de contact a été rendue possible grâce à M. Didier Lecompte, ancien conseiller de l'ITC chargé de la recherche et de l'innovation. Je crois que vous êtes tous d'accord sur ce point, et je pense qu'il pourra être présent lors de notre prochain Consortium. Ce nouveau partenariat contribuera au renforcement des programmes de double diplôme et des projets de mobilité internationale.

Le second point concerne la nomination de l'équipe de direction, qui relève de la compétence du Conseil d'administration.

Chers collègues, je crois que la candidature de l'IMT Mines Albi ainsi que la nomination de l'équipe de direction sont adoptées. Je tiens à vous remercier pour votre présence, que ce soit en présentiel ou en ligne, notamment nos collègues de Belgique, du Japon et de Hanoï, ainsi que Son Excellence Monsieur l'Ambassadeur de France et l'ensemble des autres participants.

Encore une fois, tous nos remerciements à Son Excellence Monsieur Jacques Pellet, Ambassadeur de France au Cambodge, pour son soutien incontournable à l'ITC. Je suis également convaincue que vous transmettez à votre successeur les bonnes expériences et les perspectives positives de l'ITC.

### Annex 3. Overview of Recommendation of Consortium and CA 2025.

| No | Avis du Consortium 2025                                                                                                                                                               | Départ. | 2025-2026 |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------|
| 1  | New course for 3 <sup>rd</sup> Year semester 1 (C:16 ; TD:0 ;TP:0)<br><b>Mastering skills by using IA Tool</b>                                                                        | GEE     | Réalisé   |
| 2  | Combine Analog Filter with Analog Electronics for 3 <sup>rd</sup> Year semester 1 (C:32 ; TD:16 ;TP:16)<br><b>Fundamental of Electronics</b>                                          | GEE     | Réalisé   |
| 3  | <b>Energy Conversion</b><br>Move to 4 <sup>th</sup> Year Semester II (C:32 ; TD:16 ; TP:32)                                                                                           | GEE     | Réalisé   |
| 4  | <b>Power System Analysis and Optimization</b><br>Move to 4 <sup>th</sup> Year Semester I (C:32 ; TD:16 ; TP:32)                                                                       | GEE     | Réalisé   |
| 5  | <b>Data Science</b> : Modify 7 courses in total, in which 4 courses modified names, 1 course is moved to semester 2, 1 course is modified the duration, and 1 course is a new course. | AMS     | Réalisé   |
| 6  | <b>Financial Engineering</b> : All courses in year 3 are the same name in Data Science program. Some courses in year 4 and year 5 are the same name in Data Science program.          | AMS     | Réalisé   |
| 7  | Traffic Management and Modeling will be replaced by <b>Traffic Engineering, Management and Simulation (I3-S2)</b>                                                                     | GTI     | Réalisé   |
| 8  | Transport Systems of Freights and Traveler will be replaced by <b>Transport Modeling and Planning (I3-S2)</b>                                                                         | GTI     | Réalisé   |

| No | Relevé de décision du CA 2025                                                          | 2025-2026      |
|----|----------------------------------------------------------------------------------------|----------------|
| 1  | Modification of curriculum of Electronic and Automating Engineering program/GEE        | Réalisé        |
| 2  | Modification of curriculum of Electrical Energy Engineering program/GEE                | Réalisé        |
| 3  | Modification of curriculum of Transport and Infrastructure Engineering program/GTI/GCI | Réalisé        |
| 4  | Modification of curriculum of Data Science program/AMS                                 | Réalisé        |
| 5  | Modification of curriculum of Financial Engineering program/AMS                        | Réalisé        |
| 6  | L'étudiant peut choisir son département dès l'inscription au concours d'entrée         | En réalisation |
| 7  | Modification du programme d'ingénieur de 5 à 4 ans                                     | En réalisation |

### Annex 3a. Report of French Language Teaching (2025-2026).

#### Rapport de l'enseignement de français Mars 2026

La Section de Français de l'Institut de Technologie du Cambodge assure des cours de français langue étrangère à tous les étudiants de la première année à la quatrième année du cursus ingénieur. Pour les groupes de 5<sup>ème</sup> année (32h pour un semestre seulement) : cours de *Module d'Insertion Professionnelle (MIP)* (en français).

| Classe | Niveau | Nombre d'heures/semaine     |                             | Total du nombre d'heures/an |
|--------|--------|-----------------------------|-----------------------------|-----------------------------|
|        |        | Semestre 1<br>(16 semaines) | Semestre 2<br>(16 semaines) |                             |
| I1     | A1     | 6h                          | 6h                          | 192h                        |
| I2     | A2     | 6h                          | 4h                          | 160h                        |
| I3     | A1*    | 4h                          | 2h                          | 96h                         |
|        | A2     |                             |                             |                             |
|        | B1     |                             |                             |                             |
| I4     | A2     | 2h                          | 2h                          | 64h                         |
|        | B1     |                             |                             |                             |
|        | B2     |                             |                             |                             |
| I5     | MIP    | 2h                          |                             | 32h                         |

\*I3-A1 : Étudiants ingénieurs venant du cycle technicien

# 1. Ressources humaines

L'appel à recrutement des enseignants de français vacataires a été lancé le 11 juillet 2025. L'interview s'est faite du 14 au 15 août 2025.

| No . | Nom et prénom   | Sexe | Date de naissance | Diplôme                | Sujet de mémoire                                                                                                                         | Université et pays                                                | Année de fin d'étude |
|------|-----------------|------|-------------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------|
| 1    | KHEMTRAN Krasel | F    | 13.10.1971        | Master 2               | La motivation des étudiants dans l'apprentissage du français à l'Institut de Technologie du Cambodge                                     | Université de Moncton, Canada                                     | 1999                 |
| 2    | EL Sotheany     | F    | 01.05.1970        | Licence FLE            |                                                                                                                                          | Université de Phnom Penh (Cambodge), Université de Rouen (France) | 1993 / 2001          |
| 3    | NHEP Kim Hun    | M    | 18.11.1972        | Licence ès Lettres     |                                                                                                                                          | Université Royale de Phnom Penh (Cambodge)                        | 1996                 |
| 4    | PRUM Rithy      | M    | 05.11.1971        | Licence                |                                                                                                                                          | Université de Phnom Penh (Cambodge) , Université de Roue          | 1994                 |
| 5    | PHUONG Sothea   | F    | 07.07.1987        | Master 2               | Les stratégies pour motiver les étudiants à parler en classe de FLE (Étude de cas des étudiants à l'Institut de Technologie du Cambodge) | Institut National de l'Education, Cambodge                        | 2021                 |
| 6    | KUCH Chanpoly   | M    | 01.01.1973        | Master en linguistique | Rapport de 30 pages : proverbes khmers et fra                                                                                            | Université Royale de Phnom Penh                                   | 2009                 |
| 7    | YEANG Ranich    | F    | 22.05.1998        | Licence                |                                                                                                                                          | Université Royale de Phnom Penh                                   | 2018                 |
| 8    | SAR Hieng       | F    | 26.02.1948        | Licence+ DALF C1       |                                                                                                                                          | Université Royale de Phnom Penh, Cambodge                         | 1992 et 2006         |
| 9    | PAN Chansonita  | F    | 07.08.1995        | Master                 | Jeu de rôle pour améliorer la PO                                                                                                         | Institut National de l'Education, Cambodge                        | 2022                 |
| 10   | BUN Veary       | F    | 19.05.1954        | Licence                |                                                                                                                                          | Université Royale de Phnom Penh , Cambodge                        | 1988                 |
| 11   | MUONG Romany    | F    | 27.05.1959        | DALF C1                |                                                                                                                                          | Institut Français du Cambodge                                     | 2006                 |

|    |                |   |            |           |                                                                                                                   |                                                      |      |
|----|----------------|---|------------|-----------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|------|
| 12 | VORN Savathana | M | 19.05.1984 | Master    | Rapport du stage pratique : Gestion administra                                                                    | CUS, Cambodge (Cambodian University for Specialties) | 2018 |
| 13 | NET Ninit      | M | 10.09.1993 | Licence   |                                                                                                                   | Université Royale de Phnom Penh (Cambodge)           | 2018 |
| 14 | AN SINA        | M | 16.01.1997 | Licence   | Rapport de stage: La production orale dans la                                                                     | Université Royale de Phnom Penh (Cambodge)           | 2019 |
| 15 | SOK DALIN      | M | 4/16/1987  | Licence+1 |                                                                                                                   | Institut National de l'Éducation, Cambodge           | 2016 |
| 16 | HENG VALONG    | M | 27.08.1995 | Master    | L'enseignement de la prononciation en classe de 10ème : difficultés et stratégies                                 | Institut National de l'Éducation, Cambodge           | 2024 |
| 17 | SAN VITOU      | M | 30.11.1989 | Licence   |                                                                                                                   | Université Royale de Phnom Penh , Cambodge           | 2011 |
| 18 | TOL SINATH     | M | 07.07.1996 | Licence   |                                                                                                                   | Université des Moussons (Cambodge)                   | 2019 |
| 19 | VEY SORIYA     | F | 24.09.2001 | Licence   |                                                                                                                   | Université Royale de Phnom Penh                      | 2022 |
| 20 | SET SOVANKESA  | F | 01.01.2001 | Master    | Difficultés et stratégies de l'enseignement-apprentissage de la compréhension orale dans la classe de FLE         | Institut National de l'Education, Cambodge           | 2025 |
| 21 | NOUM VIRADAY   | M | 28-08-1989 | Master 2  | Choix des supports pédagogiques et des méthodes pour l'enseignement de la compréhension orale chez les apprenants | Institut National de l'Éducation, Cambodge           | 2023 |
| 22 | IM PUTHEARITH  | M | 12.09.1990 | Master 2  | Méthodologie de l'enseignement de la phonétique                                                                   | Institut National de l'Éducation, Cambodge           |      |



|    |                     |   |            |         |                     |                                                           |      |
|----|---------------------|---|------------|---------|---------------------|-----------------------------------------------------------|------|
| 23 | LIM<br>HORCHUONG    | F | 20.06.2000 | Licence |                     | Université Royale de Phnom<br>Penh, Cambodge              | 2021 |
| 24 | CHHUON<br>KIMLEANG  | F | 27.09.1998 | Licence |                     | Université Royale de Phnom<br>Penh, Cambodge              | 2020 |
| 25 | CHIK LYMEAN         | F | 29.08.2003 | Licence |                     | Université Royale<br>de Phnom Penh, Cambodge              | 2025 |
| 26 | PEUY SALAM          | F | 07.06.2001 | Licence |                     | Université Royale de Phnom<br>Penh, Cambodge              | 2023 |
| 27 | NGAET CHAP          | F | 08.06.2001 | Licence |                     | Université Royale<br>de Phnom Penh, Cambodge              | 2025 |
| 28 | PEN SINPISETH       | M | 26.06.1983 | Master  | Interaction de mots | Université Royal<br>de Phnom Penh                         | 2009 |
| 29 | VIREAK<br>CHANVIBOL | M | 01.05.2004 | Licence |                     | Université Royale de Phnom<br>Penh, Cambodge              | 2025 |
| 30 | SAM LAS             | M | 15-10-1998 | Licence |                     | Université Royale de Droit et des<br>Sciences Économiques | 2021 |
| 31 | SOEY VANBROS        | M | 02-09-2002 | Licence |                     | Université Royale de Phnom<br>Penh, Cambodge              | 2025 |

## 2. Méthode d'évaluation

- Au premier semestre :
  - o Contrôle (mi-semestre) : 4 types d'évaluation : Lecture, dictée, production écrite (PE), production orale (PO)
  - o Examen final (fin du semestre) : 3 types d'évaluation : Compréhension orale (CO), compréhension écrite (CE) et production écrite (PE),
- Au deuxième semestre :
  - o Contrôle (mi-semestre) : 3 types d'évaluation : Compréhension orale (CO), compréhension écrite (CE), production écrite (PE)
  - o Examen final (10<sup>ème</sup> semaine du semestre) : 3 types d'évaluation : Compréhension orale (CO), compréhension écrite (CE) et production écrite (PE)
  - o Examen de niveau (fin du semestre) : A1/A2/B1/B2 sous 4 compétences d'évaluation : compréhension orale (CO), compréhension écrite (CE), production écrite (PE) et production orale (PO), bien adaptées au Cadre Européen Commun de Référence pour les Langues (CECRL).

## 3. Résultats de l'examen de niveau (Année 2024-2025)

### Campus Phnom Penh (2024-2025)

| Cycle                       | Niveau | Résultat |       |        |       |
|-----------------------------|--------|----------|-------|--------|-------|
|                             |        | Succès   | Échec | Absent | Total |
| 1 <sup>ère</sup> année (I1) | A1     | 844      | 270   | 290    | 1404  |
| 2 <sup>ème</sup> année (I2) | A2     | 675      | 210   | 146    | 1031  |
| 3 <sup>ème</sup> année (I3) | A1 *   | 37       | 3     | 3      | 43    |
|                             | A2     | 132      | 98    | 63     | 293   |
|                             | B1     | 531      | 78    | 0      | 609   |
| 4 <sup>ème</sup> année (I4) | A2     | 43       | 22    | 44     | 109   |
|                             | B1     | 17       | 22    | 0      | 39    |
|                             | B2     | 82       | 9     | 0      | 91    |

### Troisième année : I3

Répartition en **3 groupes de niveau** selon les résultats de l'année précédente :

#### \* Groupe de niveau A1 (I3-A1)

Il s'agit des étudiants venant du cycle Technicien. La plupart d'eux n'ont jamais appris le français.

### Campus de Tbong Khmum (2024-2025)

Pour les étudiants à Tbong Khmum, dû à leur petit nombre, ils ne sont pas classés par le résultat final de l'année précédente.

| Cycle                       | Niveau | Résultat |       |        |       |
|-----------------------------|--------|----------|-------|--------|-------|
|                             |        | Succès   | Échec | Absent | Total |
| 1 <sup>ère</sup> année (I1) | A1     | 5        | 19    | 3      | 27    |
| 2 <sup>ème</sup> année (I2) | A2     | 5        | 9     | 3      | 17    |
| 3 <sup>ème</sup> année (I3) | B1     | 11       | 10    |        | 21    |
| 4 <sup>ème</sup> année (I4) | B2     | 0        | 27    | 0      | 27    |

**Pourcentage du succès par année d'études  
et par niveau de français**  
**Liste des étudiants ingénieurs réussissant à l'examen de niveau de français 2024-2025**  
**Campus Tbong Khmum**

| Année d'études | Niveau de français | Nombre total * | Obtention A1 |     | Obtention A2 |     | Obtention B1 |     | Obtention B2 |    |
|----------------|--------------------|----------------|--------------|-----|--------------|-----|--------------|-----|--------------|----|
|                |                    |                | Nombre       | %   | Nombre       | %   | Nombre       | %   | Nombre       | %  |
| I1             | A1                 | 27             | 5            | 18% |              |     |              |     |              |    |
| I2             | A2                 | 17             |              |     | 5            | 29% |              |     |              |    |
| I3             | B1                 | 21             |              |     |              |     | 11           | 52% |              |    |
| I4             | B2                 | 27             |              |     |              |     |              |     | 0            | 0% |

#### 4. Certification du niveau de français

L'ITC délivre deux types de certification :

| Année d'études | Niveau de français | Nombre total | Obtention A1 |     | Obtention A2 |     | Obtention B1 |     | Obtention B2 |     |
|----------------|--------------------|--------------|--------------|-----|--------------|-----|--------------|-----|--------------|-----|
|                |                    |              | Nombre       | %   | Nombre       | %   | Nombre       | %   | Nombre       | %   |
| I1             | A1                 | 1404         | 844          | 60% |              |     |              |     |              |     |
| I2             | A2                 | 1031         |              |     | 675          | 65% |              |     |              |     |
| I3             | A1                 | 43           | 37           | 86% |              |     |              |     |              |     |
|                | A2                 | 293          |              |     | 132          | 45% |              |     |              |     |
|                | B1                 | 609          |              |     |              |     | 531          | 87% |              |     |
| I4             | A2                 | 109          |              |     | 43           | 39% |              |     |              |     |
|                | B1                 | 39           |              |     |              |     | 17           | 43% |              |     |
|                | B2                 | 91           |              |     |              |     |              |     | 82           | 90% |

- 1) **Attestation de connaissance en langue française** : il s'agit d'une simple attestation donnant le nombre d'heures de cours de français effectués pour les étudiants qui ne bénéficient pas de la

réforme à partir de 2016. Mais les étudiants des autres années peuvent également la demander en cas de nécessité.

- 2) **Attestation de niveau de langue française** : une session d'examen de niveau de français a lieu en juin, vers la fin du second semestre pour les étudiants en :
- 1<sup>ère</sup> année : A1
  - 2<sup>ème</sup> année : A2
  - 3<sup>ème</sup> année : A1/A2/B1
  - 4<sup>ème</sup> année : A2/B1/B2

## 6. Formation continue d'enseignants de français

- **Quatre enseignants de français de l'ITC ont suivi une formation** intitulée « *Enseigner la grammaire autrement pour dynamiser la classe de FLE en Asie-Pacifique* », organisée par l'AUF du 9 au 11 octobre 2024 à Vientiane, au Laos,.
- **Cinq enseignants de français de l'ITC ont suivi une formation** intitulée « *APPLICATION DE L'INTELLIGENCE ARTIFICIELLE DANS L'ENSEIGNEMENT DU FOS ET DU FLP EN ASIE-PACIFIQUE* », organisée par l'AUF du 13 au 15 août 2025 à Phnom Penh.
- **Onze enseignants de français de l'ITC ont suivi une formation** intitulée « *Intégrer l'IA pour diversifier les approches pédagogiques et mieux répondre aux besoins des apprenants* », organisée par l'AUF du 29 septembre au 1er octobre 2025 à Kampot.
- Les enseignants de français ont suivi un atelier de formation le 29 novembre 2025, consacrée au thème : « *Découverte de la diversité des cultures francophones et les variétés du français* », co-organisée par la Section de français de l'ITC et la Faculté de philosophie, arts et lettres de l'Université Catholique de Louvain de Belgique sous le projet « COMBOd'IA ».

## Annex 3b. Report of English Language Teaching (2025-2026).

### 1. Introduction

The Institute of Technology of Cambodia (ITC) is a leading tertiary institution dedicated to training high-capacity engineers to drive national development. Since 1995, the English Language Section has provided essential instruction to students from Year 2 to Year 5. The English curriculum is designed to empower students to:

- Succeed in their academic pursuits.
- Enhance their employability in a competitive job market.
- Pursue advanced research and postgraduate studies both locally and internationally.

### 2. Human Resources

The English Section is comprised of a diverse team of qualified educators, categorized as follows:

2 Professeurs Titulaires: 2 Masters

- Mr. SO Phea (Master, The University Waikato, New Zealand, 1998)
- Mr. CHENG Kimsan (Master, The University of Sydney, Australia, 1999)

18 Professeurs Vacataires : 1 Phd ; 12 Masters ; and 5 Bachelors

### 3. Faculty recruitment and development

#### *Key Achievements*

- **Standardized Recruitment:** Implemented a robust hiring process including public advertisements, shortlisted candidate screening, and rigorous interview criteria.
- **Pre-Semester Preparation:** Conducted two intensive teacher-training sessions prior to the start of Semester 1 to align pedagogical goals.

#### *Challenges*

- **Specialized Expertise:** While the applicant pool is steady, most candidates possess backgrounds in General English (ELT) rather than English for Specific Purposes (ESP) or Engineering.
- **Recruitment Volume:** The number of highly qualified applicants remains lower than desired for specialized technical roles.

### 4. Academic Programs & Curriculum

#### *Achievements*

- **Accurate Placement:** Systematic use of diagnostic and level-based examinations ensures students are placed in groups matching their proficiency.
- **Certification:** Successful completion of the program leads to formal certification, adding value to the students' professional portfolios.

#### *Challenges*

- **Credit Hours:** The current allocation of 2 hours per week is insufficient for achieving comprehensive fluency in technical English.
- **Attendance Issues:** Students who fail level exams occasionally show decreased engagement or fail to attend remedial sessions.

## 5. Course Materials & Methodology

The curriculum is specifically tailored for engineering students, utilizing a blend of international textbooks and internally developed materials.

### *Core Textbooks by Level:*

- **Year 2 (A2):** *Technology 1* (Eric H. Glendinning)
- **Year 3 (B1):** *Technology 2* (Glendinning & Pohl)
- **Year 4 (B2):** *English for Environmental Science* (Terry Phillips) & *Academic Writing* (ITC Internal)
- **Year 5:** *English for Career and Work* (ITC Internal – 2020 Update)

### *Challenges*

- **Material Complexity:** Some course books are designed for native speakers, occasionally creating a barrier for ESL learners.
- **Syllabus Pacing:** Historically, the volume of content in the textbooks makes it difficult to complete the entire syllabus within a single semester.

## 6. Learning Objectives

By the end of the program (Year 5), students are expected to:

- **Research Proficiency:** Master reading strategies for literature reviews and technical research.
- **Professional Communication:** Exhibit confidence in presentations, interviews, and professional engineering contexts.
- **Technical Writing:** Utilize specialized terminology to produce accurate workplace reports and practicum documentation.
- **Academic Defense:** Effectively present and defend graduate projects before a faculty committee.

## 7. Attendance and Engagement

- **Strengths:** We observe high levels of engagement and consistent attendance from high-achieving and mid-level students.
- **Weaknesses:** Administrative hurdles result in some students failing to register on time. Furthermore, the academic calendar is frequently interrupted by public holidays and mandatory field trips.

## 8. Professional Development

### *Achievements*

- **Collaborative Learning:** Regular pedagogical exchanges occur during weekly staff meetings.
- **External Training:** 10 teachers attended the **21st CamTESOL Conference (2025)**, sponsored by IDP Education.
- 3 teachers participated in the **CamELT 2024** workshops, supported by IFL-RUPP.

### *Challenges*

- **Expert Oversight:** There is a current lack of long-term foreign experts or advisors to provide international benchmarking.
- **Funding Constraints:** Opportunities for overseas professional development or specialized short courses have been limited in recent years.

## 9. Conclusion

The English language program at ITC is more than just a curriculum requirement; it is a professional catalyst. By providing students with the tools to navigate international engineering standards and global career paths, the English Section plays a direct role in the following institutional successes:

- **Gender Diversity:** Female students now represent **52%** of the student body (Years 2-5), with the GCA department leading at a 68% female enrollment rate.
- **Graduate Success:** Our most recent data shows a **93% positive outcome rate**, with 76% of graduates entering the workforce and 17% continuing their education abroad.
- **Strategic Vision:** To support ITC's goal of producing 17,000+ engineers by 2030, the English Section is dedicated to enhancing language training to ensure our graduates remain competitive on the world stage.

#### Annex 4. Minutes of CEVU Meeting.

##### Student grievances during CEVU meeting on 26 Novembre 2025)

|                                                                                                                                                                | Résolu pendant la réunion | Responsable sur problèmes restants |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------------|
| <b>I- Education and Research</b>                                                                                                                               |                           |                                    |
| <b>1- Education</b>                                                                                                                                            |                           |                                    |
| <b>I1-DTC :</b> Request to have more explanation on Tutorial of Maths                                                                                          | √                         |                                    |
| <b>I4-GCA :</b> Request to extend academic calendar due to difficulty to make up class and TP.<br><b>I4-GIM :</b> Request not to make up class every Saturday. | √                         |                                    |
| <b>GIM students:</b> Request new CNC workshop in full operation                                                                                                | √                         |                                    |
| <b>I3-GGG:</b> Request to find more scholarship or sponsor, especially for students with financial difficulty.                                                 | √                         |                                    |
| <b>T2-GRU:</b> Request to open continuing education at evening time as others programs.                                                                        | √                         |                                    |
| <b>Lecturer GGG:</b> Request a safe soil location (no underground cables/pipes) for STP soil tests and hand boring (1m).                                       | √                         |                                    |
| <b>2- Internet and e-learning</b>                                                                                                                              |                           |                                    |
| <b>I2-DTC, I3-I4-AMS, I3-I4 GGG, I3-I5-GEE, I5-GIM, I4-GIC, T1</b>                                                                                             |                           |                                    |
| - Request to intall WiFi in LAB F-201 & F-202.                                                                                                                 |                           | Service informatique               |
| - WiFi is slow or non-functional in Buildings J, E, K, A, I (4th/5th floors), and specific rooms (B-305, E301-302, J509)                                       |                           |                                    |
| - T1 students still didn't have the internet account                                                                                                           |                           |                                    |
| - ITC Wifi and mobile data in I-building (1st and 3rd floors) are not working well                                                                             |                           |                                    |
| <b>II- Materials and Hygiene</b>                                                                                                                               |                           |                                    |



|                                                                                                                                                                    |                                                              |                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------|
| <b>Students, Lecturers</b>                                                                                                                                         |                                                              |                                        |
| - Air conditionings and fans problem.                                                                                                                              | Technical team will check, repair and do regular maintenance | Service Technique et Service Technique |
| - Request to repair and do maintenance LCD Projectors regularly.                                                                                                   |                                                              |                                        |
| - Request a Projector that has high resolution, and Request to change HDMI in hall S1, S2                                                                          |                                                              |                                        |
| - Request to install a fixed Projector in all classroom, especially at K-405, F-401                                                                                |                                                              |                                        |
| - Request to repair microphone in big rooms.                                                                                                                       |                                                              |                                        |
| - Lights in some rooms are not well function.                                                                                                                      |                                                              |                                        |
| - Request to replace glass whiteboard by conventional whiteboard.                                                                                                  |                                                              |                                        |
| - Request to clean regularly classrooms and offices.                                                                                                               |                                                              |                                        |
| <b>III- Parking</b>                                                                                                                                                |                                                              |                                        |
| <b>Students :</b>                                                                                                                                                  |                                                              |                                        |
| - Student was request to reduct in the penalties fee for lost ticket (1,000 KHR) and forgotten keys (5,000 KHR), and can be ID card be retrieve the following day. | √                                                            |                                        |
| - Parking congestion during rush hour in the early morning session and class end in the evening                                                                    | √                                                            |                                        |
| - Scratched on motorcycles due to overcrowding.                                                                                                                    | √                                                            |                                        |
| <b>IV- Others</b>                                                                                                                                                  |                                                              |                                        |
| - Request for school support in sports (coaches, schedules, tournaments) and lights for the football field from 6:00 PM - 8:00 PM.                                 | √                                                            |                                        |
| - Purifiers in Buildings F, A, and D have a low flow.                                                                                                              | √                                                            |                                        |

## Annex 5. Faculty Members of GS for Master Programs.

### 1. List of Lecturers and Supervisors of M-MSE

| No | Name of Lecturer   | Sex | Qualification |         |      | Specialization                              |
|----|--------------------|-----|---------------|---------|------|---------------------------------------------|
|    |                    |     | Latest degree | From    | Year |                                             |
| 1  | LIM Sovanvichet    | M   | Doctorate     | France  | 2012 | Structural Engineering                      |
| 2  | NGUON Kollika      | M   | Doctorate     | Japan   | 2012 | Water Hammer, Fluid-Structure Interaction   |
| 3  | HIN Raveth         | M   | Doctorate     | France  | 2017 | Philosophy in Mechanics                     |
| 4  | HENG Sounean       | F   | Doctorate     | France  | 2022 | Civil Engineering                           |
| 5  | LY Hav             | M   | Master        | Belgium | 2007 | Sciences Appliquées, Service de Génie Civil |
| 6  | KY Sambath         | M   | Doctorate     | France  | 2017 | Civil Engineering                           |
| 7  | CHHANG Sophy       | M   | Doctorate     | France  | 2018 | Structural Engineering and Bridge           |
| 8  | HAN Virak          | M   | Doctorate     | Japan   | 2006 | Philosophy                                  |
| 9  | KAN Kuchvichea     | M   | Doctorate     | Belgium | 2021 | Engineering Sciences and Technology         |
| 10 | POUV Keang Se      | M   | Doctorate     | France  | 2011 | Mechanical and Civil Engineering            |
| 11 | PROK Narith        | M   | Doctorate     | Japan   | 2016 | Civil Engineering                           |
| 12 | CHHITH Saosometh   | M   | Doctorate     | Belgium | 2017 | Electro-Mechanics                           |
| 13 | RATH Sovann Sathya | F   | Doctorate     | Japan   | 2016 | Concrete Engineering                        |
| 14 | DOUNG Piseth       | M   | Doctorate     | Japan   | 2020 | Civil Engineering                           |
| 15 | ENG Chandoeun      | M   | Doctorate     | Japan   | 2018 | Geology                                     |
| 16 | LENG Khundadino    | M   | Doctorate     | France  | 2023 | Civil Engineering                           |
| 17 | OENG Thaileng      | M   | Doctorate     | France  | 2023 | Civil Engineering                           |
| 18 | SRY Vannei         | M   | Doctorate     | Japan   | 2018 | Mechanics                                   |

### 2. List of Lecturers and Supervisors of M-ETM

| No | Name of Lecturer | Sex | Qualification |           |      | Specialization                                                |
|----|------------------|-----|---------------|-----------|------|---------------------------------------------------------------|
|    |                  |     | Latest degree | From      | Year |                                                               |
| 1  | KHON Kimsornn    | M   | Doctorate     | France    | 2022 | Energy Technology and Management                              |
| 2  | BUN Menghornng   | M   | Master        | Thailand  | 2021 | Information and Communication Technology for Embedded Systems |
| 3  | CHRIN Phok       | M   | Doctorate     | France    | 2016 | Electrical Energy                                             |
| 4  | ETH Oudaya       | M   | Doctorate     | Cambodia  | 2025 | Energy Technology and Management                              |
| 5  | SUK Sievlong     | M   | Master        | Indonesia | 2023 | Electrical Engineering                                        |

|    |                    |   |           |             |      |                                                             |
|----|--------------------|---|-----------|-------------|------|-------------------------------------------------------------|
| 6  | TEA Sokly          | F | Doctorate | South Korea | 2014 | Early Childhood Education                                   |
| 7  | YOU Lyhour         | M | Master    | Thailand    | 2024 | High-Voltage Insulation and Transmission Technology Program |
| 8  | AM Sokchea         | M | Doctorate | France      | 2016 | Electrical Engineering                                      |
| 9  | CHAN Sarin         | M | Doctorate | Indonesia   | 2011 | Refrigeration and Air Conditioning                          |
| 10 | VAI Vannak         | M | Doctorate | France      | 2017 | Electrical Engineering                                      |
| 11 | VONGCHANH Kinnaeth | F | Doctorate | Indonesia   | 2010 | Mechanical Engineering                                      |
| 12 | CHHLONH Chhith     | M | Doctorate | France      | 2024 | Genie Electrique                                            |
| 13 | SORN Darong        | M | Master    | China       | 2018 | Electronic Science and Technology                           |
| 14 | ENG Chandoeun      | M | Doctorate | Japan       | 2018 | Geology                                                     |
| 15 | ENG Samphors       | F | Master    | Indonesia   | 2018 | Electrical Engineering                                      |
| 16 | PECH Sopheap       | F | Doctorate | Cambodia    | 2023 | Energy Technology and Management                            |

### 3. List of Lecturers and Supervisors of M-WEE

| No | Name of Lecturer | Sex | Qualification |             |      | Specialization                                  |
|----|------------------|-----|---------------|-------------|------|-------------------------------------------------|
|    |                  |     | Latest degree | From        | Year |                                                 |
| 1  | THENG Vouchlay   | F   | Doctorate     | Japan       | 2022 | Civil Engineering                               |
| 2  | UK Sovannara     | M   | Doctorate     | Japan       | 2022 | Civil Engineering                               |
| 3  | ANN Vannak       | M   | Doctorate     | Spain       | 2015 | Water Science and Technology                    |
| 4  | BUN Saret        | M   | Doctorate     | Japan       | 2019 | Environmental Engineering                       |
| 5  | EANG Khy Eam     | M   | Doctorate     | Japan       | 2018 | Sustainable Resources Engineering               |
| 6  | HAM Phaly        | M   | Doctorate     | Japan       | 2022 | Environmental Engineering                       |
| 7  | PENG Chanthol    | F   | Doctorate     | Japan       | 2019 | Life Science and Technology                     |
| 8  | DOUNG Ratha      | M   | Doctorate     | Philippines | 2015 | Philosophy                                      |
| 9  | CHHUON Kong      | M   | Doctorate     | Philippines | 2016 | Environmental Engineering                       |
| 10 | HEU Rina         | F   | Doctorate     | Japan       | 2020 | Civil and Environmental Engineering             |
| 11 | MUON Ratha       | F   | Doctorate     | France      | 2022 | Environmental Science                           |
| 12 | KET Pinnara      | F   | Doctorate     | Belgium     | 2019 | Agricultural Science and Biological Engineering |
| 13 | PEN Sytharith    | F   | Doctorate     | Japan       | 2018 | Environmental Engineering                       |
| 14 | SANG Davin       | F   | Doctorate     | France      | 2022 | Environmental Engineering                       |
| 15 | SOK Ty           | M   | Doctorate     | France      | 2021 | Functional Ecology and Environment              |

#### 4. List of Lecturers and Supervisors of M-AIE

| No | Name of Lecturer | Sex | Qualification |             |      | Specialization                                                          |
|----|------------------|-----|---------------|-------------|------|-------------------------------------------------------------------------|
|    |                  |     | Latest degree | From        | Year |                                                                         |
| 1  | TY Boreborey     | F   | Doctorate     | Philippines | 2016 | Groundwater Treatment Process by Adsorption Process                     |
| 2  | EK Pichmony      | F   | Doctorate     | USA         | 2021 | Food Science                                                            |
| 3  | MORM Elen        | F   | Doctorate     | Belgium     | 2021 | Engineering and Technology                                              |
| 4  | KHOEURN Kimleang | F   | Doctorate     | Japan       | 2019 | Sustainable Resources Engineering                                       |
| 5  | MITH Hasika      | M   | Doctorate     | Belgium     | 2014 | Food Science                                                            |
| 6  | PENG Chanthol    | F   | Doctorate     | Japan       | 2019 | Life Science and Technology                                             |
| 7  | SUONG Malyna     | F   | Doctorate     | France      | 2017 | Mécanismes des Interactions Parasitaires Pathogènes et Symbiotiques     |
| 8  | TAN Reasmey      | F   | Doctorate     | Japan       | 2011 | Bioengineering                                                          |
| 9  | PHAT Chanvorleak | F   | Doctorate     | South Korea | 2016 | Food Chemistry                                                          |
| 10 | YOEUN Sereyvath  | M   | Doctorate     | South Korea | 2014 | Biotechnology                                                           |
| 11 | CHIN Lyda        | F   | Doctorate     | France      | 2025 | Agro-Industrial Product Development                                     |
| 12 | OEUM Kakada      | F   | Doctorate     | France      | 2024 | Biologies des Interactions Symbiotiques et Parasitaires                 |
| 13 | SROY Sengly      | F   | Doctorate     | France      | 2021 | Food Science and Technology                                             |
| 14 | THANH Channmuny  | F   | Doctorate     | France      | 2024 | APAB-Biochimie et Physico-chimie des Bioproduits et Aliments, Nutrition |

#### 5. List of Lecturers and Supervisors of M-ECS

| No | Name of Lecturer | Sex | Qualification |           |      | Specialization                                    |
|----|------------------|-----|---------------|-----------|------|---------------------------------------------------|
|    |                  |     | Latest degree | From      | Year |                                                   |
| 1  | HENG Rathpisey   | M   | Master        | Indonesia | 2020 | Electrical Engineering and Information Technology |
| 2  | PHAUK Sökkhey    | M   | Doctorate     | Japan     | 2021 | Interdisciplinary Intelligent Systems             |
| 3  | BOU Channa       | M   | Master        | Thailand  | 2018 | Computer Science, Software Engineering            |
| 4  | CHAN Sophal      | M   | Master        | Thailand  | 2020 | Information Technology                            |
| 5  | PEN Chentra      | M   | Master        | Cambodia  | 2011 | Applied Mathematics                               |
| 6  | TAL Tong Sreng   | M   | Master        | Cambodia  | 2018 | Information and Communication Technology          |
| 7  | YOU Vanndy       | M   | Master        | India     | 2016 | Computer Science                                  |
| 8  | KONG Phutphalla  | M   | Doctorate     | Belgium   | 2021 | Science and Technology Engineering                |
| 9  | NOU Sotheany     | M   | Doctorate     | Japan     | 2025 | Information and Communication Engineering         |

|    |              |   |           |          |      |                                       |
|----|--------------|---|-----------|----------|------|---------------------------------------|
| 10 | VALY Dona    | M | Doctorate | Belgium  | 2020 | Science de L'ingénieur et Technologie |
| 11 | HAS Sothea   | M | Doctorate | France   | 2022 | Applied Mathematics                   |
| 12 | NEANG Pheak  | M | Doctorate | Thailand | 2024 | Applied Mathematics                   |
| 13 | KUY Movsun   | M | Doctorate | Belgium  | 2025 | Computer Science                      |
| 14 | TITH Dara    | M | Doctorate | Japan    | 2020 | Information Technology                |
| 15 | PICH Reatrey | M | Master    | Thailand | 2018 | Computing in Engineering Systems      |

#### 6. List of Lecturers and Supervisors of M-MIC

| No | Name of Lecturer  | Sex | Qualification |             |      | Specialization                                                |
|----|-------------------|-----|---------------|-------------|------|---------------------------------------------------------------|
|    |                   |     | Latest degree | From        | Year |                                                               |
| 1  | PEC Rothna        | M   | Doctorate     | South Korea | 2017 | Electrical and Electronics Engineering                        |
| 2  | IT Chivorn        | M   | Master        | Russia      | 2023 | Control in Technical Systems                                  |
| 3  | SOKHAL Aylik      | M   | Master        | France      | 2023 | Industrial Performance and Mechatronic System                 |
| 4  | SRENG Sokchenda   | M   | Doctorate     | France      | 2013 | Research, Telecommunication, System and Architecture          |
| 5  | SUM Rithea        | M   | Master        | Thailand    | 2023 | Electrical and Information Engineering                        |
| 6  | AM Sokchea        | M   | Doctorate     | France      | 2016 | Electrical Engineering                                        |
| 7  | SRANG Sarot       | M   | Doctorate     | Japan       | 2014 | Dynamical System Modeling, Estimation and Adaptive Control    |
| 8  | VALY Dona         | M   | Doctorate     | Belgium     | 2020 | Science de L'ingénieur et Technologie                         |
| 9  | CHHITH Saosometh  | M   | Doctorate     | Belgium     | 2017 | Electro-Mechanics                                             |
| 10 | KIM Bunthern      | M   | Doctorate     | France      | 2019 | Electrical Engineering                                        |
| 11 | MUY Sengly        | M   | Doctorate     | South Korea | 2025 |                                                               |
| 12 | THOURN Kosorl     | M   | Doctorate     | Japan       | 2019 | Electronic and Telecommunication Engineering                  |
| 13 | BUN Menghorn      | M   | Master        | Thailand    | 2021 | Information and Communication Technology for Embedded Systems |
| 14 | CHHORN Sopheaktra | M   | Master        | Thailand    | 2018 | Electronics-Bio-Medical                                       |
| 15 | SREY Sok Serey    | M   | Master        | Cambodia    | 2023 | Mechatronics, Information and Communication Engineering       |
| 16 | TANG Sou Bun      | M   | Master        | Cambodia    | 2024 | Mechatronics, Information and Communication Engineering       |

#### 7. List of Lecturers and Supervisors of M-TIE

| No | Name of Lecturer | Sex | Qualification |          |      | Specialization                        |
|----|------------------|-----|---------------|----------|------|---------------------------------------|
|    |                  |     | Latest degree | From     | Year |                                       |
| 1  | SAUM Narith      | M   | Doctorate     | Thailand | 2023 | Philosophy                            |
| 2  | PHAUK Sökkhey    | M   | Doctorate     | Japan    | 2021 | Interdisciplinary Intelligent Systems |

|    |                  |   |           |          |      |                                                          |
|----|------------------|---|-----------|----------|------|----------------------------------------------------------|
| 3  | HASH Chanly      | M | Master    | Japan    | 2008 | Urban and Regional Planning                              |
| 4  | HENG Sokbil      | M | Doctorate | Japan    | 2011 | Geotechnical Engineering                                 |
| 5  | KAING Saoserey   | M | Doctorate | France   | 2008 | Bridge Engineering                                       |
| 6  | PHUN Veng Kheang | M | Doctorate | Japan    | 2013 | Transport Engineering, Planning, Environment, and Policy |
| 7  | YEN Yat          | M | Doctorate | China    | 2014 | Public Administration                                    |
| 8  | HAS Sothea       | M | Doctorate | France   | 2022 | Applied Mathematics                                      |
| 9  | DOUNG Piseth     | M | Doctorate | Japan    | 2020 | Civil Engineering                                        |
| 10 | CHHENG Ratha     | M | Master    | Cambodia | 2021 | Transport Engineering                                    |
| 11 | PLACK Sokhit     | M | Master    | Cambodia | 2023 | Transport Engineering                                    |
| 12 | YANG Panha       | F | Master    | Cambodia | 2021 | Transport Engineering                                    |

#### 8. List of Lecturers and Supervisors of M-DAS

| No | Name of Lecturer | Sex | Qualification |             |      | Specialization                                    |
|----|------------------|-----|---------------|-------------|------|---------------------------------------------------|
|    |                  |     | Latest degree | From        | Year |                                                   |
| 1  | PHAUK Sökkhey    | M   | Doctorate     | Japan       | 2021 | Interdisciplinary Intelligent Systems             |
| 2  | HENG Rathpisey   | M   | Master        | Indonesia   | 2020 | Electrical Engineering and Information Technology |
| 3  | LONG Pakrigna    | M   | Master        | Thailand    | 2018 | Computing in Engineering Systems                  |
| 4  | OL Say           | M   | Master        | Philippines | 2015 | Mathematics                                       |
| 5  | SOEUNG Senghong  | M   | Master        | Cambodia    | 2023 | Data Science                                      |
| 6  | TOUCH Sopheak    | M   | Master        | France      | 2015 | Industrial Engineering                            |
| 7  | VALY Dona        | M   | Doctorate     | Belgium     | 2020 | Science de L'ingénieur et Technologie             |
| 8  | HAS Sothea       | M   | Doctorate     | France      | 2022 | Applied Mathematics                               |
| 9  | KHEAN Vesal      | M   | Master        | South Korea | 2024 | Applied Artificial Intelligence                   |
| 10 | NHIM Malai       | M   | Master        | Belgium     | 2022 | Statistics and Data Science                       |
| 11 | NEANG Pheak      | M   | Master        | Thailand    | 2024 | Applied Mathematics                               |
| 12 | NGIN Kimlong     | M   | Master        | China       | 2019 | Computer Science and Technology                   |
| 13 | PHOK Ponna       | M   | Master        | Cambodia    | 2010 | Mathematics                                       |
| 14 | SIM Tepmony      | M   | Doctorate     | France      | 2016 | Applied Mathematics and Statistics                |

### 9. List of Lecturers and Supervisors of M-ARC

| No | Name of Lecturer | Sex | Qualification |         |      | Specialization                             |
|----|------------------|-----|---------------|---------|------|--------------------------------------------|
|    |                  |     | Latest degree | From    | Year |                                            |
| 1  | KETH Kannary     | F   | Doctorate     | Belgium | 2025 | Architecture and Town and Country Planning |
| 2  | HIN Raveth       | M   | Doctorate     | France  | 2017 | Philosophy in Mechanics                    |
| 3  | HASH Chanly      | M   | Master        | Japan   | 2008 | Urban and Regional Planning                |
| 4  | HENG Sounean     | F   | Doctorate     | France  | 2022 | Civil Engineering                          |
| 5  | LONG Makara      | M   | Master        | Belgium | 2021 | Ingénierie Architecturale et Urbaine       |
| 6  | SRUN Sreyna      | F   | Master        | China   | 2023 | Architecture Design                        |
| 7  | TAING Kimnenh    | F   | Doctorate     | Belgium | 2024 | Sciences de L'ingénieur et Technologie     |
| 8  | HAN Virak        | M   | Doctorate     | Japan   | 2006 | Civil Engineering                          |

## Annex 6. List of Master Thesis.

(List arranged by degree, field/specialization, and chronological order)

### 1. M-MSE

*This list shows the theses successfully defended in 2025 only. Please consult our website for the exhaustive list theses from 2011 to 2025.*

- LEY Satya (2025). *A sampling-based sensitivity analysis of the failure of RC structures using discrete limit analysis computational model*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- DY Sochita (2025). *Determination of Fracture Behavior of Cambodian Sandstone by Using Semi Circular Bending Test*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- MA Song Khun (2025). *Lateral-Torsional Buckling of Hybrid Steel-Concrete Columns/Walls*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- POV Ratha (2025). *Mesoscale Modeling of Concrete Affected by Delayed Ettringite Formation*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- KORN Sengann (2025). *Prestressed Stone Beam*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- AUN Chheng Kheang (2025). *Valorisation of natural fibres to reinforce cementitious materials*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- BUOY Chanbo (2025). *Resilient modulus of lime-treated materials for pavement design in the Cambodian context*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- CHHEANG Seavpao (2025). *Experimentation of Hydro-Mechanical Behaviour of Swelling Soils*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- MEAS Samrith (2025). *Numerical Study of Solid Particles Filtration in a Porous Medium*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- NGOUN Bora (2025). *Experimental Study on Pullout Resistance of Carbon Tyfo®Fibranchors Embedded into Concrete Cylinder with Confinement of Tyfo®Fibrwrap*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- SUN Soreaksmey (2025). *Objective of low-carbon concrete, replacement of ternary cement by flash-metakaolin*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- SVAY Monineath (2025). *Formulation of Alkali-activated Binders based on Sediments and Industrial By-Products for Applications in Structural Construction Materials*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- YOEUNTHY Vanntheng (2025). *Improving the Durability and Strength of Expansive Soils Stabilized with Emulsion Asphalt and Cement*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- YOK Yavorn (2025). *Study on Mechanical Properties of Brick-Based Construction and Demolition Waste (C&DW) as partial Cement in Concrete*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- HENG Rathanaksambath (2025). *Numerical Study on Chloride-Induced Corrosion in Reinforced Concrete*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- SIENG Soleng (2025). *Characteristics of Anisotropic and Plastic Behavior of XC4 and 80CrV2 Steels Using Tensile Tests and XRD*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- THENG Kimtong (2025). *Analytical Evaluation of Energy Factors for Energy-Based Seismic Design and Performance of Double-Knee Braced Frames*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- KAO Engentrak Reach (2025). *Numerical Study on Performance of Carbon Tyfo®Fibranchors Inserted into Concrete Specimen of Various Compressive Strength Under Pullout Force*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- EA Khunpannha (2025). *Delayed Deformations of Low-carbon Concrete*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]



- LEAN Karana (2025). *Investigation of the Notch Connection System of the Timber-Concrete Composite Floor Using Numerical Simulation*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- MONY Rethyden (2025). *ITZ effect on the Non-Linear Ultrasonic Response of Concrete*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]
- PEAV Oudom (2025). *Analysis of group pile Redundancy and Efficiency under Axial Eccentric Loaded*, [Master Thesis, Materials and Structural Engineering, Institute of Technology of Cambodia]

## 2. M-ETM

*This list shows the theses successfully defended in 2025 only. Please consult our website for the exhaustive list theses from 2015 to 2025.*

- SRV Vanda (2025). *Agent-Based Dynamic Distributed Optimal Power Flow using Alternating Direction Method of Multiplier in Microgrid*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]
- SREY Sak (2025). *Multi-Objective Volt-Var Optimization In PV-Integrated Distribution Networks Using Genetic Algorithm*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]
- SREYNATTHA Pagnasatyavorn (2025). *Optimal Sizing and Placement of BESS to Enhance Frequency Stability with High Penetration of Inverter-Based Resources (Solar PV)*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]
- OEUN Sothea (2025). *An Integrated Small-Signal and Electromagnetic Transient Analysis Tool for Power System Stability*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]
- SARY Monychot (2025). *Modeling Assessment of Small-Scale System Integration Multi-Machine and Inverter-Based Resource*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]
- OEUN Monioudom (2025). *Grid Impacts of Battery Energy Storage Systems Participating in Energy Markets*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]
- HAN Malin (2025). *Protection of Distribution Grid with High Penetration of Inverter Based Resources (IBRs)*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]
- NAING Bora (2025). *Voltage Coordination in Distribution Grid (HIL and Digital Twin)*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]
- THON Thyra (2025). *Optimal Feeder Routing and Tie-switch for Medium Voltage Distribution System Considering Economic and Reliability Aspects*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]
- CHIM Chakrya (2025). *Improving Short-Term Day-Ahead PV Forecasting Robustness: A Machine Learning Approach with Feature and Validation Analysis*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]
- MOM Likhai (2025). *Techno-Economic Comparison of VRF and Water-cooled Chiller System at the Ministry of Tourism in Sihanouk Province, Cambodia*, [Master Thesis, Energy Technology and Management Engineering, Institute of Technology of Cambodia]

## 3. M-WEE

*This list shows the theses successfully defended in 2025 only. Please consult our website for the exhaustive list theses from 2014 to 2025.*

- POV Kakda (2025). *Integrate Multiple Sensors to Identify Heat Sources and Green Heath Vegetation Across Litho-Mineral Alterations with Land Cover Changes in Tonle Sap Region, Cambodia*, [Master Thesis, Water and Environmental Engineering, Institute of Technology of Cambodia]
- SAMAI Sany (2025). *Assessment of the Effects of Hydrology, Physicochemical Parameters, and Nutrients on Eutrophication in Tonle Sap Lake Using Machine Learning*, [Master Thesis, Water and Environmental Engineering, Institute of Technology of Cambodia]

- SATH Sithea (2025). *Environmental Variables determining Carbon Stock and Soil Physical Properties at the Catchment Scale, Stung Chrey Bak Observatory, Cambodia*, [Master Thesis, Water and Environmental Engineering, Institute of Technology of Cambodia]
- CHY Sreypich (2025). *Precipitation and Flood Estimation and their Relationships with Spectral Indices in the Mekong Delta Region*, [Master Thesis, Water and Environmental Engineering, Institute of Technology of Cambodia]

#### 4. M-AIE

*This list shows the theses successfully defended in 2025 only. Please consult our website for the exhaustive list theses from 2015 to 2025.*

- SOVANN Chakriya (2025). *Characterization of Antimicrobial Resistance Profiles and ESBL Resistance Genes in Salmonella Isolates from Diverse Food Matrices in Cambodia*, [Master Thesis, Agro-Industrial Engineering, Institute of Technology of Cambodia]
- SEA Sreylin (2025). *Production and Characterization of Activated Carbon from Cassava Peels for Diclofenac Removal from Water*, [Master Thesis, Agro-Industrial Engineering, Institute of Technology of Cambodia]
- YAN Sreynich (2025). *Evaluation of the resistance of Cambodian rice germplasm to the Meloidogyne graminicola and identification of associated bacteria*, [Master Thesis, Agro-Industrial Engineering, Institute of Technology of Cambodia]
- VICHETH Vichny (2025). *Impact of rice agro-system on aroma accumulation in Phka Rumdoul rice variety in Cambodia*, [Master Thesis, Agro-Industrial Engineering, Institute of Technology of Cambodia]
- OURN Eneang (2025). *Study on Effectiveness of Preservatives on Quality and Shelf Life of Cambodian Traditional Fermented Fish (Nem Trey) During Storage*, [Master Thesis, Agro-Industrial Engineering, Institute of Technology of Cambodia]
- HO Singy (2025). *Evaluation of rice phytopathogens and seed quality of a collection of Cambodian rice varieties from different agroecological production systems*, [Master Thesis, Agro-Industrial Engineering, Institute of Technology of Cambodia]
- NOU Kimhouy (2025). *Effects of Different Smoking Conditions on Quality and Polycyclic Aromatic Hydrocarbons of Smoked Fish*, [Master Thesis, Agro-Industrial Engineering, Institute of Technology of Cambodia]
- UON Kimsrong (2025). *Development of Method to Identify Suppressive Soils Against Phytoparasite Nematodes*, [Master Thesis, Agro-Industrial Engineering, Institute of Technology of Cambodia]
- YUOK Lyda (2025). *Development of black soy sauce and black sweet soy sauce by fermentation*, [Master Thesis, Agro-Industrial Engineering, Institute of Technology of Cambodia]

#### 5. M-ECS

*This list shows the theses successfully defended in 2025 only. Please consult our website for the exhaustive list theses from 2015 to 2025.*

- SONGEAM Sela (2025). *A Computational Approach to Labor Market Analytics: Analyzing Skill Trends in Cambodia Using an LLM-Based Pipeline*, [Master Thesis, Computer Science, Institute of Technology of Cambodia]
- SONG Selasak (2025). *Security Management of Reputation Records in the Self-Sovereign Identity Network for the Trust Enhancement*, [Master Thesis, Computer Science, Institute of Technology of Cambodia]
- YEN Oudom (2025). *A Blockchain-based Approach for A Dynamic Access Permission in Self-Sovereign Identity Network*, [Master Thesis, Computer Science, Institute of Technology of Cambodia]

#### 6. M-MIC

*This list shows the theses successfully defended in 2025 only. Please consult our website for the exhaustive list theses from 2017 to 2025.*

- CHHEAN Rotanak (2025). *Design and Simulation of Smart Control Algorithms for Task-Specific Energy Management in Electric Tractor*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]

- PROEUNG Bun Rong (2025). *Development of Metamaterial-Based Sensor for Soil Moisture Monitoring in Smart Agriculture Application*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]
- LIM Dale (2025). *Improving the Navigation performance based on low-cost IMU sensor Array Through Data Fusion Estimation and Error Compensation Method*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]
- MINH Meng Hour (2025). *Development and Evaluation of a Reinforcement Learning Framework for Autonomous Land Leveling Path Planning*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]
- TAING Bunsrung (2025). *Optimization of Electric Powertrain for Multi-Tasking in Agricultural Operations*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]
- KLENG Vireak (2025). *Modification of DC/DC Forward Converter to DC/AC Inverter Based on Second-life Computer Power Supplied for Replacing Smooth Sine Wave Solar Inverter*, [Master Thesis, Mechatronics, Information and Communication Engineering, Institute of Technology of Cambodia]

## 7. M-TIE

*This list shows the theses successfully defended in 2025 only. Please consult our website for the exhaustive list theses from 2021 to 2025.*

- PHO Bopheaktra (2025). *Correlation between Dynamic Cone Penetrometer (DCP) and California Bearing Ratio (CBR) for subgrade soil materials in Cambodia*, [Master Thesis, Transport Engineering, Institute of Technology of Cambodia]
- SRORN Piseth (2025). *Machine Learning-Based Prediction of Public Bus Ridership Prediction: A Case study in Phnom Penh City*, [Master Thesis, Transport Engineering, Institute of Technology of Cambodia]
- ROS Khematakavid (2025). *Assessment of Factory Workers' Satisfaction with Their Current Commute and Their Intentions Toward Using Public Buses in Phnom Penh*, [Master Thesis, Transport Engineering, Institute of Technology of Cambodia]
- PHINY Lihong (2025). *Assessment of Motorcycle Emissions and Air Quality: A Case Study at the Institute of Technology of Cambodia*, [Master Thesis, Transport Engineering, Institute of Technology of Cambodia]
- AN Oudom (2025). *Using Distance Measures to Assess Accessibility to Urban Services from Public City Bus Stops in Phnom Penh*, [Master Thesis, Transport Engineering, Institute of Technology of Cambodia]

## 8. M-DAS

*This list shows the theses successfully defended in 2025 only. Please consult our website for the exhaustive list theses in 2025.*

- HORT Hourpheng (2025). *Comparison Analysis of Deep Learning and Tree-based Homogenous Ensemble Learning Predictive Models on the KHR/USD Daily Official Exchange Rate*, [Master Thesis, Data Science, Institute of Technology of Cambodia]
- UANN Sreyvi (2025). *A Novel Interacting Neural Network: A Comparative Study of Standard and Distributed Architectures on Image Classification*, [Master Thesis, Data Science, Institute of Technology of Cambodia]
- LENG Phirum (2025). *Comparing Time Series, Machine Learning, and Deep Learning Models for Paddy Rice Price Forecasting in Battambang Province, Cambodia*, [Master Thesis, Data Science, Institute of Technology of Cambodia]
- CHHORN Danut (2025). *Reconstructing Higher-Order Interactions in Algal Communities*, [Master Thesis, Data Science, Institute of Technology of Cambodia]
- LUK Chamnan (2025). *Time Series and Deep Learning Models for Weekly PM2.5 Forecasting: A Comparative Study in Bangkok, Thailand*, [Master Thesis, Data Science, Institute of Technology of Cambodia]
- EY Rey (2025). *AI-Driven Web Platform for Tomato Leaf Disease Prediction Using Deep Learning*, [Master Thesis, Data Science, Institute of Technology of Cambodia]

- EM Dara (2025). *Predictive Modeling of Garment Trade Flows in Cambodia: A Data-Driven Approach to Forecasting Export Trends*, [Master Thesis, Data Science, Institute of Technology of Cambodia]
- SEUN Siuphing (2025). *Analysis on Machine Learning Models for Imbalanced Data Problem in Payment Fraud Detection*, [Master Thesis, Data Science, Institute of Technology of Cambodia]
- THONG Sithach (2025). *Forecasting for Cambodia's Rice Production Using Multiple Linear Regression and Tree – Based Ensemble Learning Methods*, [Master Thesis, Data Science, Institute of Technology of Cambodia]

## **Annex 7. Lists of Master Publications.**

### **1. Lists of Publications M-MSE**

*This list shows the papers published by the graduates in 2025 only. Please consult our website for more information on students' publications.*

1. Sochita Dy, Vannei Sry, Yann Charles & Fabien Cazes (2025). Determination of Mechanical Properties of Cambodian Sandstone under Brazilian Test and Semi-Circular Bending Test. Techno-SRJ-0307

### **2. Lists of Publications M-ETM**

*This list shows the papers published by the graduates in 2025 only. Please consult our website for more information on students' publications.*

1. Thyra Thon, Vannak Vai & Samphors Eng (2025). Planning for Medium Voltage Distribution Systems Considering Economic and Reliability Aspects. Techno-SRJ\_12\_23
2. Likhai Mom, Sarin Chan & Rithymean Khoun (2025). Techno-Economic Comparison of VRF and Water-cooled Chiller System at the Ministry of Tourism in Sihanouk Province, Cambodia. Techno-SRJ\_12\_25

### **3. Lists of Publications M-WEE**

*This list shows the papers published by the graduates in 2025 only. Please consult our website for more information on students' publications.*

1. Kakda Pov, Chhenglang Heng, Makara Soy, Vincent Herbreteau & Vannak Ann (2025). Land Use and Land Cover Distribution across Litho-Mineral Alteration of an Irrigated Catchment of the Tonle Sap Lake, Cambodia. Techno-SRJ\_12\_21
2. Sany SAMAI, Vouchlay THENG & Vannak ANN (2025). Assessment of the effects of hydro-physicochemical parameters and nutrients on eutrophication in Tonle Sap Lake using Machine Learning. Techno-SRJ\_12\_07
3. Sithea Sath, Ratha Moun, Rainer Zaiss, Jeroen Meersmans, Vannak Ann & Pascal Jouquet (2025). Environmental Variables Determining Soil Physical Properties and Carbon Content at the Catchment Scale, Stung Chrey Bak Observatory, Cambodia. Techno-SRJ\_12\_28
4. Sreypich Chy, Chhenglang Heng, Thibault Catry, Renaud Hostache, Christophe Révillion, Vincent Herbreteau & Vannak Ann (2025). Estimation of rainfall and flooding with remotely-sensed spectral indices in the Mekong Delta region. Techno-SRJ\_12\_22

### **4. Lists of Publications M-AIE**

*This list shows the papers published by the graduates in 2025 only. Please consult our website for more information on students' publications.*

1. Chakriya SOVANN, Navin SRENG & Hasika MITH (2025). Characterization of Antimicrobial Resistance Profiles and Extended-Spectrum Beta-Lactamase Resistance Genes in Salmonella Isolates from Different Food Matrices in Cambodia. Techno-SRJ-0330
2. Sreylin Sea, Mouylen Pey, Sopanha Sim, Chanpheng Say, Davin Sang, Sivchheng Phal & Reasmey Tan (2025). Activated Carbon Derived from Cassava Peels (*Manihot esculenta*) for the Removal of Diclofenac. Techno-SRJ\_12\_14
3. Sreynich YAN, Malyna SUONG, Vichny VICHETH, Seyla DOEURN, Kakada OEUM & Stephane BELLAFFIORE (2025). Evaluation of the susceptibility of rice germplasms in Cambodia to the Rice Root-Knot Nematode, *Meloidogyne graminicola*. Techno-SRJ-0329
4. Vichny VICHETH, Stephane BELLAFFIORE, Leanghok BUN, Sereyvath YOEUN & Chanvorleak PHAT (2025). Impact of rice agro-system on aroma accumulation of Phka Rumdoul rice variety in

- Cambodia Impact of rice agro-system on aroma accumulation of Phka Rumdoul rice variety in Cambodia. Techno-SRJ-0322
5. Eneang OURN, Sothyra KHOR, Chanchao CHEM, Seyha DOEURN & Chanthol PENG (2025). Effect of Nisin and Potassium Sorbate on Quality and Shelf Life of Cambodian Traditional Fermented Fish (Nem Trey). Techno-SRJ\_12\_08
  6. Singy HO, Malyna SUONG, Myriam ADAM, Kakada OEUM, Vichany VICHETH, Rada KONG, Florent TIVET & Lionel MOULIN (2025). Quality evaluation of Cambodian rice seeds under organic tillage and green manure production systems. Techno-SRJ-0318
  7. Kimhouy Nou, Sereyvath Yoeun, Chanvorleak Phat, Vattana Mom, Sovannmony Lay, Caroline Douny, Marie-Louise Scippo & Hasika Mith (2025). Impact of Smoking Materials on Smoked Fish Quality and Polycyclic Aromatic Hydrocarbons Contamination. Techno-SRJ-0288
  8. Kakada Oeum, Malyna Suong, Kimsrong Uon, Le' a Jobert, Ste' phane Bellafiore, Aurore Comte, Emilie Thomas, Fidero Kuok & Lionel Moulin (2025). Comparison of plant microbiota in diseased and healthy rice reveals methylobacteria as health signatures with biocontrol capabilities. Front. Plant Sci. 15:1468192. doi: 10.3389/fpls.2024.1468192
  9. Lyda Yuok, Luka Ly, Marinich Net, Parakulsuksatid Pramuk & Reasmey Tan (2025). Effect of Enzyme on Physicochemical and Sensory Characteristics of Black Soy Sauce. Techno-SRJ\_12\_27

### 5. Lists of Publications M-ECS

*This list shows the papers published by the graduates in 2025 only. Please consult our website for more information on students' publications.*

1. Sela SONGEAM, Dona VALY & Sothea HAS (2025). A Computational Approach to Labor Market Analytics: Analyzing Skill Trends in Cambodia Using an LLM-Based Pipeline. Techno-SRJ-0374
2. Selasak Song, Dara Tith & Dona Valy (2025). Ecurity Management of Reputation Records in the Self-Sovereign Identity Network for the Trust Enhancement. Techno-SRJ\_12\_10
3. Oudom Yen, Dona Valy, Dara Tith & Jean-Noël Colin (2025). A Blockchain-based Approach for A Dynamic Access Permission in Self-Sovereign Identity Network. Techno-SRJ\_12\_11

### 6. Lists of Publications M-MIC

*This list shows the papers published by the graduates in 2025 only. Please consult our website for more information on students' publications.*

N/A

### 7. Lists of Publications M-TIE

*This list shows the papers published by the graduates in 2025 only. Please consult our website for more information on students' publications.*

1. Bopheaktra PHO, Narith SAUM, Tetsya SOK & Lyhour CHHAY (2025). Correlation Between Dynamic Cone Penetrometer (DCP) and California Bearing Ratio (CBR) for Subgrade Soil Material in Cambodia. Techno-SRJ-0312
2. SRORN Piseth, Veng Kheang PHUN, Narith SAUM & Monyrath KOV (2025). Study on Public Bus Ridership Prediction Using Machine Learning: A Case Study of Public Bus in Phnom Penh City. Proceedings of EASTS, Ref: Ms. No. PP3886R1
3. Khematakavid ROS, Veng Kheang PHUN & Panha YANG (2025). The Negative Experiences of Low-Income Citizen Commute and Their Intentions Toward Public Bus in Phnom Penh. Techno-SRJ\_12\_29
4. Lihong PHINY, Veng Kheang PHUN, Narith SAUM & Sokhit PLACK (2025). Assessing the Impact of Motorcycle Emissions on Urban Air Quality: A Case Study at the Institute of Technology of Cambodia. Techno-SRJ-0306
5. Oudom AN, Yat YEN & Veng Kheang PHUN (2025). Using Distance Measures to Assess Accessibility to Urban Services from Public City Bus Stops in Phnom Penh. Techno-SRJ\_12\_18

## **8. Lists of Publications M-DAS**

*This list shows the papers published by the graduates in 2025 only. Please consult our website for more information on students' publications.*

1. Hourpheng HORT, Sokkhey PHAUK, Pheak NEANG & Vesal KHEAN (2025). Comparison Analysis of Deep Learning and Tree-Based Homogeneous Ensemble Learning Predictive Models on the KHR/USD Daily Official Exchange Rate. Techno-SRJ-0313
2. Leng Phirum, Phauk Sokkhey, Nhim Malai & Tann Chantara (2025). Comparing Time Series, Machine Learning, and Deep Learning Models for Paddy Rice Price Forecasting in Battambang Province, Cambodia. Techno-SRJ-0308
3. Siuphing SEUN, Sokkhey PHAUK, Kimlong NGIN & Pakrigna LONG (2025). Analysis on Machine Learning Models for Imbalanced Data Problem in Payment Fraud Detection. Techno-SRJ-0310
4. Sithach THONG, Sokhey PHAUK & Sothea HAS (2025). The Forecasting for Cambodia's Rice Production Using Multiple Linear Regression and Tree – Based Ensemble Learning Methods. Techno-SRJ-0309

## Annex 8. Faculty Members of GS for Doctoral Programs

### 1. List of Lecturers and Supervisors of D-WAE

| No | Name of Lecturer | Sex | Qualification |             |      | Specialization                                     |
|----|------------------|-----|---------------|-------------|------|----------------------------------------------------|
|    |                  |     | Latest degree | From        | Year |                                                    |
| 1  | PENG Chanthol    | F   | Doctorate     | Japan       | 2019 | Life Science and Technology                        |
| 2  | OEURNG Chantha   | M   | Doctorate     | France      | 2010 | Hydrology and Water Resources                      |
| 3  | BUN Kim Ngun     | M   | Doctorate     | Malaysia    | 2013 | Materials Engineering                              |
| 4  | ANN Vannak       | M   | Doctorate     | Spain       | 2015 | Water Science and Technology                       |
| 5  | BUN Saret        | M   | Doctorate     | Japan       | 2019 | Environmental Engineering                          |
| 6  | CHHUON Kong      | M   | Doctorate     | Philippines | 2016 | Environmental Engineering                          |
| 7  | KET Pinnara      | F   | Doctorate     | Belgium     | 2019 | Agricultural Science and Biological Engineering    |
| 8  | TAN Reasmey      | F   | Doctorate     | Japan       | 2011 | Bioengineering                                     |
| 9  | ENG Chandoeun    | M   | Doctorate     | Japan       | 2018 | Geology                                            |
| 10 | MUON Ratha       | F   | Doctorate     | France      | 2022 | Environmental Science                              |
| 11 | MASSUEL Sylvain  | M   | Doctorate     | France      | 2005 | Sciences de l'Eau dans l'Environnement Continental |
| 12 | SANG Davin       | F   | Doctorate     | France      | 2022 | Environmental Engineering                          |
| 13 | SONG Layheang    | M   | Doctorate     | France      | 2021 | Water Resources                                    |

### 2. List of Lecturers and Supervisors of D-ETM

| No | Name of Lecturer | Sex | Qualification |           |      | Specialization                     |
|----|------------------|-----|---------------|-----------|------|------------------------------------|
|    |                  |     | Latest degree | From      | Year |                                    |
| 1  | KRET Kakada      | M   | Doctorate     | Japan     | 2019 | Exploration Geophysics             |
| 2  | AM Sokchea       | M   | Doctorate     | France    | 2016 | Electronics                        |
| 3  | BUN Long         | M   | Doctorate     | France    | 2011 | Electrical Engineering             |
| 4  | CHAN Sarin       | M   | Doctorate     | Indonesia | 2011 | Refrigeration and Air Conditioning |
| 5  | CHRIN Phok       | M   | Doctorate     | France    | 2016 | Electrical Energy                  |
| 6  | OR Chanmoly      | M   | Doctorate     | Japan     | 2014 | Petroleum Production Engineering   |
| 7  | VAI Vannak       | M   | Doctorate     | France    | 2017 | Electrical Engineering             |
| 8  | CHHLONH Chhith   | M   | Doctorate     | France    | 2024 | Genie Electrique                   |
| 9  | HAS Sothea       | M   | Doctorate     | France    | 2022 | Applied Mathematics                |
| 10 | KIM Bunthern     | M   | Doctorate     | France    | 2019 | Electrical Engineering             |
| 11 | KHON Kimsrornn   | M   | Doctorate     | France    | 2022 | Energy Technology and Management   |



|    |                    |   |           |           |      |                        |
|----|--------------------|---|-----------|-----------|------|------------------------|
| 12 | VONGCHANH Kinnaeth | F | Doctorate | Indonesia | 2010 | Mechanical Engineering |
| 13 | ENG Chandoeun      | M | Doctorate | Japan     | 2018 | Geology                |
| 14 | SREU Tola          | M | Doctorate | Japan     | 2023 | Petroleum Engineering  |

### 3. List of Lecturers and Supervisors of D-FTN

| No | Name of Lecturer | Sex | Qualification |             |      | Specialization                                                                         |
|----|------------------|-----|---------------|-------------|------|----------------------------------------------------------------------------------------|
|    |                  |     | Latest degree | From        | Year |                                                                                        |
| 1  | PHAT Chanvorleak | F   | Doctorate     | South Korea | 2016 | Food Chemistry                                                                         |
| 2  | EK Pichmony      | F   | Doctorate     | USA         | 2021 | Food Science                                                                           |
| 3  | MITH Hasika      | M   | Doctorate     | Belgium     | 2014 | Food Science                                                                           |
| 4  | SOUNG Malyna     | F   | Doctorate     | France      | 2017 | Mécanismes des Interactions Parasitaires Pathogènes et Symbiotiques                    |
| 5  | TAN Reasmey      | F   | Doctorate     | Japan       | 2011 | Bioengineering                                                                         |
| 6  | IN Sokneang      | F   | Doctorate     | France      | 2012 | Science and Processes of Food and Bio-Products, Agriculture Biology Environment Health |
| 7  | PENG Chanthol    | F   | Doctorate     | Japan       | 2019 | Life Science and Technology                                                            |
| 8  | YOEUN Sereyvath  | M   | Doctorate     | South Korea | 2014 | Biotechnology                                                                          |

### 4. List of Lecturers and Supervisors of D-MIT

| No | Name of Lecturer | Sex | Qualification |             |      | Specialization                                             |
|----|------------------|-----|---------------|-------------|------|------------------------------------------------------------|
|    |                  |     | Latest degree | From        | Year |                                                            |
| 1  | VALY Dona        | M   | Doctorate     | Belgium     | 2020 | Science de L'ingénieur et Technologie                      |
| 2  | PO Kimtho        | M   | Doctorate     | Japan       | 2009 | Communication Engineering                                  |
| 3  | SIM Tepmony      | M   | Doctorate     | France      | 2016 | Applied Mathematics, Signal and Image Processing           |
| 4  | AM Sokchea       | M   | Doctorate     | France      | 2016 | Electrical Engineering                                     |
| 5  | CHRIN Phok       | M   | Doctorate     | France      | 2016 | Electrical Energy                                          |
| 6  | PHAUK Sökkhey    | M   | Doctorate     | Japan       | 2021 | Interdisciplinary Intelligent Systems                      |
| 7  | SRANG Sarot      | M   | Doctorate     | Japan       | 2014 | Dynamical System Modeling, Estimation and Adaptive Control |
| 8  | SRENG Sokchenda  | M   | Doctorate     | France      | 2012 | Telecommunications and Network                             |
| 9  | HAS Sothea       | M   | Doctorate     | France      | 2022 | Applied Mathematics                                        |
| 10 | PEC Rothna       | M   | Doctorate     | South Korea | 2017 | Electrical and Electronics Engineering                     |
| 11 | KEO Lychek       | M   | Doctorate     | Japan       | 2010 | Control and Automation Systems                             |
| 12 | KUY Movsun       | M   | Doctorate     | Belgium     | 2025 | Computer Science                                           |

|    |               |   |           |       |      |                                              |
|----|---------------|---|-----------|-------|------|----------------------------------------------|
| 13 | THOURN Kosorl | M | Doctorate | Japan | 2019 | Electronic and Telecommunication Engineering |
|----|---------------|---|-----------|-------|------|----------------------------------------------|

### 5. List of Lecturers and Supervisors of D-MSS

| No | Name of Lecturer  | Sex | Qualification |         |      | Specialization                                           |
|----|-------------------|-----|---------------|---------|------|----------------------------------------------------------|
|    |                   |     | Latest degree | From    | Year |                                                          |
| 1  | DOUNG Piseth      | M   | Doctorate     | Japan   | 2020 | Civil Engineering                                        |
| 2  | NGUON Kollika     | M   | Doctorate     | Japan   | 2012 | Water Hammer, Fluid-Structure Interaction                |
| 3  | HIN Raveth        | M   | Doctorate     | France  | 2017 | Mechanics                                                |
| 4  | HAN Virak         | M   | Doctorate     | Japan   | 2006 | Construction Materials                                   |
| 5  | KAN Kuchvichea    | M   | Doctorate     | Belgium | 2021 | Engineering Sciences and Technology                      |
| 6  | PHUN Veng Kheang  | M   | Doctorate     | Japan   | 2013 | Transport Engineering, Planning, Environment, and Policy |
| 7  | YOS Phanny        | M   | Doctorate     | Japan   | 2014 | Materials Engineering                                    |
| 8  | OR Chanmoly       | M   | Doctorate     | Japan   | 2014 | Petroleum Production Engineering                         |
| 9  | ENG Chandoeun     | M   | Doctorate     | Japan   | 2018 | Geology                                                  |
| 10 | SEANG Chansopheak | M   | Doctorate     | France  | 2013 | Civil and Mechanical Engineering                         |
| 11 | CHHITH Saosometh  | M   | Doctorate     | Belgium | 2017 | Electro-Mechanics                                        |
| 12 | OUCH Vanthet      | M   | Doctorate     | France  | 2023 | Génie Civil                                              |

## **Annex 9. List of Doctoral Thesis.**

(List arranged by degree, field/specialization, and chronological order)

### **1. List of PhD Theses D-WAE**

*This list shows the theses successfully defended in 2025 only. Please consult our website for the exhaustive list theses from 2017 to 2025.*

PHOEURN Chan Arun (2025). *Assessing Irrigation Water Use Efficiency for Rice Cultivation Using Experimental and Modeling Approach*, [Doctoral Thesis, Water and Environment, Institute of Technology of Cambodia]

### **2. List of PhD Theses D-ETM**

*This list shows the theses successfully defended in 2025 only. Please consult our website for the exhaustive list theses from 2017 to 2025.*

CHEA Vabotra (2025). *Study on the Impact of Heat Stress on Garment Worker Productivity and Economy in Cambodia*, [Doctoral Thesis, Energy Technology and Management, Institute of Technology of Cambodia]

ETH Oudaya (2025). *Study on impacts of the integration of renewable energy resources to distribution system in Cambodia*, [Doctoral Thesis, Energy Technology and Management, Institute of Technology of Cambodia]

HEANG Latin (2025). *Study on Impact of Heat Stress on Construction Labor Productivity in Cambodia*, [Doctoral Thesis, Energy Technology and Management, Institute of Technology of Cambodia]

### **3. List of PhD Theses D-FTN**

*This list shows the theses successfully defended in 2025 only. Please consult our website for the exhaustive list theses from 2017 to 2025.*

CHIN Lyda (2025). *Impact of initial composition and processing technique on compounds of gustatory interest. Predictive modeling of sugars, acids and volatile compounds in mango products*, [Doctoral Thesis, Food Technology and Nutrition, Institute of Technology of Cambodia]

LY Luka (2025). *Metabolomic Profiling of Soy Sauce and the Food Contaminant 3-Monochloropropane-1,2-Diol: from Fermentation with Different Raw Materials to Commercial Products Available in the Markets*, [Doctoral Thesis, Food Technology and Nutrition, Institute of Technology of Cambodia]

PHAL Sivchheng (2025). *Study of the performance of banana peels activated carbon: from experimental characterization of diclofenac adsorption to cradle-to-grave life cycle analysis*, [Doctoral Thesis, Food Technology and Nutrition, Institute of Technology of Cambodia]

### **4. List of PhD Theses D-MIT**

*This list shows the theses successfully defended in 2025 only. Please consult our website for the exhaustive list theses from 2017 to 2025.*

HEAN Samboeun (2025). *Data-Driven and Policy-Oriented Analysis, and Evaluation on the Demand of Digital Skills in Cambodia: Case Study of CADT Students' Performance Using Machine Learning Models*, [Doctoral Thesis, Mechatronics and Information Technology, Institute of Technology of Cambodia]

KUY Movsun (2025). *Network Function Virtualization (NFV) at the Edge: Resource Constrained and Multi-Domain Environments*, [Doctoral Thesis, Mechatronics and Information Technology, Institute of Technology of Cambodia]

UN Sok Oeun (2025). *Cambodia Disaster Back-up Communication for Natural Disaster by Emergency Amateur Radio Operator*, [Doctoral Thesis, Mechatronics and Information Technology, Institute of Technology of Cambodia]  
YEAN Sopheak (2025). *Adaptive Control Based on Lumped Parameters with Application on Mobile Robot*, [Doctoral Thesis, Mechatronics and Information Technology, Institute of Technology of Cambodia]

### **5. List of PhD Theses D-MSS**

*This list shows the theses successfully defended in 2025 only. Please consult our website for the exhaustive list theses from 2017 to 2025.*

HENG Kimhong (2025). *A Study of High Strength-to-Weight Ratio Glass Structures*, [Doctoral Thesis, Materials Science and Structures, Institute of Technology of Cambodia]  
KETH Kannary (2025). *Design a BIM Guidelines to Support Collaboration in Construction Sector in Cambodia*, [Doctoral Thesis, Materials Science and Structures, Institute of Technology of Cambodia]

## **Annex 10. Lists of Doctoral Publications.**

(List arranged by degree, field/specialization, and chronological order)

### **1. List of Publications of D-WAE**

*This list shows the papers published by the graduates in 2025 only. Please consult our website for more information on students' publications.*

1. Chan Arun Phoeurn & Chhourn Orn & Thanak Tho & Chantha Oeurng & Aurore Degré & Pinnara Ket (2025). Assessing the feasibility of alternate wetting and drying (AWD) technique for improving water use efficiency in dry-season rice production. Paddy and Water Environment, <https://doi.org/10.1007/s10333-024-01012-5>
2. Chan Arun Phoeurn & Aurore Degré & Chantha Oeurng & Pinnara Ket (2025). Evaluating the impact of climate change on yield and water use efficiency of different dry-season rice varieties cultivated under conventional and alternate wetting and drying conditions. Environ Monit Assess (2024) 196:1190, <https://doi.org/10.1007/s10661-024-13363-x>

### **2. List of Publications of D-ETM**

*This list shows the papers published by the graduates in 2025 only. Please consult our website for more information on students' publications.*

1. Vabotra Chea & Sarin Chan & Natalia Borzino & Min Sze Pearl Tan & Jason Kai Wei Lee & Kinnaeth Vongchanh (2025). Perceived impact of heat stress on health and productivity of tropical female garment workers– a comparison between cool and hot months. Chea et al. BMC Public Health (2025) 25:1543, <https://doi.org/10.1186/s12889-025-22787-0>
2. Oudaya Eth & Vannak Vai & Long Bun (2025). Optimal Topology with Improved Phase Balancing and PV Hosting Capacity in a Low Voltage Distribution System. International Journal of Electrical and Electronic Engineering & Telecommunications Vol. 13, No. 5, 2024
3. Latin Heang & Kinnaeth Vongchanh & Yang Yang & Sarin Chan & Pheak Kor (2025). Heat Stress Effects on Construction Labour Productivity in Hot Seasons: A Case Study of Rebar and Moulding Workers in Cambodia. ASEAN Engineering Journal

### **3. List of Publications of D-FTN**

*This list shows the papers published by the graduates in 2025 only. Please consult our website for more information on students' publications.*

1. Lyda Chin & Adrien Servent & Sivmey Hor & Hasika Mith & Christophe Bugaud (2025). Predictive models for estimating the sugar content and organic acids in processed mangoes based on the initial content. International Journal of Food Science and Technology 2024
2. Luka Ly & Chansehakpong Te & Monychot Tepy Chanto & Reasmey Tan (2025). Impact of Different Raw Materials on Changes in Volatile Compounds during Moromi Fermentation. Biol. Life Sci. Forum 2023, 26, 103. <https://doi.org/10.3390/Foods2023-14962>
3. Luka Ly & Lay Phikhher Eav & Monychot Tepy Chanto & Pramuk Parakulsuksatid & Reasmey Tan (2025). Evaluation of Physicochemical and Microbiological Characteristics of Different Soy sauces Sold in Phnom Penh, Cambodia. Journal of Food Science and Nutrition Research 7 (2024): 14-21
4. Sivchheng Phal & Christelle Guigui & Aurore Didi & Reasmey Tan & Yolaine Bessiere (2025). Role of natural organic matter on diclofenac adsorption on activated carbon produced from banana peels. ELSEVIER, Journal of Water Process Engineering 77 (2025) 108495

#### **4. List of Publications of D-MIT**

*This list shows the papers published by the graduates in 2025 only. Please consult our website for more information on students' publications.*

1. HEAN Samboeun & KOR Sokchea & SIM Tepmony & PO Kimtho (2025). Educational Model for Cultivating Digital Talent in Cambodia: A Case Study at Cambodia Academy of Digital Technology. Cambodian Journal of Education and STEM
2. Samboeun HEAN & Sokchea KOR & Tepmony SIM & Kimtho PO & Srun SOVILA (2025). From Educational Model to Achievements - Classifying Post-Graduate Success with Machine Learning. Techno-SRJ-0305
3. Sok Oeun UN & Kimtho PO & Kosorl THORN & Rathna PEC & Channareth Srun & Seven Siren (2025). Design of Emergency Position Reporting System for Disasters Using Amateur Radio and Automatic Packet Reporting System (APRS) as a Mobile Station Operator for Educational Purposes. Indonesian Journal of Educational Research and Technology 3(3) (2023) 257-264
4. Sok Oeun UN & Kimtho PO & Kosorl THOURN & Rathna PEC & Seven SIREN & Vannak ROS (2025). Back-up Communication for Natural Disaster by Emergency Amateur Radio Operator and Implemented using APRS as Location Tracker. Engineering Science and Sustainable Development, ESSD2022
5. Sokoeun UN & Chang-Wan JEON & Tae-Sam KANG (2025). Development of Multi-Vehicle Display Navigation System. Journal of Institute of Control, Robotics and Systems (2021) 27(4) :306-311
6. Sopheak YEAN & Sarot SRANG (2025). Comparison between Compensated and Uncompensated PD with Cascade Controller Design of PMDC Motor: Real Experiments. International Journal of Robotics and Control Systems, Vol. 3, No. 4, 2023, pp. 880-898, ISSN 2775-2658
7. Sopheak YEAN & Thura PEOU & Boreth SETHY & Sarot Srang (2025). PD Controller and Dynamic Compensation Design for a DC Motor based on Estimated Parameters. IEEE

#### **5. List of Publications of D-MSS**

*This list shows the papers published by the graduates in 2025 only. Please consult our website for more information on students' publications.*

1. Heng K. & Vassaux M. & Hin R. & Seang C. & Sangleboeuf J. C. (2025). Topology Optimization of Structural Glass Beams: Design, Fabrication, and Experimental Validation (2025). Glass Structures and Engineering
2. Kannary Keth & Samia Ben Rajeb & Virak Han (2025). Identification of Workflow in Construction Projects in Cambodia With and Without Building Information Modeling/ Models/ Management Approaches. International Journal on Advances in Intelligent Systems, vol 16 no 3 & 4, year 2023
3. Kannary Keth & Samia Ben Rajeb & Virak Han (2025). Collaborative Works in Construction Projects in Cambodia Toward a Workflow Scenario Identification. COLLA 2023: The Thirteenth International Conference on Advanced Collaborative Networks, Systems and Applications

**Annex 11. ITC lecturers in overseas post-graduate program (2025-2026).**

| No | Nom et prénom/<br>Name | Sexe/<br>Sex | Départ./<br>Depart. | Diplôme/<br>Degree | Université d'accueil/<br>Host University | Pays/<br>Country | Début de formation/<br>Start |                |                | Fin/<br>End    | Financement/<br>Funding  |
|----|------------------------|--------------|---------------------|--------------------|------------------------------------------|------------------|------------------------------|----------------|----------------|----------------|--------------------------|
|    |                        |              |                     |                    |                                          |                  | Jour/<br>Day                 | Mois/<br>Month | Année/<br>Year | Année/<br>Year |                          |
| 1  | PICH Reatrey           | M            | GIC                 | PhD                | ITC                                      | Cambodia         | 1                            | 9              | 2021           | 2026           | ARES-CCD, ITC            |
| 2  | POENG Kokthay          | M            | GIC                 | PhD                | University of Namur                      | Belgium          | 1                            | 9              | 2022           | 2026           | CyberExcellence          |
| 3  | UN Lykong              | F            | GIC                 | PhD                | University Grenoble Alpes                | France           | 1                            | 9              | 2024           | 2027           | BGF                      |
| 4  | EM Hengly              | M            | GIC                 | PhD                | UMONS                                    | Belgium          | 1                            | 9              | 2025           | 2029           | ARES                     |
| 5  | LIV Bunthorn           | M            | GIC                 | PhD                | Université catholique de Louvain         | Belgium          | 1                            | 9              | 2025           | 2029           | ARES                     |
| 6  | KHUN Dararith          | M            | GIC                 | PhD                | University of Namur                      | Belgium          | 1                            | 9              | 2025           | 2029           | ARES-CCD                 |
| 7  | HIEK<br>Lymonyratanak  | M            | GIC                 | Master             | ITC                                      | Cambodia         | 1                            | 9              | 2025           | 2026           |                          |
| 8  | OL Phearun             | M            | GIC                 | Master             | ITC                                      | Cambodia         | 1                            | 9              | 2025           | 2027           | ITC-100%                 |
| 9  | CHAB Sreylan           | F            | GIC                 | Master             | ITC                                      | Cambodia         | 1                            | 9              | 2025           | 2027           | EU-Cambodia              |
| 10 | ANG Ousa               | M            | GIC                 | Master             | ITC                                      | Cambodia         | 1                            | 9              | 2025           | 2027           | EU-Cambodia              |
| 11 | LUN Sambo              | M            | GRU                 | PhD                | Institut Agro Montpellier                | France           | 1                            | 9              | 2025           | 2028           | HEIP2 + IRD              |
| 12 | CHAN Ratboren          | M            | GRU                 | PhD                | Université Toulouse III - Paul Sabatier  | France           | 1                            | 10             | 2023           | 2026           | BGF                      |
| 13 | Laymey Sreng           | F            | GGG                 | PhD                | Gyeongsang National University           | South Korea      | 20                           | 8              | 2025           | 2029           | Global Korea Scholarship |
| 14 | Rithy Kan              | M            | GGG                 | PhD                | Waseda University                        | Japan            | 20                           | 9              | 2025           | 2028           | AUN/SEED-Net             |
| 15 | Mengly Seng            | M            | GGG                 | PhD                | Kyoto University                         | Japan            | 20                           | 3              | 2026           | 2029           | AUN/SEED-Net             |

**Annex 12. ITC students in overseas post-graduate program (2025-2026).**

| No | Nom et prénom/<br>Name | Sexe/<br>Sex | Dépt. | Diplôme/<br>Degree | Université d'accueil/<br>Host University | Pays/<br>Country | Début de formation/<br>Start |                |                | Fin/End        | Financement/<br>Funding               |
|----|------------------------|--------------|-------|--------------------|------------------------------------------|------------------|------------------------------|----------------|----------------|----------------|---------------------------------------|
|    |                        |              |       |                    |                                          |                  | Jour/<br>Day                 | Mois/<br>Month | Année/<br>Year | Année/<br>Year |                                       |
| 1  | ALEXANDER Virak        | M            | GIM   | PhD                | University Grenoble Alpes                | France           | 1                            | 9              | 2025           | 2028           | Doctoral School<br>Scholarship        |
| 2  | BAN Liheang            | M            | GRU   | Master             | Chulalongkorn Universtiy                 | Thailand         | 1                            | 1              | 2024           | 2026           | ASEAN and<br>NON-ASEAN<br>Scholarship |
| 3  | BRANG Sokhorng         | M            | GRU   | Master             | Chulalongkorn Universtiy                 | Thailand         | 1                            | 1              | 2024           | 2026           | ASEAN and<br>NON-ASEAN<br>Scholarship |
| 4  | BUNNY Som              | F            | GRU   | Master             | Hohai University                         | China            | 5                            | 9              | 2024           | 2026           | Hohai University                      |
| 5  | CHAN Sameth            | M            | GRU   | Master             | Hohai University                         | China            | 6                            | 9              | 2023           | 2028           | CSC Scholarship                       |
| 6  | CHEA Sovannarith       | M            | GIM   | Master             | Kagoshima University                     | Japan            | 1                            | 4              | 2023           | 2025           | Yonemori<br>scholarship               |
| 7  | CHHENG Por Y           | M            | GRU   | Master             | Hohai University                         | China            | 11                           | 9              | 2025           | 2027           | Hohai University                      |
| 8  | CHROEUN Sokay          | M            | GIM   | PhD                | Université Sorbonne Paris Nord           | France           | 1                            | 9              | 2023           | 2026           | CNRS funding                          |
| 9  | CHY Vesana             | M            | GRU   | Master             | Kyoto University                         | Japan            | 1                            | 10             | 2025           | 2027           | MEXT                                  |
| 10 | DARITH Narin           | M            | GRU   | Master             | Hohai University                         | China            | 11                           | 9              | 2025           | 2027           | Hohai University                      |
| 11 | HAON Khamkeo           | F            | GRU   | Master             | Dongguk University                       | Korea            | 1                            | 9              | 2025           | 2027           | ADB under GKS                         |
| 12 | HEANG Samphors         | M            | GIM   | Master             | Czech Technical University in<br>Prague  | Czech            | 1                            | 9              | 2023           | 2026           | Czech<br>Government<br>Scholarship    |
| 13 | HEM Chanveasna         | M            | GIM   | Master             | Université Sorbonne Paris Nord           | France           | 1                            | 9              | 2025           | 2026           | BGF                                   |
| 14 | HONG SETHYA            | M            | GIM   | Master             | ITC                                      | Cambodia         | 1                            | 10             | 2025           | 2027           | need scholarship                      |



|    |                      |   |     |        |                                |          |    |   |      |      |                                 |
|----|----------------------|---|-----|--------|--------------------------------|----------|----|---|------|------|---------------------------------|
| 15 | HOR Vichheka         | M | GRU | PhD    | Hohai University               | China    | 11 | 9 | 2025 | 2028 | Hohai University                |
| 16 | HUONG Oudomsatia     | M | GRU | PhD    | Kyung Pook National University | Korea    | 1  | 9 | 2024 | 2027 | Kyungpook National University   |
| 17 | KHAY Mengly          | M | GEE | Master | Grenoble INP                   | France   | 1  | 9 | 2025 | 2026 | AFD                             |
| 18 | KHEN Chanchakriya    | F | GRU | Master | Hohai University               | China    | 11 | 9 | 2025 | 2027 | Hohai University                |
| 19 | KHIM Sokunthea       | F | GRU | Master | Chulalongkorn Universtiy       | Thailand | 1  | 1 | 2024 | 2026 | ASEAN and NON-ASEAN Scholarship |
| 20 | KHOR Sothyda         | F | GRU | Master | Chulalongkorn Universtiy       | Thailand | 1  | 1 | 2024 | 2026 | ASEAN and NON-ASEAN Scholarship |
| 21 | KOUN Penglong        | M | GRU | PhD    | Hohai University               | China    | 4  | 9 | 2023 | 2026 | Hohai University                |
| 22 | LAY Liheng           | M | GRU | Master | Hohai University               | China    | 11 | 9 | 2025 | 2027 | Hohai University                |
| 23 | LOK Lyheng           | M | GRU | Master | Hohai University               | China    | 5  | 9 | 2024 | 2026 | Hohai University                |
| 24 | LY Rady              | M | GIM | Master | Kasetsart university           | Thailand | 1  | 9 | 2024 | 2026 | TAIST-Science                   |
| 25 | LY Veasna            | M | GRU | Master | Hohai University               | China    | 6  | 9 | 2023 | 2026 | CSC Scholarship                 |
| 26 | MOM Attitya          | M | GRU | Master | Hohai University               | China    | 5  | 9 | 2024 | 2027 | Mekong-Lancang Scholarship      |
| 27 | MONYPANCHAKRITH Sous | M | GIM | Master | Gazi university                | Türkiye  | 1  | 9 | 2023 | 2026 | YTB                             |
| 28 | NEOM Sophearak       | M | GRU | Master | Hohai University               | China    | 5  | 9 | 2024 | 2027 | CSC Scholarship                 |
| 29 | NEY Pothking         | M | GIM | Master | Harbin Institute of Technology | China    | 1  | 9 | 2024 | 2027 | CSC Scholarship                 |
| 30 | NGEM Sokphea         | F | GEE | Master | Grenoble INP                   | France   | 1  | 9 | 2025 | 2026 | AFD                             |
| 31 | NGORN Kimlay         | F | GRU | Master | Chulalongkorn Universtiy       | Thailand | 1  | 1 | 2024 | 2026 | ASEAN and NON-ASEAN Scholarship |
| 32 | NUTH Panha           | M | GRU | Master | Chulalongkorn Universtiy       | Thailand | 1  | 1 | 2024 | 2026 | ASEAN and NON-ASEAN Scholarship |
| 33 | OR Sopheacha         | M | GRU | Master | Hohai University               | China    | 5  | 9 | 2024 | 2027 | CSC Scholarship                 |
| 34 | PA Visaseka          | F | GRU | Master | Hohai University               | China    | 5  | 9 | 2024 | 2027 | CSC Scholarship                 |

|    |                   |   |     |        |                                                          |             |    |    |      |      |                                                       |
|----|-------------------|---|-----|--------|----------------------------------------------------------|-------------|----|----|------|------|-------------------------------------------------------|
| 35 | PHAL Kimheng      | M | GIC | Master | Seoul National University of Science and Technology      | Korea       | 1  | 9  | 2025 | 2027 | Global Korea Scholarship                              |
| 36 | PHAL Sreyluch     | F | GRU | Master | Hohai University                                         | China       | 6  | 9  | 2023 | 2027 | CSC Scholarship                                       |
| 37 | PHARY Rong        | F | GGG | Master | Hohai University                                         | China       | 1  | 9  | 2025 | 2028 | Chinese Government Scholarship                        |
| 38 | PHOUTA Belasoviet | M | GRU | Master | Hohai University                                         | China       | 6  | 9  | 2023 | 2026 | Hohai University                                      |
| 39 | PLANGKhimouorn    | M | GRU | Master | Chulalongkorn Universtiy                                 | Thailand    | 1  | 8  | 2024 | 2026 | ASEAN and NON-ASEAN Scholarship                       |
| 40 | POEV Sakada       | M | GRU | Master | Chulalongkorn Universtiy                                 | Thailand    | 1  | 1  | 2024 | 2026 | ASEAN and NON-ASEAN Scholarship                       |
| 41 | PRACH Yaramy      | F | ChE | Master | Mahidol University                                       | Thailand    | 13 | 8  | 2025 |      | Young Scientists                                      |
| 42 | RITHYNY Lyhab     | M | GIC | Master | Auckland University of Technology, New Zealand           | New Zealand | 1  | 9  | 2026 | 2027 | Partial Scholarship from AUT and partial self-funded. |
| 43 | SATH Sothea       | F | GGG | PhD    | Universite de la Sorbonne                                | France      | 20 | 8  | 2025 | 2028 | Bourse de Gouvernement Française (BGF)                |
| 44 | SAVY Jane         | F | ChE | Master | Mahidol University                                       | Thailand    | 13 | 8  | 2025 |      | Young Scientists                                      |
| 45 | SI Chheng Im      | F | GRU | Master | Chulalongkorn Universtiy                                 | Thailand    | 1  | 8  | 2024 | 2026 | ASEAN and NON-ASEAN Scholarship                       |
| 46 | SOK Serita        | F | GRU | Master | Nanjing University of Information science and Technology | China       | 1  | 1  | 2026 | 2026 | NUIST-FAO                                             |
| 47 | SOMONIKA Virak    | F | GIM | PhD    | University Grenoble Alpes                                | France      | 1  | 9  | 2025 | 2028 | Doctoral School Scholarship                           |
| 48 | SREY mean         | F | FST | Master | Liège University                                         | Belgium     | 17 | 9  | 2025 |      | ARES-CCD                                              |
| 49 | TEAR Koingpech    | M | GEE | Master | University of Electronic Science and Technology of China | China       | 1  | 9  | 2024 | 2026 | Chinese Scholarship                                   |
| 50 | TES Davin         | M | GRU | PhD    | Institute of Science Tokyo                               | Japan       | 1  | 10 | 2024 | 2027 | MEXT                                                  |
| 51 | Tha Theb          | M | GRU | Master | Institute of Science Tokyo                               | Japan       | 1  | 9  | 2024 | 2026 | MEXT                                                  |

|    |                 |   |     |          |                                         |             |    |    |      |      |                                      |
|----|-----------------|---|-----|----------|-----------------------------------------|-------------|----|----|------|------|--------------------------------------|
| 52 | UNG Channoutdom | M | GIM | PhD      | Sorbonne Paris Nord                     | France      | 1  | 9  | 2024 | 2027 | Scholarship                          |
| 53 | UTH Rathana     | M | GIC | Master   | Ecole polytechnique                     | France      | 1  | 9  | 2025 | 2028 | Eiffel                               |
| 54 | VAN Sela        | M | GIM | Master   | Kasetsart University                    | Thailand    | 1  | 7  | 2024 | 2026 | TAIST-Science Tokyo Program          |
| 55 | VET Makara      | M | GIM | Bachelor | Institute of technology of Cambodia ITC | Phnom penh  | 1  | 10 | 2023 | 2028 | Self- funding                        |
| 56 | VETH Seavphing  | F | GRU | PhD      | Hohai University                        | China       | 11 | 9  | 2025 | 2028 | CSC Scholarship                      |
| 57 | YIN Sunny       | M | GRU | Master   | Chulalongkorn University                | Thailand    | 1  | 8  | 2024 | 2026 | ASEAN and NON-ASEAN Scholarship      |
| 58 | YONRITH Phayuth | M | GIM | PhD      | Chonnam National University             | South Korea | 1  | 9  | 2026 | 2029 | Professor and School Project Funding |

**Annex 13. Short-term overseas capacity building for lecturers (2025-2026).**

| No | Nom et prénom/<br>Name | Sexe/<br>Sex | Dept. | Université d'accueil/<br>Host university      | Stage/Mobilité<br>Internship/Mobility | Début/Start |    |      | Fin/End |    |      | Financement/<br>Funding                                    |
|----|------------------------|--------------|-------|-----------------------------------------------|---------------------------------------|-------------|----|------|---------|----|------|------------------------------------------------------------|
|    |                        |              |       |                                               |                                       | DD          | MM | YYYY | DD      | MM | YYYY |                                                            |
| 1  | DOEURN Seyha           | F            | GCA   | Asia Center for Air Pollution Research (ACAP) | Short training                        | 27          | 11 | 2025 | 6       | 12 | 2025 | JICA/Japan                                                 |
| 2  | Houng Peany            | F            | GCA   | Laos                                          | Join Conference                       | 24          | 11 | 2025 | 29      | 11 | 2025 | ASSET Project                                              |
| 3  | IN Sokneang            | F            | GCA   | Liège                                         | Short visit                           | 1           | 11 | 2025 | 2       | 11 | 2025 | ARES-CCD                                                   |
| 4  | IN Sokneang            | F            | GCA   | Hochiminh                                     | Join Conference                       | 26          | 12 | 2025 | 29      | 12 | 2025 | UNIDO-Capfish project                                      |
| 5  | Khoeurn Kimleang       | F            | GCA   | Asia Center for Air Pollution Research (ACAP) | Short training                        | 27          | 11 | 2025 | 6       | 12 | 2025 | JICA/Japan                                                 |
| 6  | MICH Monika            | F            | GCA   | MASHAV Training Center                        | Training                              | 11          | 12 | 2025 | 23      | 12 | 2025 | UNIDO                                                      |
| 7  | MITH Hasika            | M            | GCA   | University of Liège                           | Short visit                           | 10          | 9  | 2025 | 21      | 9  | 2025 | ARES                                                       |
| 8  | MORM ELEN              | F            | GCA   | University of Texas in Austin                 | Leadership training                   | 22          | 9  | 2025 | 9       | 10 | 2025 | YSEALI-PFP                                                 |
| 9  | NET Marinich           | F            | GCA   | MASHAV Training Center                        | Training                              | 11          | 12 | 2025 | 23      | 12 | 2025 | UNIDO                                                      |
| 10 | NET Marinich           | F            | GCA   | Hebei Agricultural University                 | Conference                            | 25          | 10 | 2025 | 28      | 10 | 2025 | Hebei Agricultural University                              |
| 11 | PHAL Sivchheng         | F            | GCA   | Indonesia                                     | Training                              | 2           | 12 | 2025 | 3       | 12 | 2025 | Economic Research Institute for ASEAN and East Asia (ERIA) |
| 12 | PHAL Sivchheng         | F            | GCA   | Singapore                                     | Join Conference                       | 7           | 12 | 2025 | 11      | 12 | 2025 | J*STAR and JST                                             |
| 13 | TAN Borivath           | M            | GCA   | University of Sanno                           | Mobility                              | 3           | 11 | 2025 | 14      | 11 | 2025 | ERASMUS+                                                   |
| 14 | TAN Borivath           | M            | GCA   | Institut Agro Montpellier                     | Mobility                              | 5           | 1  | 2026 | 16      | 1  | 2025 | ERASMUS+                                                   |
| 15 | TAN Borivath           | M            | GCA   | Hebei Agricultural University                 | Conference                            | 25          | 10 | 2025 | 28      | 10 | 2025 | Hebei Agricultural University                              |
| 16 | TAN Reasmey            | F            | GCA   | Jinan University, China                       | Short visit                           | 3           | 11 | 2025 | 7       | 11 | 2025 | Jinan University                                           |
| 17 | Thanh Channmuny        | F            | GCA   | Nagasaki University                           | Short training                        | 26          | 7  | 2025 | 10      | 8  | 2025 | JICA/JST                                                   |

|    |                 |   |     |                                                           |                            |    |    |      |    |    |      |                                       |
|----|-----------------|---|-----|-----------------------------------------------------------|----------------------------|----|----|------|----|----|------|---------------------------------------|
| 18 | Thanh Channmuny | F | GCA | Nagasaki University                                       | Short training             | 20 | 1  | 2026 | 10 | 2  | 2026 | JICA/JST                              |
| 19 | YOEUN Sereyvath | M | GCA | Nagasaki University                                       | Short training             | 26 | 7  | 2025 | 10 | 8  | 2025 | JICA/JST                              |
| 20 | YOEUN Sereyvath | M | GCA | Nagasaki University                                       | Short training             | 7  | 1  | 2026 | 27 | 1  | 2026 | JICA/JST                              |
| 21 | ENG Chandoeun   | M | GGG | JICA                                                      | Study Visit on Geopark     | 29 | 09 | 2025 | 08 | 10 | 2025 | INACON JICA Project                   |
| 22 | ENG Chandoeun   | M | GGG | Kyushu University, Japan                                  | Study Visit and Conference | 24 | 11 | 2025 | 26 | 11 | 2025 | NEXUS Project                         |
| 23 | KONG Sotheara   | M | GGG | University of the Philippines Diliman, Philippines        | Attending Conference       | 28 | 01 | 2026 | 30 | 01 | 2026 | University of the Philippines Diliman |
| 24 | MAO Pisith      | M | GGG | JICA                                                      | Study Visit on Geopark     | 29 | 09 | 2025 | 08 | 10 | 2025 | INACON JICA Project                   |
| 25 | OR Chanmoly     | M | GGG | University of Patras, Greece                              | Study Visit                | 1  | 09 | 2025 | 05 | 09 | 2025 | GAIN project, Erasmus+ CBHE project   |
| 26 | YOS Phanny      | M | GGG | University of Patras, Greece                              | Study Visit                | 1  | 09 | 2025 | 05 | 09 | 2025 | GAIN project, Erasmus+ CBHE project   |
| 27 | HOK TIN         | M | GIC | Riga Technical University                                 | Training                   | 16 | 6  | 2025 | 20 | 6  | 2025 | DX.SEA                                |
| 28 | HOK TIN         | M | GIC | Universiti Malaysia Sabah (UMS),                          | Training                   | 27 | 10 | 2025 | 31 | 10 | 2025 | DX.SEA                                |
| 29 | LIV Bunthorn    | M | GIC | Riga Technical University                                 | Training                   | 16 | 6  | 2025 | 20 | 6  | 2025 | DX.SEA                                |
| 30 | SEAK Leng       | F | GIC | Riga Technical University                                 | Training                   | 16 | 6  | 2025 | 20 | 6  | 2025 | DX.SEA                                |
| 31 | SEAK Leng       | F | GIC | Universiti Malaysia Sabah (UMS),                          | Training                   | 27 | 10 | 2025 | 31 | 10 | 2025 | DX.SEA                                |
| 32 | SEAK Leng       | F | GIC | University of Hong Kong                                   | Conference                 | 30 | 7  | 2025 | 1  | 8  | 2025 | Huawei                                |
| 33 | VALY Dona       | M | GIC | Riga Technical University                                 | Training                   | 16 | 6  | 2025 | 20 | 6  | 2025 | DX.SEA                                |
| 34 | VALY Dona       | M | GIC | Universiti Malaysia Sabah (UMS),                          | Training                   | 27 | 10 | 2025 | 31 | 10 | 2025 | DX.SEA                                |
| 35 | VALY Dona       | M | GIC | Chitose Institute of Technology and Science (CIST), Japan | Visit / Collaboration      | 17 | 9  | 2025 | 23 | 9  | 2025 | CIST                                  |
| 36 | VALY Dona       | M | GIC | Universiti Kebangsaan Malaysia (UKM), Malaysia            | Workshop                   | 15 | 11 | 2025 | 17 | 11 | 2025 | ASEAN IVO                             |

|    |                     |   |     |                                                             |                                                                                                                               |    |    |      |    |    |      |                                                            |
|----|---------------------|---|-----|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----|----|------|----|----|------|------------------------------------------------------------|
| 37 | KINNALETH Vongchanh | F | GIM | CCC                                                         | Annual Clean Cooling Collaborative meeting                                                                                    | 2  | 6  | 2025 | 6  | 6  | 2025 | PCS project                                                |
| 38 | KINNALETH Vongchanh | F | GIM | ECCJ                                                        | EE &C meeting                                                                                                                 | 20 | 10 | 2025 | 23 | 10 | 2025 | CapCEE project                                             |
| 39 | KINNALETH Vongchanh | F | GIM | Avanta                                                      | ISO 50001 Training                                                                                                            | 15 | 12 | 2025 | 19 | 12 | 2025 | CapCEE project                                             |
| 40 | KINNALETH Vongchanh | F | GIM | CABR                                                        | Lab tour                                                                                                                      | 9  | 3  | 2026 | 13 | 3  | 2026 | BEC project                                                |
| 41 | BUN Saret           | M | GRU | Economic Research Institute for ASEAN and East Asia (ERIA)  | The regional training on "Data and evidence to catalyze informed decision-making and engagement (DECIDE)", in Bali, Indonesia | 1  | 12 | 2025 | 4  | 12 | 2025 | Economic Research Institute for ASEAN and East Asia (ERIA) |
| 42 | EANG Khy Eam        | M | GRU | National University of Laos (NUOL)                          | Site visit and installation of groundwater monitoring instrument under SGMekong-ROK project                                   | 17 | 2  | 2026 | 21 | 2  | 2026 | SGMekong-ROK, MKCF                                         |
| 43 | EANG Khy Eam        | M | GRU | Cantho University (CU), Vietnam                             | Site visit and installation of groundwater monitoring instrument under SGMekong-ROK project                                   | 23 | 2  | 2026 | 27 | 2  | 2026 | SGMekong-ROK, MKCF                                         |
| 44 | EANG Khy Eam        | F | GRU | Korea-Mekong Water Center (KOMEK)                           | 2nd Capacity Building and 5th Technical Workshop                                                                              | 21 | 9  | 2025 | 27 | 9  | 2025 | KOMEK, MKCF                                                |
| 45 | HEU Rina            | F | GRU | Norwegian Institute for Water Research (NIVA), Oslo, Norway | Training program on field sampling, and microplastics analysis in the laboratory                                              | 21 | 7  | 2025 | 25 | 7  | 2025 | Norwegian Institute for Water Research                     |
| 46 | HEU Rina            | F | GRU | Manipal University Jaipur (MUJ), Rajasthan, India           | ASEAN-India Collaborative Research Project                                                                                    | 27 | 12 | 2025 | 10 | 1  | 2026 | Manipal University Jaipur (MUJ)                            |
| 47 | KAING Vinhteang     | F | GRU | Géosciences Environnement Toulouse, OMP, Toulouse, France   | Exchange visit in the PHC-Tonle Sap project                                                                                   | 1  | 9  | 2025 | 6  | 9  | 2025 | PHC-Tonle Sap programme                                    |

|    |               |   |     |                                                             |                                                                                                   |    |    |      |    |    |      |                                          |
|----|---------------|---|-----|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----|----|------|----|----|------|------------------------------------------|
| 48 | KET Pinnara   | F | GRU | Public Chitose Institute of Science and Technology          | “Sustainable Smart Irrigation Technology Using 3D Crop Image Analysis and Artificial Intelligence | 17 | 9  | 2025 | 23 | 9  | 2025 | CIST’s International Joint Research Fund |
| 49 | LUN Sambo     | M | GRU | Institut Agro Montpellier, France                           | Y1 PhD Mission for analyzing data and attending courses                                           | 3  | 9  | 2025 | 30 | 12 | 2025 | ARTS/IRD                                 |
| 50 | LUN Sambo     | M | GRU | International Atomic Energy Agency, Austria                 | Training course on the Use of Noble Gases in Hydrological Studies                                 | 13 | 10 | 2025 | 17 | 10 | 2025 | IAEA                                     |
| 51 | MENH Leanggek | F | GRU | Norwegian Institute for Water Research (NIVA), Oslo, Norway | Training program on field sampling, and microplastics analysis in the laboratory                  | 21 | 7  | 2025 | 25 | 7  | 2025 | Norwegian Institute for Water Research   |
| 52 | SIM Solida    | F | GRU | Norwegian Institute for Water Research (NIVA), Oslo, Norway | Training program on field sampling, and microplastics analysis in the laboratory                  | 21 | 7  | 2025 | 25 | 7  | 2025 | Norwegian Institute for Water Research   |
| 53 | SONG Layheang | M | GRU | Géoscience Environnement Toulouse, OMP, Toulouse, France    | Exchange visit in the PHC-Tonle Sap project                                                       | 1  | 9  | 2025 | 6  | 9  | 2025 | PHC-Tonle Sap programme                  |

**Annex 14. Short-term overseas capacity building for students (2025-2026).**

| No | Nom et prénom/<br>Name | Sexe/<br>Sex | Dept | Université d'accueil/<br>Host university | Stage/Mobilité<br>Internship/Mobility       | Début/Start |    |      | Fin/End |    |      | Financement/<br>Funding                         |
|----|------------------------|--------------|------|------------------------------------------|---------------------------------------------|-------------|----|------|---------|----|------|-------------------------------------------------|
|    |                        |              |      |                                          |                                             | DD          | MM | YYYY | DD      | MM | YYYY |                                                 |
| 1  | VANN Sreyvin           | F            | GRU  | Institute of Science<br>Tokyo, Japan     | Japan and ASEAN<br>(NEXUS) program          | 10          | 11 | 2025 | 15      | 12 | 2025 | Japan Science and<br>Technology Agency<br>(JST) |
| 2  | CHHENG Por Y           | M            | GRU  | Institute of Science<br>Tokyo            | Japan and ASEAN<br>(NEXUS) program          | 1           | 5  | 2025 | 6       | 5  | 2025 | Japan Science and<br>Technology Agency<br>(JST) |
| 3  | CHHUN Oudom            | M            | GGG  | Kyushu University                        | Internship &Conference                      | 24          | 11 | 2025 | 06      | 12 | 2025 | JASSO                                           |
| 4  | CHOON Pdao             | M            | GGG  | Kyushu University                        | Internship &Conference                      | 24          | 11 | 2025 | 06      | 12 | 2025 | JASSO                                           |
| 5  | CHUON Samphet          | M            | GGG  | Caraga State University,<br>Philippine   | Short-term Exchange                         | 29          | 9  | 2025 | 12      | 10 | 2025 | Caraga State University                         |
| 6  | CHY Kouyseang          | F            | GGG  | Caraga State University,<br>Philippine   | Short-term Exchange                         | 29          | 9  | 2025 | 12      | 10 | 2025 | Caraga State University                         |
| 7  | EAM Limsong            | M            | GRU  | Institute of Science<br>Tokyo, Japan     | Japan and ASEAN<br>(NEXUS) program          | 10          | 11 | 2025 | 15      | 13 | 2025 | Japan Science and<br>Technology Agency<br>(JST) |
| 8  | HAS Kannan             | M            | GGG  | Kyushu University                        | Internship &Conference                      | 24          | 11 | 2025 | 06      | 12 | 2025 | JASSO                                           |
| 9  | LY Rathdane            | M            | GGG  | Kyushu University                        | Internship &Conference                      | 24          | 11 | 2025 | 06      | 12 | 2025 | JASSO                                           |
| 10 | OEUR Soknai            | F            | GGG  | Kyushu University                        | Internship &Conference                      | 24          | 11 | 2025 | 06      | 12 | 2025 | JASSO                                           |
| 11 | PHON Sreypich          | F            | GGG  | Caraga State University,<br>Philippine   | Short-term Exchange                         | 29          | 9  | 2025 | 12      | 10 | 2025 | Caraga State University                         |
| 12 | SOR Sonit              | F            | GIC  | National University of<br>Singapore      | The Role of Technology<br>in Sustainability | 2           | 7  | 2025 | 06      | 07 | 2025 | Self-funding                                    |



|    |                      |   |     |                                                                                  |                                    |    |    |      |    |    |      |                                                           |
|----|----------------------|---|-----|----------------------------------------------------------------------------------|------------------------------------|----|----|------|----|----|------|-----------------------------------------------------------|
| 13 | Thorn Thanysa        | M | GGG | Kyushu University, Japan                                                         | Short-term Exchange                | 14 | 9  | 2025 | 15 | 10 | 2025 | NEXUS Project                                             |
| 14 | THORN Watvatey       | F | GRU | Institute of Science<br>Tokyo, Japan                                             | Japan and ASEAN<br>(NEXUS) program | 1  | 5  | 2025 | 6  | 5  | 2025 | Japan Science and<br>Technology Agency<br>(JST)           |
| 15 | THORN Watvatey       | F | GRU | Institute of Science<br>Tokyo, Japan                                             | Japan and ASEAN<br>(NEXUS) program | 10 | 11 | 2025 | 15 | 11 | 2025 | Japan Science and<br>Technology Agency<br>(JST)           |
| 16 | TOEM Silang          | M | GGG | Kyushu University, Japan                                                         | Short-term Exchange                | 14 | 9  | 2025 | 15 | 10 | 2025 | NEXUS Project                                             |
| 17 | VONG<br>Pichchoranay | F | GIC | Daegu, Daegu<br>Gyeongbuk Institute of<br>Science and Technology,<br>South Korea | Summer Research<br>Internship      | 30 | 6  | 2025 | 08 | 08 | 2025 | Daegu Gyeongbuk<br>Institute of Science and<br>Technology |

**Annex 15. Dispatch Professor at ITC (2025-2026).**

| No | Nom et prénom/<br>Name |                            | Université d'origine/<br>From the University                   | Matière enseignée/<br>Subject taught                                                  | Début/Start |    |      | Fin/End |    |      | Dept |
|----|------------------------|----------------------------|----------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------|----|------|---------|----|------|------|
|    |                        |                            |                                                                |                                                                                       | DD          | MM | YYYY | DD      | MM | YYYY |      |
| 1  | Prof.                  | SIACCHITANO José<br>andré  | Universtité de Toulon- France                                  | Electrical engineering                                                                | 10          | 11 | 2025 | 15      | 11 | 2025 | GIM  |
| 2  | Prof.                  | BERAUD Jean-Luc            | Universtité de Toulon- France                                  | Electrical engineering                                                                | 10          | 11 | 2025 | 15      | 11 | 2025 | GIM  |
| 3  | Dr.                    | CAZES Fabien               | Université Sorbonne Paris Nord                                 | Essais mécaniques et simulations<br>numériques                                        | 16          | 6  | 2025 | 27      | 6  | 2025 | GIM  |
| 4  | Prof.                  | Alessandra Negri           | Università Politecnica delle Marche<br>(UNIVPM), Italy         | Marine mediterranean Sapropel                                                         | 29          | 9  | 2025 | 1       | 3  | 2025 | GRU  |
| 5  | Prof.                  | Massimo Sarti              | Università Politecnica delle Marche<br>(UNIVPM), Italy         | Marine mediterranean Sapropel                                                         | 29          | 9  | 2025 | 1       | 3  | 2025 | GRU  |
| 6  | Dr.                    | Rachel Hurley              | Norsk institutt for vannforskning<br>(NIVA)                    | Macro and Microplastic Assessment<br>in Rivers                                        | 27          | 10 | 2025 | 30      | 10 | 2025 | GRU  |
| 7  | Mme                    | Vilde Kloster<br>Snekkevik | Norsk institutt for vannforskning<br>(NIVA)                    | Macro and Microplastic Assessment<br>in Rivers                                        | 27          | 10 | 2025 | 30      | 10 | 2025 | GRU  |
| 8  | Prof.                  | Nishida Kei                | University of Yamanashi, Japan                                 | seminar on water research and Roca<br>Roca for safe and comfortable water<br>and life | 17          | 11 | 2025 | 20      | 11 | 2025 | GRU  |
| 9  | Dr.                    | WALTER Rudametkin          | University of Toulouse, France                                 | PHC-Tonle Sap program                                                                 | 17          | 11 | 2025 | 21      | 11 | 2025 | GRU  |
| 10 | Dr.                    | BOITHIAS Laurie            | University of Toulouse, France                                 | PHC-Tonle Sap program                                                                 | 17          | 11 | 2025 | 21      | 11 | 2025 | GRU  |
| 11 | Dr.                    | Komal                      | Manipal University, India                                      | Biomass Originated Nanomaterials:<br>Applications in Wastewater<br>Detoxification     | 12          | 1  | 2026 | 02      | 2  | 2026 | GRU  |
| 12 | Mme                    | Annebeth Loois             | Rotterdam University of Applied<br>Sciences (RUAS), Netherland | Water Management                                                                      | 12          | 1  | 2026 | 16      | 1  | 2026 | GRU  |

|    |             |                        |                                                             |                                                            |    |    |      |    |    |      |     |
|----|-------------|------------------------|-------------------------------------------------------------|------------------------------------------------------------|----|----|------|----|----|------|-----|
| 13 | M.          | Tijmen Den Oudendammer | Rotterdam University of Applied Sciences (RUAS), Netherland | Water Management                                           | 12 | 1  | 2026 | 16 | 1  | 2026 | GRU |
| 14 | M.          | Rick Heikoop MURP MEMR | Rotterdam University of Applied Sciences (RUAS), Netherland | Urban Water Management                                     | 22 | 3  | 2026 | 22 | 4  | 2026 | GRU |
| 15 | Asst. Prof. | Nichole Anthony Pacle  | Caraga State University, Philippines                        | Economic Geology                                           | 10 | 12 | 2025 | 17 | 12 | 2025 | GGG |
| 16 | Prof.       | José Luis Molina       | IRD-G-Eau                                                   | Applying IA to hydraulic engineering and water management. | 22 | 6  | 2025 | 28 | 6  | 2025 | GRU |

## **Annex 16. Detail information on research vision, mission, research interests of ETM Unit.**

### **Cambodian Context**

Cambodia has sustained an impressive average annual economic growth. To ensure enduring and inclusive growth, the nation has embarked on a path to promote industrial development, aiming to foster economic diversification, bolster competitiveness, and enhance productivity. Consequently, there has been a notable surge in energy demand and consumption.

In pursuit of sustainable development, ensuring energy security holds paramount importance, necessitating the expansion of energy sector infrastructure and the development of human resources to keep pace with socio-economic progress. The Rectangular Strategy-Phase IV has underscored one of the lingering challenges in diversification and value creation in the industry and service sectors: high energy prices (electricity rates) compared to neighbouring countries.

However, the landscape is evolving. Until recently, the cost of renewable energy has witnessed a remarkable decline, particularly in solar photovoltaic and onshore wind energy technologies. Expanding the share of renewables in Cambodia's energy mix, alongside diversification and utilization of locally available resources, and the adoption of energy efficiency and conservation measures, will be pivotal for the advancement of the energy sector in the country. In this context, innovations in the energy sector, including solar and wind energy, alongside initiatives like turning waste into warmth and energy efficiency enhancements in distribution systems through the integration of energy management systems and trading, conventional oil, gas and rare earth element exploration, present promising avenues for sustainable development and economic growth.

### **The Research Unit**

The research unit, specializing in energy technology and energy management, boasts internationally recognized expertise in specific fields relevant to Cambodian requirements. This expertise contributes significantly to the exploration of conventional energy resources, as well as the advancement of new and renewable energy sources and energy efficiency and conservation efforts. This is achieved through extensive research, collaborations with international partners, private sectors, and pertinent government agencies, and the cultivation of skilled human resources.

The areas of research and collaboration prioritized by the unit encompass a wide range of topics, including but not limited to biomass and agricultural waste conversion for energy production, solar photovoltaic and thermal energy systems, wind energy technologies, innovative smart grid solutions, micro-grid development for remote areas, energy consumption measurement and analysis methodologies, energy management systems, simulation of large-scale energy systems, and exploration of conventional energy resources.

### **Vision**

To be leading contributor in supporting national energy security through research and innovation, knowledge creation and technology transfer with focus on energy sources diversification, efficient use of energy and environmental friendliness.

### **Mission**

- Producing competent human resources in energy related fields.

- Conducting research in new and renewable energy, energy conversion and recovery, energy conservation, saving and management, and exploration of conventional energy resources to address local and regional issues.
- Closely collaborating with related Ministries, national and international partners and private sectors.
- Disseminate research findings and transfer technologies to the society

## Research Themes

The multidisciplinary team addresses scientific issues in the following sectors:

- New and Renewable Energy: Biomass, Solar PV, Solar PV/T, and Wind Turbine with a focus on design and modelling of processes, fuel and emissions measurements, lab and pilot scale equipment.
- Energy Efficiency and Conservation: Heat recovery, Waste to energy, thermal systems optimization, energy consumption measurement and modelling.
- Smart grid: connexion from renewable sources and optimization of grid electricity distribution and micro-grid for remote areas.
- Energy Management: energy management system, modelling and optimization of large energy systems.

Exploration of conventional energy resources: depositional environment and reservoir characterization, mapping of hydrothermal alteration related base metal deposits, geological mapping and investigation of hydrocarbon potential.

## Researchers

### Senior researchers (10M, 2F)

Dr. KRET Kakda, (Head of ETM Research Unit), Ph.D in Geophysics, Kyushu University, Japan  
*Geophysical exploration (seismic, magnetic, electrical and resistivity methods), Oil and Gas Exploration, remote sensing and GIS, economic geology.*

Dr. OR Chanmoly (Director of RIC), Ph.D. in Petroleum Production Engineering, Kyushu University, Japan  
*Enhanced oil recovery; reservoir engineering; CO<sub>2</sub> sequestration; biomass to energy*

Dr. CHAN Sarin (Head of Industrial and Mechanical Engineering Department), Ph.D. in Engineering, Institute of Technology Bandung, Indonesia and Keio University, Japan  
*Renewable energy, waste heat recovery and heat-activated cooling system*

Dr. AM Sokchea, Ph.D in Energy Engineering, France  
*Energy Power System*

Dr. BUN Long, Ph.D. in Electrical Engineering, INP Grenoble, France  
*Power system, renewable energy system, fault diagnosis*

Dr. CHRIN Phok, Ph.D. in Electrical Engineering, Université Paul Sabatier, Toulouse, France  
*Renewable energy, frugal engineering, asynchronous generator*

Dr. VAI Vannak, Ph.D. in Electrical Engineering, Université Grenoble Alpes, France  
*Power distribution system planning, Rural electrification, Optimization*

Dr. KIM Bunthern, Ph.D in Electrical and Electronics Engineering, Toulouse INP, France  
*Control systems, Renewable energy, Robotics*

Dr. ENG Chandoeun (Head of Faculty of Geo-resources and Geotechnical Engineering), Ph.D. in Geophysics, Kyushu University, Japan  
*Geophysical exploration, Economic geology, Oil and Gas Exploration*

Dr. KHON Kinsrornn (Head of Master program, ETM Research Unit), Ph.D., Power system, University of Toulouse III.  
*Power System, Microgrid, Optimization, Planning*

Dr. SIO Sreymean, Petroleum Geology, ITC  
*Petroleum Geology, Mineral and Petroleum Exploration, Characteristic of Mineral Deposit and Petroleum System*

Dr. PECH Sopheap, Vice-Head of Faculty of Geo-resources and Geotechnical Engineering, ITC.  
*Petroleum geology*

### **Lecturer-researcher (3M, 1F)**

Dr. VONGCHANH Kinnaeth, Ph.D. Institute of Technology Bandung (ITB) and Hokkaido University (HU)  
*Energy Efficiency, Renewable energy, Biomass energy, Drying, Heat Stress*

Mr. EAM Dara, master's in electrical and Energy Engineering, Institute of Technology of Cambodia.

Dr. Heang Latin, PhD, Institute of Technology of Cambodia  
*Biomass to energy, Mechanical design, Heat Stress*

Dr SAM Sopheap, PhD, Yokohama National University  
*Energy materials, Thermal materials*

### **Fulltime-researcher (0M, 1F)**

Mrs Eng Samphors, Ph.D candidate, Université de Mons, *Distribution Management System, Renewable Energy Micro grid planning & Energy Storage, Distribution automation & Real time monitoring system*

### **Academic and Research Partners**

Universiti Teknologi Malaysia (UTM)  
University of Liège  
Université Claude Bernard Lyon 1  
Kyoto University (KU)  
Université Grenoble Alpes (UGA)  
Kyushu University  
National University of Singapore (NUS)  
The Hong Kong Polytechnic University (PolyU),  
Kyoto University (KU)

### **Non-academic partners**

Ministry of Mines and Energy, Cambodia  
Ministry of Education, Youth and Sports, Cambodia  
Ministry of Industry, Science, Technology and Innovation, Cambodia

Cambodian Climate Change Alliance  
 APSARA Authority  
 The Energy Conservation Center Japan (ECCJ)  
 Asean Center of Energy (ACE)  
 JICA  
 G2Elab

### **Industrial Partners and NGOs**

Electricité du Cambodge  
 GERES  
 ORBIT P. A Co.,Ltd  
 Health & Environment International Trust (HEIT)  
 Institut Francais pour la Performance du Batiment (IFPEB)  
 EnergyLab  
 GGGI  
 ATS  
 Sevea Consulting  
 EnerCam Co.,Ltd  
 Samnang Angkor Development Co Ltd  
 IMECS (CAMBODIA) CO.,LTD  
 SMEs involved in Solar Energy development  
 Angkor Resources Corp  
 Matlab Co., LTD  
 Renaissance Minerals (Cambodia) Limited  
 UNDP

### **Publications of ETM researchers for the last 5 academic years**

From 2021-2022 to 2025-2026, there are in total **133 research outputs** from ETM unit classified into three categories: Index publications, non-index publications, and Conferences as shown in the Table 6.

Table 6: Summary of number of publications in the last 5 years.

| <b>Publication classification/year</b> | <b>2025-2026</b> | <b>2024-2025</b> | <b>2023-2024</b> | <b>2022-2023</b> | <b>2021-2022</b> | <b>Total</b> |
|----------------------------------------|------------------|------------------|------------------|------------------|------------------|--------------|
| Index publications                     | 2                | 1                | 18               | 3                | 14               | <b>38</b>    |
| Non-index publications                 | 0                | 0                | 2                | 0                | 0                | <b>2</b>     |
| Conferences                            | 6                | 25               | 30               | 27               | 5                | <b>93</b>    |
| <b>Total</b>                           | <b>8</b>         | <b>26</b>        | <b>50</b>        | <b>30</b>        | <b>19</b>        | <b>133</b>   |

## **Annex 17. Detail information on research vision, mission, research interests of FTN Unit.**

### **Cambodian Context**

Although Cambodia is still mainly a rural country with 58% of the population being farmers, the processing of agricultural products is generally family-based or within informal industrial structures, with a low added value and a low level of technology, thus limiting their ability to compete in international markets. Only 10% of the industrial workers are in the food-beverage sector, a great majority (97%) of them working in micro-enterprises with no foreign investment. Besides the need of training technicians and engineers with a focus on agricultural products transformation and quality control, research centres with high level faculty staff are needed to do research on food processes, develop original and innovative products adapted to Cambodian tastes and habits (dry or fermented products), and assist the growing industrial sector in the quality and safety assessment of the food chain.

### **The Research Unit**

The research unit Food Technology and Nutrition is established to enhance the development of food and beverage industries in Cambodia through cost-effective collaborative research and innovation programs between a diverse range of economic partners and the researchers of the Institute of Technology of Cambodia. The Research Unit promotes technical platforms and research projects to support the sectors of food and feed processing, food storage and preservation, and innovative products from agriculture and forestry. Other aspects as product design, cost-effectiveness, waste and by-products minimization, energy consumption reduction or valorisation of Cambodian biodiversity are also studied in the Research Unit. The main goal of this unit is to become a reliable center for research, training and consultancy services in food processing improvement, food fermentation, food product development and innovation, value addition of agricultural products, food nutrition, food safety, food quality analyses and food preservation in order to sustain the development of Cambodia.

### **Vision**

To be an excellent unit for research, innovation, training and consultancy services in the field of food science and technology contributing to sustainable development of Cambodia.

### **Mission**

- To increase the visibility of FTN research unit by strengthening researchers' capacity in food related fields to be nationally and regionally recognized
- To create standardized laboratories for research and hall technology for pilot scale
- To boost the research activities through local and international collaborations (Universities, Government, SMEs, NGOs)
- To promote prototyping and technology transfer; and to provide training and consultancy services to food industries and relevant stakeholders
- To disseminate scientific outputs through national and international publications and scientific events

### **Research Theme**

1. Drying technology
2. Biotechnology (fermentation, microbiology, plant)
3. Extrusion technology
4. Extraction and purification technology
5. Beverage technology



6. Food product development and innovation
7. Food safety and shelf life improvement
8. Food composition and food contaminant analysis

## Researchers

### **Senior researcher (0M, 11F)**

Dr. TAN Reasmey (Deputy Director of RIC), Ph.D in Bioengineering, Tokyo Institute of Technology, Japan

*Food Biotechnology (Vegetable and cereal fermentation), Food Product Development and Innovation, Food and Water Microbiology, Anaerobic Digestion*

Dr. IN Sokneang (Dean of Faculty of Chemical and Food Engineering), Ph.D in Science and Processes of Food and Bio-products, AgroParisTech, Paris, France

*Food Safety and Risk Assessment, Nutrition, Food Processing*

Dr. PHAT Chanvorleak (Head of FTN Research Unit), Ph.D in Food Chemistry, Chung-Ang University, Anseong, South Korea

*Food chemistry, Food Contaminant Analysis, Agrochemical Analysis, Mycotoxin Analysis*

Dr. SUONG Malyna, Ph.D in Bioengineering, University of Montpellier, France

*Plant Biodiversity, Microbiology, Genetic Engineering*

Dr. HOUNG Peany, Ph.D in Chemical Science and Engineering, Tokyo Institute of Technology, Japan

*Chemical Engineering*

Dr. HOR Sivmey (Vice-Dean of Faculty of Chemical and Food Engineering), Ph.D in Biochemical and Physicochemical of Food, SupAgro Montpellier, France

*Post-harvest Quality, Transformation of Tropical Fruits*

Dr. SROY Sengly, Ph.D in Nutrition and Food Science, Montpellier SupAgro University, France

*Food Nutrition, Food Processing and Food Development*

Dr. EK Pickmony, PhD. in Food Science, Washington State University, USA

*Food Analysis, Cereal Science, Extrusion, Food ingredients, Food Quality, Starch, Biopolymers, Carbohydrates, Plant Proteins*

Dr. MORM Elen, Ph.D in Chemical Engineering (Transfer, Interfaces and Processing), Free University of Brussels, Belgium

*Drying of Agricultural Crops and Herbal, Bioethanol*

Dr. PHUONG Heangsim, PhD in Processing Engineering, University of Nantes, France

*Enzymes, Enzyme Activity, Biomass, Sugar, Proteins, Carbohydrate Biochemistry*

Ms. YIN Molika, Ph.D in Food Science and Nutrition, Institute Agro/SupAgro Montpellier, France

*Food Product Development and Sensory Evaluation*

### **Lecturer-Researcher (2M, 3F)**

Dr. MITH Hasika, PhD in Food Science, Université de Liège, Belgium.

*Plant's Essential Oils/Extracts, Antimicrobials, Antioxidants, Food Microbiology, Food Preservation and Processing, Agro-Food Industry Management*

Dr. YOEUN Sereyvath, PhD in Science, Chonnam National University, South Korea

*Biotechnology, Organic Compounds Analysis (Pesticides and others)*

Dr. THANH Channmuny, PhD in Health and Food Science, University of Montpellier, France  
*Food science, Food microorganism*

Dr. CHIN Lyda, PhD in Agro-Industrial Product Development, Kasetsart University, Thailand  
*Food processing, Food product development*

Dr. OEUM Kakada, PhD of Science in Basic Science, Chungnam National University, South Korea  
*Cell Biology, Microbiology, Cancer Biology, Cell cycle, Immunology, and Entomology*

***Full-time researchers (2M, 3F)***

Mr. LY Luka, Master in Agro-Industrial, Institute of technology of Cambodia, Cambodia  
*Food processing, Quality control*

Mrs. MOM Vattana, Master in Food Science, Kasetsart University, Thailand  
*Food processing, Food product development*

Mr. LAY Sovannmony, Master in Chemical Engineering, De la Salle University, Philippines  
*Extraction*

Mr. SAY Manith, Master of Science in Food Technology, Khon Kaen University, Thailand  
*Snacks production, Frying process*

Ms. SIENG Sreyvich, Master in Chemical Engineering, Gadjah Mada University, Indonesia  
*Chemical Engineering*

Ms. Kong Chhorvy, Master, Institute of Technology of Cambodia, Cambodia

**Academic and Research Partners**

Tokyo Institute of Technology, Japan

Yamagata University, Japan

Université de Liège, Belgium

Université de Bruxelles, Belgium

SupAgro-Montpellier, France

AgroSup-Dijon, France

Polytech Lille, France

Institut National Polytechnique de Toulouse (INP Toulouse), France

French Agricultural Research Centre for International Development (CIRAD), France

Institut de recherche pour le développement (IRD), France

Aix-Marseille Université, France

Université Claude Bernard Lyon 1, France

Kasetsart University, Thailand

Hanoi University of Science and Technology (HUST), Vietnam

Chung-Ang University, South Korea

Chonnam National University, South Korea

**Non-academic partners**

Ministry of Education, Youth and Sports, Cambodia

Ministry of Industry and Handicraft, Cambodia  
 Ministry of Commerce, Cambodia  
 General Secretariat of the National Science and Technology Council, Ministry of Planning  
 National Productivity Centre of Cambodia (NPCC), Cambodia  
 Ministry of Environment, Cambodia  
 Tonle Sap Authority, Cambodia  
 Department of Agro-industry, Ministry of Agriculture, Forestry and Fisheries, Cambodia  
 Ministry of Rural Development, Cambodia

### **Industrial Partners and NGOs**

LyLy Company Co. Ltd  
 Cambodia Brewery Limited  
 Baca-Villa Productions Co Ltd  
 Cambodia Beverages Company  
 Mee Chiet  
 Eche Ngov Heng Food Production of Kampot Co., Ltd  
 Kang Sosedra Enterprise  
 Phnom Penh Safe Food  
 Healthy Food Enterprise  
 Dara Food Enterprise  
 DKSH  
 Indochina Rice Mill Limited  
 Food Enterprise  
 Confirel  
 Golden Silk  
 Rosmeric Paper  
 Chaktomuk Pest Services Co., Ltd (Orkin Cambodia)  
 Ringacam  
 Khmer Fresh Milk Co., Ltd  
 Bodia Spa  
 Aprati Foods (Cambodia) Ltd

### **Publications of FTN researchers for the last 5 academic years**

For the last 5 academic years, there are in total 192 research outputs from FTN unit classified into three categories: Index publications, Non-index publications, and Conferences as shown in the Table 7 below.

Table 7: Summary of number of publications in last 5 years

| <b>Publication classification/year</b> | <b>2025-2026</b> | <b>2024-2025</b> | <b>2023-2024</b> | <b>2022-2023</b> | <b>2021-2022</b> | <b>Total</b> |
|----------------------------------------|------------------|------------------|------------------|------------------|------------------|--------------|
| Index publications                     | 6                | 5                | 14               | 14               | 8                | <b>47</b>    |
| Non-index publications                 | 6                | 3                | 4                | 6                | 7                | <b>26</b>    |
| Conferences                            | 34               | 41               | 17               | 16               | 11               | <b>119</b>   |
| <b>Total</b>                           | <b>46</b>        | <b>49</b>        | <b>35</b>        | <b>36</b>        | <b>26</b>        | <b>192</b>   |

## **Annex 18. Detail information on research vision, mission, research interests of MIT Unit.**

### **Cambodian Context**

In Cambodia, the rapid growth of the IT and communications sector is at the heart of a digital transformation that spans across the entire nation, revolutionizing the way data is collected, transferred, and utilized. This evolution is especially significant in sectors such as agriculture, public health, and urban management, where the ability to generate vast amounts of data can lead to innovative solutions to pressing challenges. The emerging of generative AI and its popularity underscore the transformative potential of advanced technologies in creating new content, solving complex issues, and streamlining decision-making processes. Amidst this digital revolution, the integration of electronics and IoT technologies is pivotal for developing interconnected systems that enhance real-time data processing and communication capabilities. These technologies are crucial for facilitating immediate and effective responses to environmental crises, public health emergencies, and climate change challenges. Similarly, advancements in robotics and automation are driving significant improvements in efficiency and productivity across multiple industries, including food, mining, and manufacturing. By leveraging robotics, Cambodia is able to introduce smart, affordable, and innovative solutions that can automate complex processes, boost production efficiency, and foster the growth of SMEs with high-technology aspirations but limited capital.

As Cambodia navigates through these technological advancements, the emphasis on these key research areas is critical. These technologies not only promise to enhance the nation's responsiveness to immediate and long-term challenges but also pave the way for a future that embraces sustainable development and technological sophistication.

### **Vision**

To be a center of excellence in developing innovative solutions within the realms of Intelligent Mechatronics, Artificial Intelligence, and Advanced Telecommunications.

### **Mission**

To advance applied multidisciplinary research of Mechatronics, Artificial Intelligence, Telecommunication, and Aerospace through national and international collaborations for fostering national academic community and serving society.

### **The Research Themes**

The combination of the different areas: information science and mechatronics allows developing specific topics related to the Cambodian context as:

- Aerospace and Space Engineering
- Artificial Intelligence (Machine Learning, Deep Learning, and Optimization)
- Intelligent Mechatronics
- Telecommunication and Internet of Things
- Operation Research
- Supply Chain Management

### **Researchers**

#### **Senior Researchers (18M, 0F)**

Dr. VALY Dona (Head of MIT research unit), Ph.D. in Engineering Science and Technology, Université catholique de Louvain, Belgium.

*Document Image Analysis, Computer Vision, Natural Language Processing*

Dr. SRANG Sarot, Ph.D. in Engineering, Tokyo Institute of Technology, Japan  
*Instrumentation, estimation, control and robotics, dynamic modelling, simulation, Artificial Intelligence.*

Dr. PEC Rothna, PhD from Chung Ang University, Republic of Korea  
*Signal Processing and Mobile Communication*

Dr. THOURN Kosorl, Ph.D. in International Development Engineering, Tokyo Institute of Technology, Japan  
*Computational methods for electromagnetics, electromagnetic compatibility, wave propagation, pattern recognition, image processing, computer vision*

Dr. KIM Bunthern, Ph.D. in Electrical Engineering, INP Toulouse, France  
*Control system, robotics, renewable energy, automation, energy generation system*

Mr. SOK Kimheng, Master in Computer Science, INSA de Rennes, France  
*Privacy, Security, Blockchain*

Dr. PO Kimtho, Ph.D. in Communication Engineering, Tokyo Institute of Technology, Japan.  
*Digital Signal Processing; radio communication; microwave and RF systems*

Dr. SRENG Sokchenda, Ph.D. in Telecommunication Engineering, INP Toulouse, France  
*Wireless communications, satellite communications, digital image processing*

Dr. SIM Tepmony, Ph.D. in Information Science, Electronics and Communications, Telecom Paris, France  
*Markov theory; statistics; probability; maximum likelihood*

Dr. PHAUK Sökkhey, Ph.D. in Interdisciplinary Intelligent System, majoring in Data Science, University of the Ryukyus, Japan  
*Educational Data Mining, AI in Education, Data Science in agriculture, and Data Science for Sustainable Development Goals (SDGs)*

Dr. KEAN Jeudy, Ph.D. in Telecommunication Engineering, INP-ENSEEIH Toulouse, France.

Dr. KUY Movsun, Ph.D. in Computer Network, Université de Namur, Belgium.  
*Computer Networking*

Dr. NOU Sotheany, Ph.D., Institute of Science Tokyo, Japan.  
*AI, Computer Vision, Image Processing*

Mr. CHOU Koksai, Master in Logistics and Supply Chains System Engineering, Sirindhorn International Institute of Technology, Thammasat University, Thailand  
*Computer Vision, Robotic, Automation System, Supply Chain*

Mr. KEO Chivorn, Master in Industrial and Mechanical Engineering from Institute of Technology of Cambodia, Cambodia.  
*Mechanical and Control System*

Mr. PICH Reatrey, Ph.D. candidate in Network and Cyber Security, Institute of Technology of Cambodia, Cambodia.  
*AI Engineering and Cybersecurity*

Dr. NGET Rithea, Ph.D. in information Science, Japan Advanced Institute of Science and Technology, Japan  
*Network coding and IoTs*

Mr. BUN Menghorng, Ph.D. candidate in Control and Diagnostic of Electrical System, INP-ENSEEIH Toulouse, France.

### **Lecturer-researchers (3M, 0F)**

Mr. HEL Chanthan, Master in Telecommunication, Chulalongkorn University, Thailand  
*Wireless communication, Technology for agriculture*

Dr. HAS Sothea, Ph.D. in Theoretical study and applications of machine learning methods, Sorbonne Université, France  
*Supervised/unsupervised/deep learning, aggregating and modeling*

Mr. CHHORN Sopheaktra, Master in Electrical and Energy Engineering from Chulalongkorn University, Thailand.  
*Measurement instrument, Internet of Thing and Medical device*

### **Fulltime-researchers (8M, 0F)**

Mr. SREY Sokserey, Master of Engineering in Robotics, Institute of Technology of Cambodia, Cambodia.

Mr. TANG Sou Bun, Master of Engineering in Robotics, Institute of Technology of Cambodia, Cambodia.

Mr. Tim Haksong, Master of Engineering in Robotics, Institute of Technology of Cambodia, Cambodia

Mr. CHIN Chan Daraly, Ph.D. candidate in Network and Machine Learning, INP-ENSEEIH Toulouse, France.

Mr. Em Hengly, PhD. candidate in Multi-Metric Soft Contrastive Learning for Sleep Apnea Severity and Outcome Prediction, Université de Mons, Belgium.

Mr. Nhim Malai, PhD. Candidate in Early identification of Diabetes Risk in Cambodia using Machine Learning on Lifestyle factors, Université catholique de Louvain, Belgium.

Mr. Liv Bunthorn, PhD. Candidate in Enhancing Khmer Language Accessibility Through AI-Driven Air-writing Recognition, Université catholique de Louvain, Belgium

Mr. Khun Dararith, PhD. Candidate in Biostatistics, Statistics, Université de Namur, Belgium

### **Academic Partners**

Université de Namur, Belgium

Université de Liège, Belgium

Université catholique de Louvain, Belgium

Université de Mons, Belgium

Tokyo Institute of Technology, Japan

Toyohashi University of Technology, Japan  
 Chitose Institute of Science and Technology, Japan  
 University of Fukui, Japan  
 Tokyo Polytechnic University, Japan  
 INP Toulouse, France  
 Institut Mines-Telecom, France  
 Universitas Pendidikan Ganesha, Indonesia  
 Universiti Kebangsaan Malaysia, Malaysia  
 University of Sydney, Australia

### **Non-academic partners**

Asian Office of Aerospace Research and Development  
 Ministry of Education, Youth and Sports, Cambodia  
 Ministry of Water Resources and Meteorology, Cambodia  
 Ministry of Rural Development, Cambodia  
 Ministry of Industry and Handicraft, Cambodia  
 Ministry of Public Works and Transport, Cambodia  
 Ministry of Environment, Cambodia  
 Ministry of Health, Cambodia  
 Ministry of Culture and Fine Art. Cambodia  
 JICA, Japan  
 Institut Pasteur du Cambodge

### **Industrial Partners and NGOs**

Solar Green Energy Co., Ltd. Cambodia  
 AI Farm  
 Louvain Cooperation  
 Eclosio  
 iDE  
 Yamato Green Co., Ltd.

### **Publications of MIT researchers for the last 5 academic years**

From 2020-2021 to 2024-2025, there are in total 195 research outputs from MIT unit classified into three categories: Indexed Publications, Non-indexed Publications, and Conference Papers as shown in the Table 8 below.

Table 8. Summary of number of publications in last 5 years

| <b>Publication classification/year</b> | <b>2025-2026</b> | <b>2024-2025</b> | <b>2023-2024</b> | <b>2022-2023</b> | <b>2021-2022</b> | <b>Total</b> |
|----------------------------------------|------------------|------------------|------------------|------------------|------------------|--------------|
| Indexed Publications                   | 7                | 3                | 7                | 8                | 6                | <b>31</b>    |
| Non-indexed Publications               | 10               | 5                | 10               | 2                | 6                | <b>33</b>    |
| Conferences                            | 11               | 65               | 40               | 30               | 1                | <b>147</b>   |
| <b>Total</b>                           | <b>28</b>        | <b>73</b>        | <b>57</b>        | <b>40</b>        | <b>13</b>        | <b>211</b>   |

## **Annex 19. Detail information on research vision, mission, research interests of MSS Unit.**

### **Cambodian Context**

To achieve the Sustainable Development Goals (SDGs), Cambodia has embraced the UN 2030 Agenda for SDGs. The country aims to become an upper middle-income status by 2030. To achieve this, the government has set up a policy to push up research and innovation that reflects the country's needs. Promoting domestic products is one of the focuses of the policy that requires research and innovation, specifically in engineering and construction materials.

Currently, raw rubber in Cambodia is one of the main agro-industrial products contributing about USD 400 million in 2021 to the country's economy through exportation. With the limitation of knowledge in rubber technology in Cambodia, almost all the value-added rubber products such as rubber bands, gloves, flip flops, and rubber inner tubes are imported to support the needs of the country. Moreover, if looking at the construction sector, new challenges have to be met: the construction sector boomed in 2016 with a total investment of 8.5 b\$. There are over 900 high-rise buildings (more than 5 floors), the majority of them in Phnom Penh and Sihanoukville. The fast evolution of Cambodian cities causes issues of quality (qualified human resources, redefining building standards), sustainability (depletion of local resources in construction materials), and affordability with eco-friendly materials that can adapt to local resources.

The MSS is not limited to the building industry, as there are also big challenges in recycling or recovering materials from waste, replacing polymers from fossil origin with natural polymers, and producing sustainable products from local materials. The Materials Science and Structure Research Unit was established to build up a group of researchers with similar skills and working fields as an interdisciplinary to achieve a common goal.

### **Research Unit**

The Material Sciences and Structure Research Unit focuses on research and innovation trends in engineering and construction material, especially with low carbon impact materials and light structures, including geotechnical engineering, underground structures, structural engineering, minerals, polymers, ceramics and alloys to address specific needs for Cambodia. The research unit also pays attention to the Architectural Engineering field, especially the studies on affordable housing. Our researchers work closely with local and international partners to push applied research and transform it into innovation for promoting the economic growth of the country.

### **Vision**

The vision of the MSS Research Unit is to be a national leading and excellent center for research, development, and innovation that can offer advanced technology and technical solutions in the fields of materials and structures to the industries. MSS Research Unit will be a source for technical innovation transfer, and producing scientists and engineers.

### **Mission**

- Conduct basic and applied research focused on materials and structure
- Promote R&D linkage between government, universities, and private sectors
- Promote research capacity, scientific communications, and entrepreneurship
- Promote technology transfer, develop product prototypes, and push for commercialization



## Research Theme

### ***Materials Science and Engineering***

- Mineralization
- Engineering materials such as bio-materials, polymer, rubber, and ceramic
- Construction Materials such as stabilized soils, eco-pave blocks, cementitious material, and bitumen

### ***Structural Engineering***

- Structural design & performance of buildings
- Heritage Preservation
- FEM simulation and analysis
- Composite structures
- Post-installed anchors such as bundled and glass fiber rebars

### ***Architectural Engineering***

- Life cycle assessment
- Building Information Modeling
- Green buildings
- Sustainable design

### ***Transport and Infrastructure***

- Air pollution control
- Traffic
- Infrastructure development
- Bridge engineering

## Researchers

### **Senior Researchers (8M, 2F)**

Dr. DOUNG Piseth (Head of MSS Research Unit), PhD in Civil Engineering, Tokyo Institute of Technology, Japan

*Steel structures, Tall steel/concrete building systems, Earthquake engineering, and Structural engineering*

Asst. Prof. Dr. YOS Phanny, PhD in Materials Engineering, Kyushu University, Japan

*Natural rubber, Natural rubber latex, Polymer composites*

Asst. Prof. Dr. HAN Virak, PhD in Civil Engineering, Kochi University of Technology, Japan

*Civil engineering materials, Concrete, Modeling*

Asst. Prof. Dr. Phun Veng Kheang, PhD in Transport Engineering, Tokyo Institute of Technology, Japan

*Transport engineering, planning, and policy*

Dr. HIN Raveth, PhD in Material Engineering, University of Rennes 1, France

*Mechanical Behavior of Materials, Glass Structures, Civil Engineering*

Dr. KAN Kuchvichea, PhD in Civil Engineering, Université Libre de Bruxelles, Belgium

*Soil mechanics, Construction materials*

Dr. HENG Sounean, D. Eng., INSA Rennes, France

*Mechanics of materials and structures*

Dr. OEUNG Thaileng, D. Eng., INSA Rennes, France  
*Steel-concrete composite materials and structures*

Dr. Saum Narith, PhD in Transport Engineering, Thammasat University - Hokkaido University, Thailand & Japan  
*Transportation Engineering, Machine Learning, Deep Learning, Optimization Algorithm*

Mrs. KETH Kannary, PhD candidate, Université Libre de Bruxelles, Belgium, and ITC  
*Research area: Architectural design, Building Information Modeling (BIM)*

### **Lecturer-Researchers (0)**

#### **Full-time Researchers (6M, 3F)**

Mrs. AUN Srean, PhD candidate, Université de Rennes, France, and ITC  
*Research area: Biomaterials/ Bioplastic innovation, Air pollution control*

Mr. LONG Makara, PhD candidate, University of Liege, Belgium, and ITC  
*Research area: Sustainable building design, Life cycle assessment, Green building*

Mr. SOM Chansamnang, PhD candidate in Civil Engineering, INSA Rennes, France, and ITC  
*Research area: Effect of the addition of natural fibers on shrinkage, Cracking risk, and Healing capacity of cementitious materials*

Mr. NUTH Visal, PhD candidate, Université de Lorraine, France, and ITC  
*Research area: Soil mechanics, Road structure*

Mr. PLACK Sokhit, PhD candidate, Institute of Technology of Cambodia  
*Research area: Transport engineering, Traffic and air pollution*

Mr. CHANN Socheata, PhD candidate, INSA Rennes and ITC  
*Research area: Tempered glass, Foamed concrete with recycled and geopolymer materials*

Mr. LEAN Karana, PhD candidate, Institute of Technology of Cambodia  
*Research area: Durability and Microstructural Behavior of Glulam under Wet–Dry Cycling, Alkaline Aging, and Outdoor Creep*

Ms. Yok Yavorn, PhD candidate, Institute of Technology of Cambodia  
*Research area: Varlorization of Construction And Demolition Waste*

Ms. Sreng Laymey, PhD candidate, Gyeongsang National University, Korea  
*Natural rubber, natural rubber latex*

### **Academic and Research Partners**

Université Libre de Bruxelles, Belgium  
Université de Liege, Belgium  
Toronto Metropolitan University, Canada  
INSA de Rennes, France  
Sorbonne Paris Nord University, France  
Université de Lorraine, France  
Université de Rennes, France

Université de Rennes 1, France  
 University of Stuttgart, Germany  
 Fukuoka University  
 Kanazawa University, Japan  
 Kyushu University, Japan  
 Tokyo Institute of Technology, Japan  
 Yokohama National University, Japan  
 Universiti Sains Malaysia, Malaysia  
 Chulalongkorn University, Thailand  
 King Mongkut's University of Technology Thonburi (KMUTT), Thailand

### **Non-Academic Partners**

Ministry of Education, Youth and Sports, Cambodia  
 Ministry of Public Works and Transport, Cambodia  
 Ministry of Culture and Fine Arts, Cambodia  
 Ministry of Mines and Energy, Cambodia  
 Ministry of Environment, Cambodia  
 Cambodia Rubber Research Institute, Cambodia

### **Industrial Partners and NGOs**

SNP-PT International Co., Ltd, Thailand  
 Fyfe Asia Pte Ltd, Singapore  
 IKEE group, Cambodia  
 HILTI, Thailand  
 Cart Tire Co., Ltd  
 ISI Steel

### **Publications of MSS researchers for the last 5 academic years**

From 2020-2021 to 2024-2025, there are in total 129 research outputs from the MSS unit classified into three categories: Indexed Publications, Non-indexed Publications, and Conference Papers as shown in the Table below.

Table 9: Summary of number of publications in last 5 years

| <b>Publication classification/year</b> | <b>2025-2026</b> | <b>2024-2025</b> | <b>2023-2024</b> | <b>2022-2023</b> | <b>2021-2022</b> | <b>Total</b> |
|----------------------------------------|------------------|------------------|------------------|------------------|------------------|--------------|
| Indexed Publications                   | 10               | 4                | 5                | 5                | 2                | <b>26</b>    |
| Non-indexed Publications               | 5                | 8                | 1                | 3                | 1                | <b>18</b>    |
| Conference Papers                      | 11               | 21               | 22               | 41               | 9                | <b>104</b>   |
| <b>Total</b>                           | <b>26</b>        | <b>33</b>        | <b>28</b>        | <b>49</b>        | <b>12</b>        | <b>148</b>   |

## **Annex 20. Detail information on research vision, mission, research interests of WAE Unit.**

### **Cambodian Context**

Water is a huge issue in the world and particularly in Cambodia. Although the country is crossed by the Mekong river and possesses a large fresh water lake (the Tonle Sap Great lake), Cambodia is vulnerable to the succession of annual floods and droughts with severe episodes. Many problems arise due to changes in land use, natural resources exploitation, pollution, and climate change. Moreover, there is concern with current and future situation of intensive use of ground water for irrigation in the dry season, sea water intrusion in the coastal areas, heavy metals release due to mining activities, non-point source pollution from agriculture, soil erosion, air pollution, and urbanization with no wastewater treatment. Besides regional water environmental issues, the quality of water is low in rural areas or low-income urban environments with contamination of agrochemical, faecal contamination and strong arsenic concentration in ground water in the Lower Mekong area.

Research plays a pivotal role in environmental protection by providing the knowledge to better understand and manage issues such as climate change and water quality & availability. In parallel, the development of innovative and environmentally friendly technologies can offer sustainable economic opportunities through the responsible management of both natural and man-made resources. Often, environmental challenges go beyond national frontiers and require a coordinated approach in ASEAN and at global level.

#### **Vision**

Our vision is to become a well-known knowledge hub to provide the scientific research information on utilization and management of water and environment for sustainable development in the region.

#### **Purposes**

- To bring together institutional-wide centers and researchers to tackle national, regional and global water and environmental issues through multi and interdisciplinary research under Research and Innovation Center.
- To develop and offer graduate program on Science in Water and Environmental Engineering that support to country development and benefit to civil society.
- To provide knowledge, skill, tool, and awareness pertaining to water and environmental quality and human-environment interactions in order to improve and sustain the function of environmental systems, protect human health and economic growth.

#### **Mission**

1. Conducting multi-disciplinary and interdisciplinary both basic and applied research on the utilization and protection of the environment, minimization and treatment of pollution particularly to the water resources, hydrological and ecological systems.
2. Developing, demonstrating and disseminating new finding and methodology supporting to science and engineering for the environmental management and monitoring, disaster management, ecological restoration, treatment and disposal of pollution.
3. Collaborating on the local and global scale in research and education to protect the precision resources that comply with national policy and SDGs to sustain human life.
4. Educating and training personnel for management, supervision and operation of water resources and environmental systems.

#### **Research Theme**

The research unit Water and Environment is established to address the needs of Cambodia in this very large field. The research Unit has strong interactions with a worldwide community of

researchers and stakeholders focused on various research theme. The research activity and themes include the following but not limited to:

- **Hydrology and Water Resources Management:** Hydrological Modeling and Analysis, Hydrogeological Analysis, Groundwater and surface water interaction, Water Balance, Soil Erosion, River Bank Erosion and failure, Land Use Change, Environmental Modelling, Watershed Carrying Capacity, GIS and Remote Sensing, Hydraulic Structure ...
- **Climate Change and Disaster Risk Management:** Weather Forecasting, Weather Forecasting, Climate Change Modeling, Climate Change Downscaling, Climate Change Impacts, Climate Change Vulnerability and Adaptation, Tropical Meteorology, Flood/Drought Management, other hazards...
- **Urban Water Supply, and Wastewater Treatment:** Drinking Water Assessment and Treatment, Pollution Management, Waste Water Treatment, WASH, Water Treatment Technology, Microbiology, Water Quality Modeling, Water Biochemistry...
- **Coastal and Marine Environment (CME):** Seawater Intrusion, Coastal Processes and Sediment Transport, Coastal Wetland Ecosystem, Sea Surface Current, Sea Grass and Coral Protection, Wave Impact on Coastal and Offshore Structures, Coastal Karst Landforms, Coastal Geology, Coastal Flood Management...
- **Soil and Irrigation:** Soil-Plant-Water Relation, Agricultural Water Management, Soil Quality.
- **Urban Environmental Management (UEM):** Air Pollution Management, Solid Waste Management, Hazardous Waste Management, Environmental Health and Risk Assessment

## Researchers

### *Senior Researcher (8F, 4M)*

Dr. PENG Chanthol (Head of WAE Research Units), Dr. Eng. in Life Science and Technology, Tokyo Institute of Technology, Japan.

*Food and Environmental Microbiology, Water Quality Monitoring*

Ms. KAING Vinhteang, PhD candidate in Environmental Engineering, Tokyo Institute of Technology, Japan

*Microplastic, water quality monitoring*

Dr. THENG Vouchlay, Dr.Eng. in Civil and Environmental Engineering, Tokyo Institute of Technology, Japan.

*Water Quality Modelling and Assessment, Water and Wastewater Treatment*

Dr. HEU Rina, Dr. Eng. in Civil and Environmental Engineering, Tokyo Institute of Technology, Japan.

*Water Quality and Environmental Assessment, Water Treatment Technology, Environmental Ecosystems, Water Supply and Sanitation*

Dr. BUN Saret, PhD in Environmental Engineering from Chulalongkorn University, Thailand.

*Water and Wastewater Engineering*

Dr. SANG Davin, PhD in Chemistry and Process Engineering (Double degrees) from École Nationale Supérieure de Chimie de Rennes (ENSCR), France.

*Water and wastewater treatment, Environmental Analysis, Water Analysis, Liquid chromatography, Adsorption, Membrane bioreactor, Treatment of micropollutants, Activated carbon production from solid waste.*

Dr. ANN Vannak, Ph.D in Water Science and Technology, Universitat de Girona, Spain  
*Water-Soil-Plant-Microorganism Interactions and Biodiversity, Hydrologic processes in a river basin, Climate change-related topics*

Dr. CHHOUN Kong, Ph.D. in Environmental Engineering, University of the Philippines-Diliman and Tokyo Institute of Technology, Japan.  
*Environmental Hydrology, integrated water resources management, watershed hydrology*

Dr. Sao Sochan, PhD in Impact of flooding on soil-water physicochemical properties and microbial communities in floodplain soil, Iwate University, Japan  
*Soil-water ecosystems, Soil organic carbon, Soil microbial communities*

Dr. KET Pinnara, Ph.D. in Agricultural Science and Biological Engineering, University of Liege-Gembloux Agro-Bio Tech, Belgium  
*Irrigation water saving for crop production*

Dr. HAM Phaly, PhD in Environmental Engineering from Chulalongkorn University, Thailand.  
*Water and wastewater, air pollution control.*

Mrs. HANG Leakhena, M. Eng. in Environmental Engineering, University of The Philippine Diliman, Philippine.  
*Indoor/Outdoor air pollution*

***Lecturer-Researcher (2F, 5M)***

Dr. SONG Layheang, PhD in Continental Surfaces and Interfaces, Hydrology, Université Toulouse III - Paul Sabatier, France.  
*Hydrology, Soil Erosion, Disaster and Agricultural Irrigation and Modeling*

Dr. SOK Ty, PhD in Functional Ecology and Environment (Double Degree) from National Polytechnic Institute of Toulouse (INP-Toulouse), France.  
*Hydrology, Water Resources, Climate change and Environmental Monitoring and Assessment*

Dr. EANG Khy Eam, Ph.D. in Sustainable Resources Engineering, Hokkaido University, Japan.  
*Environmental Geochemistry, Water Environment, Hydrogeology, Geochemical Modeling and Solute Transport, Sustainable Resources Management, Geomechanics and Rock Slope Stability*

Dr. PHAL Sivchheng, PhD in Process and Environmental Engineering, INSA Toulouse and ITC, France and Cambodia  
*Water quality, water/wastewater treatment, adsorption process, biogas production, material production.*

Dr. Kimhuy Sok, PhD in Water Resources Engineering, Chulalongkorn University, Thailand  
*Water Resources Management, Drought Assessment, Shoreline Evolution, Nearshore Sediment Transport, Radiometric Dating of Sediment*

Dr. DOUNG Ratha, PhD in Environmental Engineering, University of Philippines Diliman (UPD) and Tokyo Institute of Technology (TIT), Japan  
*Hydrogeology; groundwater modeling; coastal aquifer management*

Mr. CHOK Vuthy, Master in Water and Environmental Engineering, Institute of Technology of Cambodia, Cambodia,  
*Water and Environmental Engineering, Water Quality Assessment and Management, Hydrology, Hydrogeophysics*

Dr. PEN Sytharith, Ph.D in Environmental engineering, Hokkaido University, Japan  
*Bed instability in suspended load dominated environments*

Ms. DOEURN Seyha, Master in Environmental Management, Kyoto University, Japan  
*WASH (Water, Sanitation, and Hygiene), Drinking water quality, Water Supply, and Wastewater characterization*

Dr. MUON Ratha, PhD in Environmental Science (Double Degree) from Sorbonne Université, France.  
*Soil Science, Mapping (GIS), Ecosystem services provide by termite mounds*

***Full-time Researcher (3F, 2M)***

Mr. HUOT Menghour, PhD candidate in Hydrology and Water Resources, Hohai University, China

Mr. CHAN Ratboren, Ph.D candidate (year 1), M. Eng. in Environmental Engineering, Kasetsart University, Thailand.  
*Water Quality Assessment, Water and Wastewater Treatment, Membrane Bioreactor, Antibiotics Treatment.*

Mrs. CHANTO Monychot Tepy, Ph.D candidate (year 1), Master in Environmental Design, Kanazawa University, Japan  
*Water Quality and Pollution, Biological Wastewater Treatment, Environmental Biotechnology, Microbial Community Analysis, Environmental and Food Microbiology*

Mr. POV Kakda, Master in Water and Environmental Engineering, Institute of Technology of Cambodia, Cambodia  
*Remote Sensing, Geo-resources (Geological, Geothermal, Mineral Exploration) and Environment.*

Ms. HENG Chhenglang, Master in Spatial Hydrology and Water quality, Institute of Technology of Cambodia, Cambodia

Mr. LUN Sambo, PhD candidate in Underground Water Management, Institut Agro Montpellier, France

Mr. KAN Rithy, PhD candidate in Microplastic and Nanoplastic in Air, Soil, Water, Waseda University, Japan

Mr. HOUR Sotheara, Master in Wastewater Treatment, Chulalongkorn University, Thailand

Ms. SATH Sithea, PhD candidate in Environmental variables determining Soil physical properties and Carbon Concentration, Institute of Technology of Cambodia, Cambodia

Ms. CHEA Gechhor, Master in Wastewater treatment, Chulalongkorn University, Thailand

Ms. PHOL Mengheak, PhD candidate in Effect of Different irrigation methods on water saving in rice cultivation, Institute of Technology of Cambodia

Ms. VONG Pisey, PhD candidate in AMR in farm environment and water sources, Institute of Technology of Cambodia

### **Academic Partners**

Royal University of Agriculture, Cambodia  
Royal University of Phnom Penh, Cambodia  
Tokyo Institute of Technology, Japan  
Tokyo University of Agriculture and Technology, Japan  
University of Girona, Spain  
Université de Toulouse, France  
Université de Liège-Gembloux, Belgium  
CARE, Ho Chi Minh City, Vietnam  
Guilin University of Technology, China  
Wuhan University, China  
Kanazawa University, Japan  
Kyoto University, Japan  
Chulalongkorn University, Thailand  
University of Nantes, France  
CNRS, France  
IRD, France  
Etc.

### **Non-academic partners**

Ministry of Education, Youth and Sports, Cambodia  
Ministry of Water Resources and Meteorology, Cambodia  
Ministry of Rural Development, Cambodia  
Ministry of Industry and Handicraft, Cambodia  
Ministry of Public Works and Transport, Cambodia  
Ministry of Environment, Cambodia  
JICA, Japan  
JST, Japan  
AFD, France  
APN, Japan  
Etc.

### **Industrial Partners and NGOs**

Phnom Penh water supply Authority  
SAFEGE  
BORDA  
GRET  
B2G  
Weventure



### **Publications of WAE researchers for the last 5 academic years**

In last five academic year from 2020-2021 to 2024-2025, there are in total 184 research outputs from WAE unit classified into three categories: Indexed Publications, Non-indexed Publications, and Conference Papers as shown in the Table 19 below.

Table 10 : Summary of number of research publications in last 5 years

| <b>Publication classification/year</b> | <b>2024-2025</b> | <b>2023-2024</b> | <b>2022-2023</b> | <b>2021-2022</b> | <b>2020-2021</b> | <b>Total</b> |
|----------------------------------------|------------------|------------------|------------------|------------------|------------------|--------------|
| Indexed Publications                   | 7                | 24               | 27               | 10               | 14               | <b>82</b>    |
| Non-indexed Publications               | 5                | 4                | 7                | 6                | 3                | <b>25</b>    |
| Conference Papers                      | 33               | 4                | 25               | 15               | 0                | <b>77</b>    |
| <b>Total</b>                           | <b>45</b>        | <b>32</b>        | <b>59</b>        | <b>31</b>        | <b>17</b>        | <b>184</b>   |

**Annex 21. New Research Projects in 2025-2026 of ETM Unit.**

| No. | Project/Research Topic                                                         | Name of Researcher                                         | Fund                                                                               | Total budget (USD) | Period    | Objectives                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Status |
|-----|--------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 1   | Energy Manager Training in Cambodia                                            | Dr. VONGCHAN Kinnaeth<br>Dr. CHAN Sarin<br>Mr. HEANG Latin | ASEAN Center for Energy, Indonesia                                                 | 19,975             | 2026      | 1. Training Programme Development and Alignment<br>2. Energy Manager and Auditor Training Programme Delivery<br>3. Energy Manager Training Programme Evaluation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | New    |
| 2   | Capacity Building and Support for Developing Building Energy Codes in Cambodia | Dr. VONGCHAN Kinnaeth<br>Dr. CHAN Sarin<br>Dr. SAM Sopheap | The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) | 21,350             | 2025-2026 | 1. Consult and engage project partners and relevant stakeholders to inform the development of the building energy code<br>2. Provide technical and advisory support to the Ministry of Land Management, Urban Planning and Construction to develop a building energy code and framework for building Energy efficiency, ensuring provisions are informed by international best practices and suited to the Cambodian context<br>3. Launch a new research initiative utilizing simulation tools and pilot demonstrations to validate key findings<br>4. Analyse and collect data and information that can contribute to the development of technical regulations and policy recommendations<br>5. Provide technical input and peer review for proposed building regulations and design guidelines<br>6. Develop a building performance research roadmap defining priority research areas and implementation steps, and including a conceptual design for a building materials laboratory<br>7. Engage sector stakeholders and build capacity through a community of practice | New    |

**Annex 22. New Research Projects in 2025-2026 of FTN Unit.**

| No. | Project/Research Topic                                                                                                                                                       | Name of Researcher                                                                                                                                                         | Fund        | Total budget | Period    | Objectives                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Status |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 1   | The development of functional beverages with improved nutritional and sensorial properties toward local economic growth through diversifying Cambodia's agriculture products | Dr. PHAT Chanvorleak<br>Dr. TAN Reasmey<br>Dr. MITH Hasika<br>Dr. SROY Sengly<br>Dr. EK Pichmony<br>Dr. THANH Channmuny<br>Dr. CHIN Lyda<br>Dr. LY Luka<br>Dr. HOUNG Peany | MoEYS       | 1488000      | 2025-2029 | <ul style="list-style-type: none"> <li>- To improve functionality and shelf-life of existing cereal drink (soya based drink with other grains and supplement of calcium, fiber, and collagen)</li> <li>- To develop gut friendly drinks (Kombucha with specific probiotic strains)</li> <li>- To develop functional fruit drinks (mango juice enriched with essential vitamins (A and C), fiber and collagen)</li> <li>- To commercialize the technology through technology transfer to company</li> </ul> | New    |
| 2   | Improvement of quality of Kimchi and garlic/ginger in honey                                                                                                                  | Dr. MITH Hasika                                                                                                                                                            | CAPRED & KE | 8,000        | 2025      | Product quality improvement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | New    |
| 3   | Trophée Innovation 2024-Exploration and exploitation of rice-associated microbiome for a sustainable rice agriculture in Cambodia                                            | Dr. OEUM Kakada<br>Dr. SUONG Malyna                                                                                                                                        | IRD         | 10000        | 2025      | To develop start up project of converting bacteria as biofertilizer and biopesticide                                                                                                                                                                                                                                                                                                                                                                                                                       | New    |
| 4   | Valorization of Cashew Apple Waste for Biofertilizer Production: A Sustainable                                                                                               | Dr. OEUM Kadada<br>Dr. MORM Elen<br>Ms. PEN Bonita<br>Mr. TAN Borivath<br>Dr. SAY Mani                                                                                     | INACON      | 12000        | 2025-2026 | The objective of this research is to valorize cashew apple waste by converting it into biofertilizer, with a focus on industrial application. To achieve this objective, the following sub-objectives have been established: 1. To analyze the compositions of different cashew apple varieties cultivated in Cambodia. 2. To develop                                                                                                                                                                      | New    |

|   |                                                                                                                        |                                                          |        |       |           |                                                                                                                                                                                                                                                                                                                                             |     |
|---|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--------|-------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|   | Approach to Waste anagement and Industrial Utilization                                                                 |                                                          |        |       |           | biofertilizer from cashew apple waste, by incorporating effective microorganisms (EM), and beneficial bacteria to enhance its fertilizing efficiency (total nitrogen, phosphorus, and potassium) 3. To conduct the pot experiment on the vegetables 4. To facilitate the transfer of research outcomes to local fertilizer SME in Cambodia. |     |
| 5 | Predictive modeling of ketchup shelf-life using machine learning                                                       | Dr. CHIN Lyda<br>Dr. YIN Molika<br>Dr. Sroy Sengly       | INACON | 12000 | 2025-2026 | To build and validate machine learning models using physicochemical, microbiological, and sensory data as input variables for predicting the shelf-life of ketchup products.                                                                                                                                                                | New |
| 6 | Effect of Collagen Peptide on the stabilization and Shelf-life of edible Bird's nest beverage under thermal processing | Dr. EK Pichmony<br>Dr. Sroy Sengly<br>Mr. Rith Vanneth   | N/A    | N/A   | 2025-2026 | To investigate the effect of fish collagen peptide levels on the quality of edible bird's nest beverage under different thermal condition<br>To evaluate the storage stability of edible bird's nest beverage under ambient condition                                                                                                       | New |
| 7 | Preserving Cambodian Traditional Dishes through Canning Technology                                                     | Dr. MITH Hasika<br>Dr. MORM Elen<br>Dr. PHAT Chanvorleak | N/A    | N/A   | 2025-2026 | To produce canned Cambodian traditional dishes and to study the stability of canned products                                                                                                                                                                                                                                                | New |

**Annex 23. New Research Projects in 2025-2026 of MIT Unit.**

| <b>No.</b> | <b>Project/Research Topic</b>                                                                      | <b>Name of Researcher</b>                | <b>Fund</b> | <b>Total budget</b> | <b>Period</b> | <b>Objectives</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Status</b> |
|------------|----------------------------------------------------------------------------------------------------|------------------------------------------|-------------|---------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1          | Multi-Metric Soft Contrastive Learning for Sleep Apnea Severity and Outcome Prediction             | Mr. EM Hengly<br>Dr. VALY Dona           | ARES        | 80,000              | 2025-2029     | <ul style="list-style-type: none"> <li>- To design a multi-metric similarity-guided contrastive loss that incorporates hypoxic burden, PWADs, PRV, and other severity measures.</li> <li>- To build a multi modal encoder combining EEG spectrogram features and physiological signals (SpO2, airflow, PPG) for joint representation learning.</li> <li>- To validate the learned severity embeddings against clinical outcomes including cardiovascular events, atrial fibrillation, hypertension, and metabolic complications using large retrospective PSG cohorts.</li> </ul>                                                                                              | New           |
| 2          | Assessment of QUIC Deployments in Non-Terrestrial Networks (NTN) and Delay-Tolerant Networks (DTN) | Mr. KHUN Dararith<br>Dr. SRENG Sokchenda | ARES        | 80,000              | 2025-2029     | The main objective of this research is to evaluate the feasibility, performance, and security of QUIC in Non-Terrestrial Networks (NTN) and Delay-Tolerant Networks (DTN). The study analyzes QUIC's applicability beyond terrestrial networks by examining the limitations of TCP and UDP in high-latency, intermittent, and high-loss environments. QUIC's performance and security mechanisms, including its flow control and encryption model, will be assessed under these conditions. Based on the findings, optimizations and security enhancements will be proposed, supported by simulation-based evaluations and the design of a secure QUIC-based DTN architecture. | New           |
| 3          | Early identification of Diabetes Risk in Cambodia using Machine Learning on Lifestyle factors      | Mr. NHIM Malai<br>Dr. PHAUK Sökkhey      | ARES        | 80,000              | 2025-2029     | <ul style="list-style-type: none"> <li>- To introduce Cambodia STEPS 2010 datasets for the analysis of diabetes risk.</li> <li>- To deal with missing values in the Cambodia STEPS 2010 datasets.</li> <li>- To compare the performance of regularization linear regression models, tree-type models, and neural networks on predicting the diabetes risk by using the lifestyle factors.</li> <li>- To build an app/website where users can input their lifestyle factors and obtain a predicted diabetes risk.</li> </ul>                                                                                                                                                    | New           |

|   |                                                                                                                                                            |                                                                                                                        |                                                     |        |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 4 | Enhancing Khmer Language Accessibility Through AI-Driven Air-writing Recognition                                                                           | Mr. LIV<br>Bunthorn<br>Dr. VALY Dona                                                                                   | ARES                                                | 80,000 | 2025-2029 | <ul style="list-style-type: none"> <li>- Enhance teaching and learning through an interactive air-writing system integrated with digital platforms such as AR and VR.</li> <li>- Assist individuals with disabilities by providing an accessible, non-contact communication tool that recognizes hand gestures instead of physical writing.</li> <li>- Modernize and preserve Khmer script by embedding traditional writing gestures into AI-driven digital technologies.</li> </ul>                                                       | New |
| 5 | Developing AI-integrated Learning Analytics Framework for Predicting and Making Recommendations to Enhance Higher Education Students' Academic Performance | Dr. PHAUK<br>Sokkhey<br>Dr. HAS Sothea<br>Mr. PEN Chentra<br>Mr. LY Tong<br>Mr. PAV<br>Limseng<br>Ms. BUN<br>Ratnatepy | World Bank                                          | 19,967 | 2026-2028 | The project aims to use machine learning and deep learning to understand and predict ITC students' academic achievement by identifying key academic, behavioral, and emotional factors, validating robust predictive models to detect at-risk students, developing an AI-integrated learning analytics framework to support personalized learning and timely interventions by lecturers and management, and strengthening institutional research capacity through PhD training and staff upskilling in educational data mining and EdTech. | New |
| 6 | AI-Powered Recommendation System                                                                                                                           | Mr. SOK<br>Kimheng<br>Mr. LAY Heng                                                                                     | CBRD                                                | 20,800 | 2026      | To develop an AI-driven recommendation system that leverages borrowing history and user preferences to provide personalized book suggestions, reducing information overload while increasing library engagement and collection visibility.                                                                                                                                                                                                                                                                                                 | New |
| 7 | Development of Two Mobile Robots for Joining a Robocon Competition in 2026                                                                                 | Mr. Tang Sou<br>Bun                                                                                                    | Takahashi Industrial & Economic Research Foundation | 7,000  | 2025-2026 | To provide lab members with a real and competitive environment to enhance their robotics skills through the design, development, and deployment of two mobile robots for the 2026 robotics competition.                                                                                                                                                                                                                                                                                                                                    | New |
| 8 | Development of Object Detection and Tracking for a UAV                                                                                                     | Mr. TIM<br>Hoksong<br>Dr. SRANG Sarot                                                                                  | TEM                                                 | 5,000  | 2025-2026 | To implement deep learning algorithm to detect object using RGB and Depth Camera.                                                                                                                                                                                                                                                                                                                                                                                                                                                          | New |
| 9 | Fine-Tuning Strategies for Reasoning in Khmer                                                                                                              | Dr. PHAUK<br>Sokkhey<br>Dr. HAS Sothea<br>Mr. PEN Chentra                                                              | JICA INACON                                         | 11,996 | 2025-2026 | To fine-tune a pre-trained medium Large Language Models to be able to explain primary school kids on Khmer Math Word Problems.                                                                                                                                                                                                                                                                                                                                                                                                             | New |

|    |                                                                                     |                                                                                                          |                    |        |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |
|----|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|--------------------|--------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|    | Mathematical Word Problems                                                          | Dr. THY Savrin<br>Mr. LY Tong<br>Mr. SORN Pov<br>Mr. UN Bunheng<br>Ms. PHAO<br>Chanthin<br>Mr. NGEN Tina |                    |        |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |
| 10 | Smart Irrigation Controller System-- SPAI+ITC Collaboration Project                 | Mr. CHHORN Sopheaktra<br>Mr. HEL Chanthan                                                                | ITC                |        | 2025-2026 | Develop new version of smart irrigation controller system                                                                                                                                                                                                                                                                                                                                                                                                                                                               | New |
| 11 | Development of Sustainable Smart Irrigation Technology Using 3D Crop Imaging and AI | Mr. HEL Chanthan<br>Dr. VALY Dona<br>Dr. KET Pinnara                                                     | CIST               | 70,000 | 2025-2027 | Introduce advanced three-dimensional imaging and multispectral analysis technologies using drones and robots to enable precise 3D assessment of crop growth conditions.                                                                                                                                                                                                                                                                                                                                                 | New |
| 12 | AI for Societal Good - Developing world-leading expertise in environmental health   | Mr. LAY Heng<br>Dr. VALY Dona                                                                            | Embassy of Ireland | 99,200 | 2025-2027 | The project aims to advance AI-driven environmental health research through parallel studies in Cambodia and Ireland that investigate links between environmental quality and human health, while simultaneously strengthening long-term institutional collaboration between ITC and DCU through PhD co-supervision, joint capacity building, and the development of a shared AI/Data Science teaching programme, and enhancing Cambodia's international research profile by hosting a major global conference in 2027. | New |
| 13 | Khmer PenPal – An AI-Powered Handwriting Teaching Assistant for Khmer               | Dr. VALY Dona<br>Mr. NGIN Kimlong                                                                        | ARES               | 7,850  | 2025-2026 | The objective of this project is to transform Khmer PenPal from a research prototype into a robust, classroom-ready AI-powered handwriting learning assistant by strengthening its underlying Khmer handwriting dataset and AI models, validating its educational impact through real-world school pilots, and deploying a secure, scalable, and user-friendly platform that supports learners, teachers, and long-term research and capacity building in Khmer language educational technology.                        | New |

**Annex 24. New Research Projects in 2025-2026 of MSS Unit.**

| <b>No.</b> | <b>Project/Research Topic</b>                                                                              | <b>Name of Researcher</b>                                                                   | <b>Fund</b>         | <b>Total budget</b> | <b>Period</b> | <b>Objectives</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Status</b> |
|------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------|---------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1          | (Re)Construire en bois au Cambodge                                                                         | Dr. Vanthet Ouch<br>Dr. Piseth Doung<br>Dr. Kuchvichea KAN                                  | ARES                | 80000               | 2025-2027     | - Improve GCI's timber construction course by including a timber structure project<br>- Characterize Cambodian timber materials for construction                                                                                                                                                                                                                                                                                                                        | New           |
| 2          | Recycling Soil Waste from Low-Lying Plains for Efficient Use in MSE Geogrid-Reinforced Slopes              | Dr. OENG Thaileng<br>Dr. HENG Sounean<br>Mr. NUTH Visal,<br>Mrs. EA Monika                  | INSACON Project     | 12000               | 2025-2026     | - Compare the mechanical behavior of lime and cement as stabilizers for soil waste backfill in Mechanically Stabilized Earth (MSE) walls. - Investigate the interaction between soil reinforcement and stabilized backfills, focusing on the utilization of lime stabilization and recycled aggregate enclosed in a wire mesh as primary and secondary reinforcements, respectively. Study the economic conditions, management, and feasibility in real-world projects. | New           |
| 3          | Assessing Traffic Issues at School Zones in Cambodia                                                       | Dr. PHUN Vengkheang; Dr. SAUM Nairth; PHENG Pharinet, Morm Udor, YANG Panha, and 6 students | JICA-LBE            | 11,910              | 2025-2026     | 1-Review best practices for minimizing traffic issues at school zones worldwide<br>2-Assess current traffic issues, particularly traffic risks at primary school zones in Cambodia<br>3-Develop a minimal standard required for safer school zones for context of Cambodia                                                                                                                                                                                              | New           |
| 4          | Durability and Microstructural Behavior of Glulam under Wet-Dry Cycling, Alkaline Aging, and Outdoor Creep | Mr. LEAN Karana<br>Dr. KAN Kuchvichea<br>Dr. OUCH Vanthet                                   | ARES-Amorce Project | 87998.02            | 2025-2028     | - Evaluate the variability and reliability of the characterized physical and mechanical properties of Cambodian local-made glulam timber by comparing to European Standard (EN).<br>- Investigate the degradation behavior of glulam under exposure of wet-dry condition, alkaline aging, and outdoor natural aging.                                                                                                                                                    | New           |



|   |                                                                                 |                                                                                                                                                                                                              |                     |        |           |                                                                                                                                                                                                                                                                   |     |
|---|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 5 | Varlorization of Construction And Demolition Waste                              | Prof. LUC Courard<br>Dr. HIN Raveth; Dr. MUY Yeakleang; Dr. HENG Sounean; Dr. SANG Davin; Ms. YOK Yavorn; Mr. CHONG Sanu                                                                                     | ARES-Amorce Project | 88000  | 2025-2027 | _To investigate and Varlorization of Construction Waste in Cambodia especially at the beach area.                                                                                                                                                                 | New |
| 6 | APPUI AUX PROJETS DE RECHERCHE EN INGÉNIERIE ARCHITECTURALE: BATIMENTS DURABLES | Prof. Pierre LECLERQ<br>Prof. Samia BEN RAJEB<br>Asst. Prof. Virak HAN<br>Dr. Sarin CHAN<br>Prof. Luc COURARD<br>Dr. Dona VALY<br>Mr. Chanly HASH<br>Dr. Kimnenh TAING<br>Dr.Kannary KETH<br>Mr. Makara LONG | ARES-PRD            | 550000 | 2026-2031 | Support the research in theme:<br>- Materials of construction for sustainable in Cambodia context<br>- contextualization of comfort models for bioclimatic approach in Cambodia<br>- Technology instrumentation for improve the sustainable buildings in Cambodia |     |

**Annex 25. New Research Projects in 2025-2026 of WAE Unit.**

| <b>No.</b> | <b>Project/Research Topic</b>                                                                                                               | <b>Name of Researcher</b>                                                                                   | <b>Fund</b>   | <b>Total budget</b> | <b>Period</b> | <b>Objectives</b>                                                                                                                                                                                                                                                                                            | <b>Status</b> |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------|---------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1          | Mitigating Antimicrobial Resistance in Aquatic Environment Through Promoting Environmental Friendly Practices in Agriculture and its sector | Dr. PENG Chanthol<br>Dr. SAO Sochan<br>Dr. PHAL Sivchheng<br>Ms. KANG Vinhteang<br>Ms. CHANTO Monychot Tepy | HERF1         | 250000              | 2026-2029     | To assess the seasonal dynamics of antimicrobial resistance and antibiotic residues in surface water, identify key transmission pathways from agricultural and aquaculture pollution, and develop and promote sustainable, and environmentally friendly cost-effective interventions to mitigate AMR spread. | New           |
| 2          | Monitoring and modelling water quality in the Mekong river basin                                                                            | Dr. SONG Layheang<br>Dr. KET Pinnara,<br>Mr. CHAN Ratboren, Ms. KAING Vinhteang                             | PHC-Tonle Sap | 380000              | 2025-2026     |                                                                                                                                                                                                                                                                                                              | New           |

**Annex 26. List of Ongoing Projects in ETM in 2025-2026.**

| <b>No.</b> | <b>Project/Research Topic</b>                                                                    | <b>Name of Researcher</b>                                                             | <b>Fund</b>                       | <b>Budget 2025-2026</b> | <b>Total budget (USD)</b> | <b>Period</b> | <b>Objectives</b>                                                                                                                                                                                                                                                                          | <b>Outputs</b>                                    |
|------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------|-------------------------|---------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| 1          | Accelerating Digital Transformation for Higher Education Institutions in Southeast Asia (DX.SEA) | Dr. OR Chanmoly<br>Mr. LAY Heng<br>Dr. VALY Dona                                      | Erasmus+                          |                         | 42,534.00                 | 2023-2025     | <ul style="list-style-type: none"> <li>- developing digital campus blueprint</li> <li>- enhance digital leadership competencies</li> <li>- improve the quality of online learning and teaching</li> <li>- improve methodologies and pedagogical approaches for digital learning</li> </ul> |                                                   |
| 2          | Training Programme to Promote Low Carbon Buildings in Cambodia (Overhead cost available)         | Dr. CHAN Sarin<br>Dr. VONGCHANH Kinnaeth<br>Dr. HEANG Latin                           | GGGI                              | 28,000.66               | 89,970.00                 | 2024-2027     | <ul style="list-style-type: none"> <li>- Recruit and train 20 Qualified Master Trainers (MTs) for delivering the LCB training programme</li> <li>- Translate and Adapt Training Modules into Khmer.</li> <li>- Organize and Deliver the Training Programme (2.5 Years).</li> </ul>         |                                                   |
| 3          | Platform for research and training on Power System                                               | Dr.KHON Kimsornn<br>Mr.SUK Sievlong<br>Dr. VAI Vannak<br>Mr. EAM Dara<br>Dr. BUN Long | AFD                               | 31,306.00               | 1,048,685.00              | 2023-2027     | 1) To provide training skill to EDC staff , upgrade laboratories, and training facilities, 2) To produce highly qualified human resource in the field of power system at master and PhD levels.                                                                                            | 30 Master students, 4 PhD and 4 Index publication |
| 4          | Residential Microgrid Design and Management                                                      | Dr. VAI Vannak<br>Mr. EAM Dara<br>Mr. SUK Sievlong                                    | ZE: Zero-Emission Energy Research | 3,000.00                | 3,000.00                  | 2025-2026     | 1). Literature review on planning strategies for microgrids with alternative sources in Cambodia                                                                                                                                                                                           |                                                   |

|   |                                                                                 |                                                                                                      |                         |            |            |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|---|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------|------------|------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|   | with Open-Source Tool and GIS                                                   | Ms. NEOV Yoklin<br>Mr. YOU Lyhour<br>Mr. HEANG Sokleap                                               |                         |            |            |           | 2). Conduct desk research for microgrid design, operation, and management using GIS (Geographic Information System) software<br>3). Develop an algorithm for optimal microgrid with different scenarios (i.e., loads, producers, and grid) over the planning period<br>4). Test and validate for microgrid design and operation visualization in GIS software                                                                                                                           |  |
| 5 | Capacity for Cambodian Energy Efficiency (CapCEE) (Overhead cost available)     | Dr. VONGCHAN Kinnaeth<br>Dr. CHAN Sarin<br>Dr. HEANG Latin                                           | LED                     | 104,552.54 | 552,322.00 | 2025-2026 | - CEMAT program is upgraded and equipped to offer quality training services for energy managers and auditors<br>- SES-ITC strengthens the energy efficiency to the public and private sectors                                                                                                                                                                                                                                                                                           |  |
| 6 | CHILL: Cooling Homes - Innovative & Low-impact Living (Overhead cost available) | Dr. VONGCHAN Kinnaeth<br>Dr. CHAN Sarin<br>Dr. SAM Sopheap<br>Mr. VENH LayOU<br>Mr. VITHEAN Khemrath | ClimateWorks Foundation | 19.35      | 118,323.00 | 2025-2027 | 1) Enhance Thermal Comfort through energy-efficient retrofitting practices in the urban residential sector.<br>2) Increase Market Adoption: Promote the adoption of energy-efficient retrofitting solutions among local SMEs, financial institutions, and households.<br>3) Build Capacities: Train and empower 30 craftsmen from 15 SMEs to implement energy-efficient retrofitting techniques.<br>4) Demonstrate and Raise and Awareness: Establish 3 demonstration sites and conduct |  |

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|  |  |  |  |  |  |  | <p>behavior change campaigns to raise awareness about the benefits of energy efficiency and thermal comfort.</p> <p>5) Promote proper usage and maintenance of energy-efficient solutions to ensure long-term benefits and user engagement.</p> <p>6) Promote access to financial services for retrofitting: Collaborate with local financial institutions to develop and provide affordable financing options for retrofitting projects.</p> <p>7) Support the integration of energy-efficient retrofitting practices into national and municipal housing policies and building codes.</p> <p>8) Develop a replicable model for energy-efficient retrofitting that can be scaled to other urban areas in Cambodia.</p> |  |
|--|--|--|--|--|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

**Annex 27. List of Ongoing Projects in FTN in 2025-2026.**

| <b>No.</b> | <b>Project/Research Topic</b>                                                                                         | <b>Name of Researchers</b>                                                                                                                                                                                                                            | <b>Fund</b>     | <b>Budget (2025-2026)</b> | <b>Total budget (USD)</b> | <b>Period</b> | <b>Objectives</b>                                                                                                                                                                            | <b>Outputs</b>                                                       |
|------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------------|---------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| 1          | Agroecology and Safe Food System Transitions (ASSET)                                                                  | Dr. HOUNG Peany<br>Dr. CHUNHIENG Thavarith; Mr. SIEANG Phen; Mr. BOU Channa; Ms. CHOM Sreylam; Ms. SREY Sokhom; Mr. THAN Sothearak; Mr. VANN Sinkeo; Dr. KHEOURN Kimleang; Ms. THENG Sokuntheary; Ms. NET Marinich; Ms. MICH Monika; Mr. TAN Borivath | EU/AFD and GRET |                           | 231000                    | 2020-2025     | To make food and agricultural systems in Southeast Asia more sustainable, safer and inclusive, through harnessing the potential of agroecology to transform them                             | - 8 Engineering students                                             |
| 2          | Development of high nutritional value farmed fish and safe processed products (smoked and fermented fish) in Cambodia | Dr. MITH Hasika<br>Dr. PHAT Chanvorleak<br>Dr. KHOEUN Kimleang<br>Dr. YOEU Sereywath<br>Dr. THANH Channmuny<br>Dr. SROY Sengly<br>Ms. MOM Vattana<br>Mr. LAY Sovannmony                                                                               | ARES            | 40000                     | 200000                    | 2022-2027     | Contribute to the development of sustainable aquaculture value chains in Cambodia and to improve food safety and nutritional quality of marketed farmed and caught fish products in Cambodia | - 3 master students<br>- 3 PhD students<br>- 1 non-index publication |
| 3          | Characterization of ambient air quality and sources identification in Phnom Penh, Cambodia                            | Mrs. SIENG Sreyvich                                                                                                                                                                                                                                   | JICA/JST        |                           | NA                        | 2023-2026     | To monitor the spatial-temporal variation of ambient air pollutants associated with PM0.1 in the urban area, and analyze the source contribution using organic components                    |                                                                      |
| 4          | Laboratory of Excellence in co-engineering for Sustainable                                                            | Dr. SUONG Malyna<br>Dr. MOULIN Lionel Dr. BELLAFIORE Stéphane<br>Dr. OEUM Kakada                                                                                                                                                                      | IRD             |                           | 70000                     |               | - To promote the “One Health” approach for sustainable rice production in Cambodia<br>- To develop alternative methods contributing to the                                                   |                                                                      |

|   |                                                                                                                                                               |                                                                                                                                          |                                                                    |        |         |           |                                                                                                                                                                                                                    |                                                                     |
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|   | Agrosystems<br>(acronym: LMI LEAD)                                                                                                                            |                                                                                                                                          |                                                                    |        |         |           | reduction of environmental pollution (incl. pesticides)<br>- To the efficiency of water management<br>- To increase the use of agrobiodiversity approaches in rice production                                      |                                                                     |
| 5 | Promoting integrated pest management and sustainability of the fragrant rice quality in Cambodia by valorization of native microbiota (FEF-HealthyRice)       | Dr. SUONG Malyna<br>Dr. BELLAFFIORE Stéphane<br>Dr. OEUM Kakada<br>Dr. PHAT Chanvorleak<br>Dr. YOEN Sereyvath                            | Ministry of Europe and Foreign Affairs (via The Embassy of France) |        | 280000  |           |                                                                                                                                                                                                                    | - 5 Engineering students<br>- 1 master students<br>- 3 publications |
| 6 | Training in the use of molecular tools for diagnosis of rice diseases to support the transition towards integrated pest management (Acronym: DiagnoPathoRice) | Dr. SUONG Malyna<br>Dr. BELLAFFIORE Stéphane                                                                                             | IRD                                                                |        | 3000    |           | To train staffs/research students on the use of molecular tools to diagnosis the rice pathogens                                                                                                                    | - 6 engineering students                                            |
| 7 | Pesticide Analysis in irrigation water of different rice practices_WAT4CAM                                                                                    | Dr. PHAT Chanvorleak<br>Dr. YOEN Sereyvath                                                                                               | CIRAD-AFD                                                          | 15000  | 39000   | 2024-2026 | To investigate pesticide residues in heavy rice production region in Kanhhot, Battambang, and Rovieng, Preah Vihear                                                                                                |                                                                     |
| 8 | The development of functional beverages with improved nutritional and sensorial properties toward local economic growth through                               | Dr. PHAT Chanvorleak<br>Dr. TAN Reasmey<br>Dr. MITH Hasika<br>Dr. SROY Sengly<br>Dr. EK Pichmony<br>Dr. THANH Channmuny<br>Dr. CHIN Lyda | MoEYS                                                              | 199230 | 1488000 | 2025-2029 | - To improve functionality and shelf-life of existing cereal drink (soya based drink with other grains and supplement of calcium, fiber, and collagen)<br>- To develop gut friendly drinks (Kombucha with specific |                                                                     |

|    |                                                                                                                                       |                                                                                         |             |  |       |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|----|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------|--|-------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|    | diversifying Cambodia's agriculture products (HEIP2-ITC-RGA#01)                                                                       | Dr. LY Luka<br>Dr. HOUNG Peany                                                          |             |  |       |           | probiotic strains)<br>- To develop functional fruit drinks (mango juice enriched with essential vitamins (A and C), fiber and collagen)<br>- To commercialize the technology through technology transfer to company                                                                                                                                                                                                                                                                               |  |
| 9  | Improvement of quality of Kimchi and garlic/ginger in honey                                                                           | Dr. MITH Hasika                                                                         | CAPRED & KE |  | 8,000 | 2025      | Product quality improvement                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| 10 | Trophée Innovation 2024-Exploration and exploitation of rice-associated microbiome for a sustainable rice agriculture in Cambodia     | Dr. OEUM Kakada<br>Dr. SUONG Malyna                                                     | IRD         |  | 10000 | 2025      | To develop start up project of converting bacteria as biofertilizer and biopesticide                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| 11 | Valorization of Cashew Apple Waste for Biofertilizer Production: A Sustainable Approach to Waste anagement and Industrial Utilization | Dr. OEUM Kadada<br>Dr. MORM Elen<br>Ms. PEN Bonita<br>Mr. TAN Borivath<br>Dr. SAY Manit | INACON      |  | 12000 | 2025-2026 | The objective of this research is to valorize cashew apple waste by converting it into biofertilizer, with a focus on industrial application. To achieve this objective, the following sub-objectives have been established: 1. To analyze the compositions of different cashew apple varieties cultivated in Cambodia. 2. To develop biofertilizer from cashew apple waste, by incorporating effective microorganisms (EM), and beneficial bacteria to enhance its fertilizing efficiency (total |  |



|    |                                                                                                                        |                                                          |        |       |       |           |                                                                                                                                                                                                                                       |                                             |
|----|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--------|-------|-------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
|    |                                                                                                                        |                                                          |        |       |       |           | nitrogen, phosphorus, and potassium) 3. To conduct the pot experiment on the vegetables 4. To facilitate the transfer of research outcomes to local fertilizer SME in Cambodia.                                                       |                                             |
| 12 | Predictive modeling of ketchup shelf-life using machine learning                                                       | Dr. CHIN Lyda<br>Dr. YIN Molika<br>Dr. Sroy Sengly       | INACON | 12000 | 12000 | 2025-2026 | To build and validate machine learning models using physicochemical, microbiological, and sensory data as input variables for predicting the shelf-life of ketchup products.                                                          | - 3 engineering students<br>- 1 publication |
| 13 | Effect of Collagen Peptide on the stabilization and Shelf-life of edible Bird's nest beverage under thermal processing | Dr. EK Pichmony<br>Dr. Sroy Sengly<br>Mr. Rith Vanneth   | N/A    | N/A   | N/A   |           | To investigate the effect of fish collagen peptide levels on the quality of edible bird's nest beverage under different thermal condition<br>To evaluate the storage stability of edible bird's nest beverage under ambient condition | - 1 master student                          |
| 14 | Preserving Cambodian Traditional Dishes through Canning Technology                                                     | Dr. MITH Hasika<br>Dr. MORM Elen<br>Dr. PHAT Chanvorleak | N/A    | N/A   | N/A   |           | To produce canned Cambodian traditional dishes and to study the stability of canned products                                                                                                                                          |                                             |

**Annex 28. List of Ongoing Projects in MIT in 2025-2026.**

| <b>No.</b> | <b>Project/Research Topic</b>                                                                                                                         | <b>Name of Researcher</b> | <b>Fund</b>      | <b>Budget 2025-2026</b> | <b>Total Budget</b> | <b>Period</b> | <b>Objectives</b>                                                                                                                                                                                                                                                                                                                           |                   |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------|-------------------------|---------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 1          | The vehicle as an intelligent thing                                                                                                                   | Mr. CHIN Chan Daraly      |                  |                         |                     | 2022-2026     | Trasforming the role of the vehicle into an active and intelligent actor on the road by exploiting these sensing, computing and communication capabilities for making the transportation people and goods safer, more efficient, greener and more entertaining.                                                                             |                   |
| 2          | Integrating the Electrification and Smart Mechanisation of Two-Wheel Tractors with Precision Agriculture for Improved Productivity and Sustainability | Dr. SRANG Sarot           | ACIAR            |                         | 213,500             | 2024-2029     | The aim of this project is to build the technological and socio-economic foundations for the design, manufacture, and field evaluation of electric and smart two-wheel tractors with precision agriculture capability, aiming to critically evaluate its potential to enhance the sustainability and productivity of Cambodian agriculture. | 10 Master student |
| 3          | Autonomous Land-Leveling Robot                                                                                                                        | Dr. SRANG Sarot           | MAFF             |                         | 20,000              | 2024-2026     | Develop a robot tractor capable of autonomously or semi-autonomously leveling agricultural land.                                                                                                                                                                                                                                            |                   |
| 4          | User Identification through Online Khmer Handwriting Analysis Using Deep Learning                                                                     | Dr. VALY Dona             | JICA INACON      |                         | 13,812              | 2025          | The research aims to create a Khmer online handwriting dataset, develop a deep learning model for handwriting analysis, and build prototype applications for user authentication and script learning.                                                                                                                                       |                   |
| 5          | "Kayvika" Khmer Sign Language Translation                                                                                                             | Mr. CHOU Koksai           | Khmer Enterprise | 750                     | 1,500               | 2024-2026     | The research aims to create a two way sign language translation application. The app will translate from Khmer voice to sign language and will translate from sign language to Khmer voice.                                                                                                                                                 |                   |

**Annex 29. List of Ongoing Projects in MSS in 2025-2026.**

| <b>N o.</b> | <b>Project/Research Topic</b>                                                                                               | <b>Name of Researchers</b> | <b>Fund</b> | <b>Budget 2025-2026</b> | <b>Total budget (USD)</b> | <b>Period</b> | <b>Objectives</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Outputs</b>                                                                                                                                                                                            |
|-------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------|-------------------------|---------------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1           | Hybrid Coatings For The Photodynamic Inactivation Of Microbial Infections                                                   | Mrs. AUN Srean             | BGF-MoEYS   |                         | 42,500                    |               | 1) to design and characterize the robust innovative multi-component combination for antimicrobial disinfection under visible light irradiation                                                                                                                                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>- Conference and journal publications</li> <li>- Bachelor and master students graduated</li> <li>- Develop and modify emulsion with plastic (knowledge)</li> </ul> |
| 2           | Climate-resilient soil stabilization in cambodia's SUBGRADE: adapting to the challenge of flooding and seasonal variations. | Mr. Nuth Visal             | BGF-MoEYS   |                         | 42,500                    |               | 1) to pinpoint challenges of flooding and variation in temperature of mechanical property.<br>2) to enhance the soil subgrade in response to Cambodian seasonal challenges                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>- PhD thesis</li> <li>- Publications</li> <li>- Collaboration</li> </ul>                                                                                           |
| 3           | Natural Rubber Latex Powdered Gloves for Medical applications                                                               | Ms. Sreng Laymey           | Takahashi   |                         | 4990                      |               | <ul style="list-style-type: none"> <li>- Produce examination powdered gloves from natural rubber latex</li> <li>- Examine antimicrobial effect biofillers such as pomelo, mangosteen, ginger, and sugarcane bagasse on latex gloves</li> </ul>                                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>- PhD thesis</li> <li>- Publications</li> <li>- Collaboration</li> </ul>                                                                                           |
| 4           | Effect of The Addition of Natural Fibers on Shrinkage, Cracking Risk and Healing Capacity of Cementitious Materials         | Mr. SOM Chansamnang        | BGF-MoEYS   |                         | 32,076                    |               | <ul style="list-style-type: none"> <li>- Valorize natural, local and renewable products and reduce the CO2 emissions comparing to the production of classic fibers</li> <li>- Produce self-healing capacity in cementitious materials by natural fibers as a reservoir</li> <li>- Limit crack and improve mechanical properties of cementitious materials</li> <li>- Reduce construction cost and building maintenance</li> <li>- Increase lifespan of structures</li> </ul> | <ul style="list-style-type: none"> <li>- 4 undergraduate theses</li> <li>- Possible 1 journal paper</li> <li>- Poster presentation in 1 international conference</li> </ul>                               |

|   |                                                                                                                                                           |                    |                          |  |         |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                     |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------|--|---------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5 | Sustainable building designs integrated life-cycle assessment (LCA), for best strategies to design the green residential building in Phnom Penh, Cambodia | Mr. LONG Makara    | ARES – COMBOd IA Project |  | 102,000 |             | Analyze building LCA towards green residential building design by integrating the sustainability aspect to propose design strategy and guidelines to reduce the carbon footprint and overall environmental impact of building                                                                                                                                                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>- Conference and journal publications</li> <li>- Master and PhD students graduated</li> <li>- Transfer knowledge</li> <li>- Policy recommendation</li> </ul> |
| 6 | Energy-based design for buildings and Steel ring damper for seismic application                                                                           | Dr. DOUNG Piseth   | KMUTT                    |  | 20,000  |             | To develop a new steel damper<br>To assess the cumulative seismic energy in buildings<br>To develop an energy-based seismic design method for buildings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>- Journal publications,</li> <li>- Research equipment,</li> <li>- Capacity building for students and researchers</li> </ul>                                  |
| 7 | Experimental and Numerical Studies of the Behavior and Durability of Foam Concrete Based on Recycled Glass and Natural Fibers                             | Mr. CHANN Socheata | Eiffel-MoEYS             |  | 50,000  |             | Objective I: To study the mechanical and thermal behavior as well as the durability of foam concrete based on Portland cement and recycled glass powder<br>Objective II: To study the numerical modeling develop an integrated 3D mesoscale model for long-term performance                                                                                                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>- PhD thesis</li> <li>- Publications</li> </ul>                                                                                                              |
| 8 | Upgrading geomaterials: from waste to resource                                                                                                            | Dr. Kuchvichea KAN | Horizon Europe           |  | 1513400 | 2025 - 2028 | <ul style="list-style-type: none"> <li>- To demonstrate the versatility and adaptability of upgraded waste geomaterials considering</li> <li>- To unveil the key mechanisms governing the durability of upgraded waste geomaterials, with explicit consideration of climatic and site conditions</li> <li>- To develop and deploy comprehensive modelling and design tools aimed at facilitating the reuse of waste geomaterials in the construction of diverse types of geostructures</li> <li>- To fill the gap in training focused on the core principles of circular economy in the context of WGs management, and foster interdisciplinary cooperation</li> </ul> | <ul style="list-style-type: none"> <li>- PhD Thesis</li> <li>- Conferences</li> <li>- Journal papers</li> </ul>                                                                                     |

|    |                                                                                               |                                             |                                 |       |         |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                               |
|----|-----------------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------|-------|---------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| 9  | US-ASEAN Smart Mobility Program: University Partnership Program                               | Prof. BOARNET Marlon<br>Dr. PHUN Vengkheang | US Department of Transportation |       | 23,595  | 2024 - 2026 | With funding from the Department of State, and as part of the USASCP, USDOT has developed four pair partnerships between ASEAN and US cities, called US-ASEAN Smart Mobility Program. Each pairing is crafting a project to share best practices and test solutions in policy, planning, and technology to create smart transportation solutions to shared challenges.                                                                                                     | - PhD Thesis<br>- Conferences<br>- Journal papers                                                                             |
| 10 | (Re)Construire en bois au Cambodge                                                            | Dr. Vanthet Ouch                            | ARES                            | 44235 | 80000   | 2025 - 2027 | - Improve GCI's timber construction course by including a timber structure project<br>- Characterize Cambodian timber materials for construction                                                                                                                                                                                                                                                                                                                           | - Conference and journal publications<br>- New seismic steel dampers are developed<br>- New seismic-based design is developed |
| 11 | Recycling Soil Waste from Low-Lying Plains for Efficient Use in MSE Geogrid-Reinforced Slopes | Dr. OENG Thaileng                           | INSACON Project                 |       | 12000   | 2025 - 2026 | - Compare the mechanical behavior of lime and cement as stabilizers for soil waste backfill in Mechanically Stabilized Earth (MSE) walls.<br>- Investigate the interaction between soil reinforcement and stabilized backfills, focusing on the utilization of lime stabilization and recycled aggregate enclosed in a wire mesh as primary and secondary reinforcements, respectively. Study the economic conditions, management, and feasibility in real-world projects. | - PhD Thesis<br>- Conferences<br>- Journal papers                                                                             |
| 12 | Assessing Traffic Issues at School Zones in Cambodia                                          | Dr. PHUN Vengkheang                         | JICA-LBE                        |       | 1,1910  | 2025 - 2026 | 1-Review best practices for minimizing traffic issues at school zones worldwide<br>2-Assess current traffic issues, particularly traffic risks at primary school zones in Cambodia<br>3-Develop a minimal standard required for safer school zones for context of Cambodia                                                                                                                                                                                                 | -                                                                                                                             |
| 13 | Durability and Microstructural Behavior of Glulam under Wet–                                  | Mr. LEAN Karana                             | ARES-Amorce Project             |       | 79998.2 | 2025 - 2028 | - Evaluate the variability and reliability of the characterized physical and mechanical properties of Cambodian local-made glulam                                                                                                                                                                                                                                                                                                                                          | -                                                                                                                             |

|    |                                                    |                                                                                                                                   |                        |  |       |                   |                                                                                                                                                                                    |   |
|----|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------|--|-------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|    | Dry Cycling, Alkaline Aging, and Outdoor Creep     |                                                                                                                                   |                        |  |       |                   | timber by comparing to European Standard (EN).<br>- Investigate the degradation behavior of glulam under exposure of wet-dry condition, alkaline aging, and outdoor natural aging. |   |
| 14 | Varlorization of Construction And Demolition Waste | Prof. LUC Courard<br>Dr. HIN Raveth;<br>Dr. MUY Yeakleang; Dr. HENG Sounean;<br>Dr. SANG Davin;<br>Ms. YOK Yavorn; Mr. CHONG Sanu | Amorce-3CFoLEx Project |  | 80000 | 2025<br>-<br>2027 | _To investigate and Varlorization of Construction Waste in Cambodia especially at the beach area.                                                                                  | — |

**Annex 30. List of Ongoing Projects in WAE in 2025-2026.**

| No. | Project/Research Topic                                                                                     | Name of Researchers | Source of Funding | Budget 2025-2026 | Total budget (USD) | Period    | Objectives                                                                                                                                                                                                                                                                                                                                                       | Outputs                                 |
|-----|------------------------------------------------------------------------------------------------------------|---------------------|-------------------|------------------|--------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| 1   | SATREPS: Establishment of Risk Management Platform for Air Pollution in Cambodia                           | Dr. OR Chanmoly     | JST/JICA          |                  | 5,000,000          | 2022-2027 | To contribute to the creation and establishment of a safe and comfortable living environment from the viewpoint of air pollution, essential for the sustainable development of tourism, which leads to economic benefits to the Cambodian people and to creation of a far better and comfortable environment for residents and tourists from all over the world. | - 1 PhD student<br>- 15 publications    |
| 2   | Prevention of Zoonotic Disease Emergence                                                                   | Dr. ANN Vannak      | EU/AFD            |                  | 58,160 euros       | 2024-2026 | To study risks of emergence of zoonotic diseases impacted by the hydrological dynamics, climate, and environment in diversified ecosystems in Cambodia                                                                                                                                                                                                           | - 2 Master students<br>- 2 publications |
| 3   | Photoproduction of radicals and their effects on carbon dynamics in tropical lakes<br><br>(JSPS-Photochem) | Dr. THENG Vochlay   | JSPS              |                  | 700                | 2023-2027 |                                                                                                                                                                                                                                                                                                                                                                  | -                                       |
| 4   | SATREPS: development and social implementation of greenhouse gas emission reduction technologies in        | Dr. SOK Ty          | SATREPS/JST/JICA  |                  | 250000             | 2024-2029 | Preparation to launch in April 2024                                                                                                                                                                                                                                                                                                                              | - 1 publication                         |

|   |                                                                                                  |            |                                      |  |         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                     |
|---|--------------------------------------------------------------------------------------------------|------------|--------------------------------------|--|---------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
|   | paddy fields of west tonle sap lake by establishing a large paddy area water management system   |            |                                      |  |         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                     |
| 5 | Integrated River Basin Management of the Mekong Basin Tributary for Adaptation to Climate Change | Dr. SOK Ty | Mekong Korea Cooperation Fund (MKCF) |  | 380,000 | 2024-2027 | <ul style="list-style-type: none"> <li>- Identify flood hazards through field-based and modeling approaches by integrating extensive update datasets (hydrology, climate, land use, water quality, infrastructure) and strengthening community resilience.</li> <li>- Assess soil erosion and water quality to identify sustainable river basin management measures.</li> <li>- Introduce nature base solution (NBS) into watershed management for improvement of flood risk and soil loss and biodiversity within the river basin.</li> <li>- To build capacity for integrated river basin management at the national and sub-national levels.</li> <li>- To develop and mainstream the policy brief for multi-</li> </ul> | <ul style="list-style-type: none"> <li>- 1 Engineering student</li> <li>- 4 publications</li> </ul> |



|   |                                                                                                                            |                   |                                                  |  |         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                        |
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|   |                                                                                                                            |                   |                                                  |  |         |           | stakeholders from the sub-national to the national level.                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                        |
| 6 | Laboratory of Excellence in co-engineering for Sustainable Agrosystems (LMI-LEAD)                                          | Dr. SUONG Malyna  | IRD                                              |  | 52,000  | 2023-2028 | (i) preliminary assessment including groundwater quality assessment as an input data for treatment technology design and social survey for assessing the demand and perspective of the target end users of the newly developed water treatment unit, (ii) optimization of groundwater treatment process in terms of treatment performance and power consumption, and (iii) evaluation the operation performance of prototype system in the real scale community. | - 4 Engineering students<br>- 2 Master students<br>- 1 PhD students<br>- 2 publication |
| 7 | Establishment of Sustainable Groundwater Management Platform in the Lower Mekong Region                                    | Dr. Khy Eam EANG  | Mekong-Republic of Korea Cooperation Fund (MKCF) |  | 499,690 | 2025-2028 | <ul style="list-style-type: none"> <li>- Reducing environmental pollution (incl. pesticides)</li> <li>- Better water management</li> <li>- Increased use of agrobiodiversity</li> <li>- Promotion of the "One Health" approach</li> <li>- Improving food security</li> </ul>                                                                                                                                                                                     |                                                                                        |
| 8 | Sustaining the shared groundwater resources of the Transboundary Cambodia-Vietnam Mekong River Delta aquifer under climate | Dr. PEN Sytharith | SEI                                              |  | 7,000   | 2024-2026 | <ul style="list-style-type: none"> <li>- To improve understanding of socio-economic and environmental factors impact on soil fertility;</li> <li>- To identify and promote innovative agricultural practices for soil rehabilitation and improve of the farmer livelihood</li> </ul>                                                                                                                                                                             |                                                                                        |

|    |                                                                                                                                            |                    |             |  |        |           |                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|----|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------|--|--------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|    | change impacts through Strategic Gender equality, disability, and social inclusion (GEDSI) tools and suitable Nature-based Solution (SAGA) |                    |             |  |        |           |                                                                                                                                                                                                                                                                                                                                                                                                     |  |
| 9  | Evaluation of Nature-based solutions for the enhancement of urban water security in South-East Asian Cities                                | Dr. PEN Sytharith  | APN         |  | 8000   | 2025-2026 | To develop a Comprehensive Groundwater Database to track and analyze groundwater changes annually, serving as a benchmark for sustainable management in the Lower Mekong Region. To promote Regional Collaboration among Mekong countries and the ROK for Adaptive Groundwater Governance, integrating multi-year trend analysis into cross-border policy frameworks and capacity-building efforts. |  |
| 10 | ECOSystem services derived from TERmite mounds in the lower Mekong basin (in Cambodia and Laos) (ECOTER)                                   | Dr. Pascal Jouquet | ANR, France |  | 565000 | 2023-2027 | To analyze climate data and write a National Climate Report for Cambodia                                                                                                                                                                                                                                                                                                                            |  |
| 11 | Development of IR technologies, and distribution of C in Chrey Bak                                                                         | Dr. Pascal Jouquet | ANR, France |  | 120000 | 2023-2026 | -Enhance resilience in the face of climate change by integrating energy, food, and water nexus                                                                                                                                                                                                                                                                                                      |  |

|    |                                                                                             |                   |                                                   |       |       |            |                                                                                                                                                                                                                                                                                                                                          |  |
|----|---------------------------------------------------------------------------------------------|-------------------|---------------------------------------------------|-------|-------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|    | catchment<br>(FairCarbon)                                                                   |                   |                                                   |       |       |            | -Gender mainstreaming in groundwater resources management                                                                                                                                                                                                                                                                                |  |
| 12 | Research collaboration on sustainable water resources management in Koh Ker heritage site   | Mr. SOK Kimhuy    | NAPV                                              |       | 12000 |            | <p>Access water supply and demand scenario of the Phnom Penh city of Cambodia.</p> <p>Identify feasible nature-based solution to enhance urban water security for drinking water and industrial water uses.</p> <p>Assess environmental and socio-economic impacts of the feasible NBS using water case study.</p>                       |  |
| 13 | Restoration of the Preah Vihear Temple's Gopura V (Phase II)                                | Mr. SOK Kimhuy    | NAPV                                              |       | 51500 |            | Anticipating the inversion of the Tonle Sap river through collaborative sampling.                                                                                                                                                                                                                                                        |  |
| 14 | Banteay Chhmar's Water Infrastructure: Climate Change and Sustainable Management Strategies | Mr. SOK Kimhuy    | Australia Awards (Alumini Research Grant Round 5) | 10000 | 10000 | 2025-20276 | <p>- To identify and quantify ecosystem services (ES) provided by TM in LMB</p> <p>- To identify the environmental and socio-economic dynamics that condition their preservation by stakeholders and</p> <p>- To consider solutions based on the management and use of TM to meet the needs of populations (health, food...) in LMB.</p> |  |
| 15 | Mutual learning toward just-in-time information for grassroots climate adaptation in the    | Dr. PENG Chanthol | Toyota Fondation                                  | N/A   | 60000 | 2024-2026  | To develop IR technologies to estimate C sequestration                                                                                                                                                                                                                                                                                   |  |

|    |                                                                                           |                  |                               |       |         |           |                                                                                                                                                                                                                                         |                                                                    |
|----|-------------------------------------------------------------------------------------------|------------------|-------------------------------|-------|---------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
|    | lower Mekong countries                                                                    |                  |                               |       |         |           |                                                                                                                                                                                                                                         |                                                                    |
| 16 | Pathogens Exposure from Aquifers: A Cambodian Health interdisciplinary case study (PEACH) | Dr. DUONG Ratha  | IRD                           | 14000 | 2,800   | 2024-2026 | 1. Planning atlas; 2. Hydraulic infrastructure system; 3. Water resources utilization; 4. Natural disasters; 5. Catchment development plans                                                                                             | - 5 Engineering students<br>- 2 Master students<br>- 1 PhD student |
| 17 | Sustainable Development of Local Activated Carbon for Water Industrial Applications       | Dr. HEU Rina     | ITC-MoEYS                     |       | 50000   | 2026-2028 | 1. Seismic survey;<br>2. Hydrological study; 3. Geotechnical study;<br>4. Technical presentation and meeting at province<br>-                                                                                                           |                                                                    |
| 18 | Laboratory of Excellence in co-engineering for Sustainable Agrosystems (LMI-LEAD)         | Dr. Malyna SUONG | IRD and FSPI (French Embassy) |       | 216,000 | 2023-2028 | Understand best practices of people along the Mekong River toward climate change adaptation for hydrological change of the Mekong River (water level change and local adaptation) and share the knowledge between Thailand and Cambodia |                                                                    |

**Annex 31. List of Completed Research Projects in 2025-2026 of ETM Unit.**

| <b>No.</b> | <b>Project/Research Topic</b>                                             | <b>Name of Researcher</b> | <b>Fund</b>                       | <b>Total budget (USD)</b> | <b>Period</b> | <b>Objectives</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Outputs</b>           |
|------------|---------------------------------------------------------------------------|---------------------------|-----------------------------------|---------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| 1          | Residential Microgrid Design and Management with Open-Source Tool and GIS | Dr. VAI Vannak            | ZE: Zero-Emission Energy Research | 3000                      | 2024-2025     | 1). Literature review on planning strategies for microgrids with alternative sources in Cambodia<br>2). Conduct desk research for microgrid design, operation, and management using GIS (Geographic Information System) software<br>3). Develop an algorithm for optimal microgrid with different scenarios (i.e., loads, producers, and grid) over the planning period<br>4). Test and validate for microgrid design and operation visualization in GIS software | - 3 Engineering students |

**Annex 32. List of Completed Research Projects in 2025-2026 of FTN Unit.**

| <b>No.</b> | <b>Project/Research Topic</b>                                                                                                                                    | <b>Name of PI</b> | <b>Fund</b>                                                        | <b>Total budget (USD)</b> | <b>Period</b> | <b>Objectives</b>                                                                                                                                                                                         | <b>Outputs</b>                              |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------------------------------------------------------|---------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| 1          | Promoting integrated pest management and sustainability of the fragrant rice quality in Cambodia by valorization of native microbiota (acronym: Healthyrice-FEF) | Dr. SUONG Malyna  | Ministry of Europe and Foreign Affairs (via the Embassy of France) | 280000                    |               | To develop integrated pest management approaches for rice crops with the farmers in order to propose sustainable alternatives based on the use of plant microbiota to guarantee the quality of rice aroma |                                             |
| 2          | Development of oyster sauce from Cambodian oysters and green mussels for commercialization                                                                       | Dr. TAN Reasmey   | Capfish UNIDO-EU                                                   | 15000                     | 2025          | To develop green mussel sauce from Cambodian green mussels in Koh Kong with extended shelf-life, and transfer the technology to SME for commercialization                                                 | - 3 Engineering students<br>- 1 Publication |
| 3          | Development of nutrient-dense waffle rolls for children by incorporating Cambodian freshwater fish powder                                                        | Dr. EK Pichmony   | Capfish UNIDO-EU                                                   | 15000                     | 2025          | To develop the “mini pillow wafer” made from Thai river sprat fish powder (Clupeoides borneensis) with improved packaging and shelflife<br>To transfer technology for the commercialization               | - 1 Engineering students                    |
| 4          | Development of Instant Fish Soups for Commercialization                                                                                                          | Ms. NET Marinich  | Capfish UNIDO-EU                                                   | 15000                     | 2025          | To develop instant fish soups (instant khor, instant broheu, instant ngam ngov) and transfer technology to SME for commercialization                                                                      |                                             |

**Annex 33. List of Completed Research Projects in 2025-2026 of MIT Unit.**

| <b>No.</b> | <b>Project/Research Topic</b>                                                                      | <b>Name of Researcher</b> | <b>Fund</b>                                         | <b>Total Budget (USD)</b> | <b>Period</b> | <b>Objectives</b>                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Output</b> |
|------------|----------------------------------------------------------------------------------------------------|---------------------------|-----------------------------------------------------|---------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1          | Development of Two Mobile Robots for Joining a Robocon Competition in 2025                         | Mr. SREY Sokserey         | Takahashi Industrial & Economic Research Foundation | 7,000                     | 2023-2024     | To provide lab members with a real and competitive environment to enhance their robotics skills through the design, development, and deployment of two mobile robots for the 2025 robotics competition.                                                                                                                                                                                                                    |               |
| 2          | Design and Implementation of Health Monitoring for Older People                                    | Dr. NGETH Rithea          | Takahashi Industrial & Economic Research Foundation | 5,000                     | 2023-2024     | To design and implement an affordable health monitoring system for older people living in rural area in Cambodia. Specific objectives are as following. (1) Design and develop an affordable ECG monitoring system; (2) Design a user interface; (3) Design an uploading data protocol to a cloud server.                                                                                                                  |               |
| 3          | Integrated Decision Support System for Non-Communicable Ocular Diseases using Machine Intelligence | Dr. VALY Dona             | ASEAN IVO                                           | 22,016                    | 2022-2024     | 1. Development of the Decision Support System to screen anterior segment-related NCODs using ASPIs captured using smartphone cameras.<br>2. Development of machine intelligence models with the best classifier that provides the highest classification and prediction accuracies to detect identified anterior segment NCOD<br>3. Societal, health and well-being impact analysis with the underprivileged old folks and |               |

|   |                                                                      |                |      |        |  |                                                                                                                                         |                 |
|---|----------------------------------------------------------------------|----------------|------|--------|--|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------|
|   |                                                                      |                |      |        |  | rural communities                                                                                                                       |                 |
| 4 | Investigation of configuration issues related to SDN/NFV deployments | Mr. KUY Movsun | ARES | 80,000 |  | (1) Experiment with NFV deployment on resource constrained datacenter.<br>(2) Experiment with NFV deployment across federated networks. | - 1 PhD student |



**Annex 34. List of Completed Research Projects in 2025-2026 of MSS Unit.**

| No. | Project/Research Topic                                                                                                 | Name of PI           | Fund     | Total budget (USD) | Period    | Objectives                                                                                                                                                                                                                                        | Outputs |
|-----|------------------------------------------------------------------------------------------------------------------------|----------------------|----------|--------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 1   | Evaluation technico-socio-économique des infrastructures routières au Cambodge                                         | Dr. Phun Veng Kheang | ARES     | 80,000             | 2023-2024 | Geological and geotechnical hazards linked to road infrastructure in Cambodia<br><br>The quality of current road infrastructure in Cambodia<br><br>The effect of the quality of road infrastructure on the socio-economic development of Cambodia | -       |
| 2   | Enhanced Durability and Sustainability of Asphalt Concrete through Waste Plastic Recycling                             | Dr. Kuchvichea KAN   | JICA-LBE | 14,950             | 2020-2024 | 1. Developing Modified Emulsion Asphalts using recycled waste plastic and waste oil.<br>2. Developing cold-mixed asphalt concrete that incorporates recycled plastic pellets, providing a sustainable, climate-resistant pavement material        | -       |
| 3   | Bus Route Optimization: A Case Study Public Bus in Phnom Penh and Intercity Bus in Cambodia                            | Dr. Narith SAUM      | JICA-LBE | 13,945             | 2023-2024 | 1. Develop a route optimization algorithm for public bus services.<br>2. Apply the bus route optimization algorithm to real-world scenarios in Cambodia, public bus in Phnom Penh and Intercity Bus with a prototype website.                     | -       |
| 4   | SATREPS Project: « Establishment of Risk Management Platform for Air Pollution in Cambodia, “Air sampling and traffic” | Mrs. AUN Srean       | JST-JICA | 4,500,000          | 2024-2025 | - Air sampling for:<br>Residential<br>Industry<br>Urban<br>Landfilled<br>- Air pollution due to traffic                                                                                                                                           | -       |

|   |                                                                                                                      |                  |      |         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|---|----------------------------------------------------------------------------------------------------------------------|------------------|------|---------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 5 | Managing the collaboration between architect, structure, and MEP in service of construction 4.0: ITC's workshop case | Ms. KETH Kannary | ARES | 102,000 | 2023-2025 | <p>The objective of this research:</p> <ul style="list-style-type: none"> <li>-To understand the multi-disciplines collaboration (architecture, structural, and MEP) in Cambodia's current construction stage.</li> <li>-To identify the difference of the guideline/protocol BIM in the European context.</li> <li>-To propose the guideline/protocol BIM aligned with the Cambodian context.</li> <li>-To propose the integration of BIM training in Architectural engineering students in Cambodia.</li> </ul> |  |
|---|----------------------------------------------------------------------------------------------------------------------|------------------|------|---------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

**Annex 35. List of Completed Research Projects in 2025-2026 of WAE Unit.**

| No. | Project/Research Topic                                                                                                                   | Name of Researchers | Source of Funding                            | Total budget (USD) | Period    | Objectives                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Outputs                                                            |
|-----|------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------------------------------|--------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 1   | Establishing an Evidence-based National Adaptation Plan (NAP): National Climate Report                                                   | Dr. SOK Ty          | Ministry of Environment (GREEN CLIMATE FUND) | 60,000             |           | To analyze climate data and write a National Climate Report for Cambodia                                                                                                                                                                                                                                                                                                                                                                                         | - 1 Publication                                                    |
| 2   | Water and Health Risks in Cambodia                                                                                                       | Dr. Sylvain Massuel | Ministry of Europe and Foreign Affairs       | 55,000             | 2021-2025 | Identify and define the exposure and vulnerability of rural populations to health hazards related to floods, in order to anticipate appropriate responses to protection issues.                                                                                                                                                                                                                                                                                  | - 2 Engineering students<br>- 2 Master students<br>- 2 Publication |
| 3   | Addressing Water Scarcity through Groundwater Use: Development of Solar-Powered Groundwater Treatment System for Remote Area of Cambodia | Dr. BUN Saret       | MTT-RRP                                      | 33,000             | 2024-2025 | (i) preliminary assessment including groundwater quality assessment as an input data for treatment technology design and social survey for assessing the demand and perspective of the target end users of the newly developed water treatment unit, (ii) optimization of groundwater treatment process in terms of treatment performance and power consumption, and (iii) evaluation the operation performance of prototype system in the real scale community. | - 5 Engineering students                                           |
| 4   | Optimization of Coconut Shell-Based Activated Carbon for Enhanced Water Treatment Efficiency                                             | Dr. HEU Rina        | JICA                                         | 13000              | 2025      | - Material Development: To produce activated carbon from coconut shells using chemical and physical activation methods and characterize its structural and chemical properties for water treatment applications.<br>'- Water Quality Analysis: To collect                                                                                                                                                                                                        |                                                                    |

|   |                                                                                                                            |                 |     |         |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |   |
|---|----------------------------------------------------------------------------------------------------------------------------|-----------------|-----|---------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|   |                                                                                                                            |                 |     |         |           | and analyze water samples from rural and urban areas in Cambodia, identifying key contaminants such as heavy metals and organic pollutants that the activated carbon will target.<br>'- Performance Evaluation and Application: To evaluate the adsorption efficiency of the activated carbon under varying conditions and assess its feasibility for use in rural water treatment systems, comparing its performance with commercial alternatives." |   |
| 5 | Réhabilitation et gestion durable de la fertilité des sols pour une agriculture durable et résiliente au Cambodge (ReaSol) | Dr. Ratha MUON  | IRD | 130,000 | 2023-2025 | - To improve understanding of socio-economic and environmental factors impact on soil fertility;<br>- To identify and promote innovative agricultural practices for soil rehabilitation and improve of the farmer livelihood                                                                                                                                                                                                                         |   |
| 6 | Anticipating the inversions of the Tonle Sap river (INVERSAP)                                                              | Dr. DUONG Ratha | IRD | 5,100   | 2024-2025 | Understanding the flow dynamics at the confluence to anticipate water quality changes (for drinking water suppliers) and migrating fish movements towards the great lake                                                                                                                                                                                                                                                                             | - |

**Annex 36. Research Proposal in 2025-2026 of ETM Unit.**

| <b>No.</b> | <b>Project/Research Topic</b>                                                                    | <b>Name of PI</b> | <b>Fund</b> | <b>Total budget (USD)</b> | <b>Objectives</b>                                                                                                                                              | <b>Status</b> |
|------------|--------------------------------------------------------------------------------------------------|-------------------|-------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1          | Development of thermal insulation materials from rice straw                                      | Sopheap Sam       | LBE         | 11980                     | The objective of this research is to develop eco-friendly insulation materials from local agricultural waste, rice straw, using a tree-derived natural binder. | Failed        |
| 2          | Study on the fabrication process and application of eco-friendly rice straw insulation materials | Sopheap Sam       | HIEP2       | 49650                     | The objective is to fabricate eco-friendly insulation materials from agricultural waste (rice straw) using tree-derived binder.                                | Under review  |

**Annex 37. Research Proposal in 2025-2026 of FTN Unit.**

| No. | Project/Research Topic                                                                                                  | Name of PI          | Fund  | Total budget | Objectives                                                                                                                                                                                                                                                                                 | Status |
|-----|-------------------------------------------------------------------------------------------------------------------------|---------------------|-------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 1   | Valorization of Cambodian Cashew Apple Fruits                                                                           | Dr. HOR Sivmey      | MoEYS | 53500        | The research project aims to valorize underutilized fruits like cashew apples in Cambodia into valueadded products.                                                                                                                                                                        | Fail   |
| 2   | Innovative fermentation to reduce biogenic amine and valorization of Prahok to be a ready-to-eat product                | Dr. Thanh Channmuny | LBE   | 13130        | 1. Optimizing fermentation conditions to reduce contamination and enhance consistency,<br>2. Investigating the valorization of Prahok to be a ready-to-eat product<br>3. Collaborating with communities and industry stakeholders to disseminate knowledge and validate innovation method. | Fail   |
| 3   | Sustainable Solutions for Contaminant Reduction in Cambodian Pepper for Global Trade                                    | Dr. YOEUN Sereyvath | MoEYS | 50000        | - Assess Current Agricultural Practices<br>- Address Food Safety Concerns in Black Pepper Value Chains<br>- Promote Pest and Disease Control<br>- Develop Farmer Training Programs                                                                                                         | Fail   |
| 4   | Development of value-added canned freshwater fish products for economic growth and malnutrition improvement in Cambodia | Dr. EK Pichmony     | MoEYS | 49,800       | This research aims to develop canned freshwater fish prototypes with two different flavors, and to produce scientific data of freshwater fish and canning technology for Cambodia context                                                                                                  | Fail   |
| 5   | Diversifying Cambodian Cacao into Cocoa Products and Chocolates                                                         | Dr. SAY Manit       | MoEYS | 20000        | - To study the effect of drying methods and conditions on qualities of dried cocoa grown in Cambodia;<br>- To analyze the proximate compositions of the dried cacao from different provinces which                                                                                         | Fail   |

|   |                                                                           |             |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |
|---|---------------------------------------------------------------------------|-------------|-------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
|   |                                                                           |             |       |       | <p>Dara Khmer Sacha Inchi have been planted, to observe the differences of proximate compositions in differences area;</p> <ul style="list-style-type: none"> <li>- To study on the effect of different cocoa butter extraction methods (Hydraulic press and screw press) and conditions on qualities of cocoa butter and de-fatted dried cocoa bean;</li> <li>- To produce the cocoa nips, cocoa liquor, cocoa butter, cocoa powder, and chocolates using Cambodian's cocoa bean;</li> <li>- To analyze the proximate composition, physicochemical, microbiological and sensory quality of final products</li> </ul> |          |
| 6 | Optimizing Functional Compounds in Soy Sauce from Different Raw Materials | Dr. Ly Luka | MoEYS | 20000 | <p>The overall objective of this research is to develop a functional soy sauce using Cambodian agricultural resources and optimized fermentation processes that enhance health-promoting compounds, improve product quality, and reduce reliance on imported raw materials</p>                                                                                                                                                                                                                                                                                                                                        | Reserved |

**Annex 38. Research Proposal in 2025-2026 of MIT Unit.**

| <b>No.</b> | <b>Project/Research Topic</b>                                                                                                              | <b>Name of Researcher</b> | <b>Fund</b> | <b>Total budget</b> | <b>Objectives</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Status</b> |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1          | The Project for an Agricultural Data Platform through Quality-Assured IoT and Optical Imaging                                              | Dr. VALY Dona             | SATREPS     |                     | The project aims to strengthen the resilience and sustainability of Cambodian agriculture by establishing a reliable, affordable, and widely deployable agricultural sensing and data infrastructure that enables data-driven decision-making for farmers. By combining advanced sensing technologies, AI-based analysis, and user-friendly data access, the project will support farmers—particularly pepper producers—in adapting to climate change, improving crop management, and maintaining product quality for international markets. At the same time, it seeks to build long-term national capacity by promoting measurement literacy through education and training, fostering a culture of accurate data use that underpins innovation, climate resilience, and Cambodia’s transition to a knowledge-based economy. |               |
| 2          | Khmer OCR for Official Documents                                                                                                           | Dr. VALY Dona             | CBRD        | 50800               | To develop a Khmer OCR technical solution leveraging Artificial Intelligence to provide high-accuracy conversion of image-based documents into editable text. Additionally, create a Word Spotting Model to streamline daily administrative tasks and contribute to Cambodia’s digital transformation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Not accepted  |
| 3          | Designing a Reusable and Modular Robot Application Framework Using Robot Operating System 2 (ROS2) for National Robot Contest Applications | Dr. SRANG Sarot           | CBRD        | 37700               | The Goal of the project is to create a software tool for students to learn robotic faster, implement autonomous robot mobility faster, and develop intelligent functionality easier.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Not accepted  |
| 4          | AI-Assistant for Administrative in HEIs                                                                                                    | Dr. PHAUK Sökkhey         | CBRD        | 29942               | The project aims to develop and deploy a web-based AI-powered assistant that integrates chatbot, dashboard, and knowledge base to provide real-time academic and administrative services, improve                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Not accepted  |



|   |                                                                                                          |                 |                                       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
|---|----------------------------------------------------------------------------------------------------------|-----------------|---------------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|   |                                                                                                          |                 |                                       |       | communication efficiency by automating routine inquiries and reducing administrative workload, and strengthen institutional capacity through the active involvement of students and staff in developing and maintaining digital service systems.                                                                                                                                                                                                                                                                                             |  |
| 5 | SmartRice-CAM: A Multi-Layer Digital Agriculture Platform for Climate-Resilient Rice Systems in Cambodia | Dr. VALY Dona   | Tonle Sap Program                     | 10600 | The objective of this project is to design, develop, and validate an integrated digital agriculture framework for rice cultivation and post-harvest processing in Cambodia by combining satellite-based remote sensing, in-field IoT sensing, low-power communication networks, and AI-based analytics to improve water-use efficiency, enable early detection of crop stress, optimize irrigation and yield forecasting, enhance post-harvest quality, and support climate-smart, data-driven decision-making for smallholder rice farmers. |  |
| 6 | Edge-Based Machine Intelligence System for Early Detection and Management of Diabetic Foot Complications | Dr. VALY Dona   | ASEAN IVO                             |       | The objective of the project is to develop a clinically interpretable, edge-based AI system for analyzing diabetic foot ulcer images to classify disease severity, support early detection and consistent clinical decision-making, and enable timely referral and appropriate care in resource-limited and underserved ASEAN healthcare settings through a clinician-in-the-loop approach.                                                                                                                                                  |  |
| 7 | Key Technologies for Distributed Acceleration of Secure Large Language Model Inference                   | Dr. VALY Dona   | Cambodia-China Joint Research Program |       | The objective of this joint project is to develop and operationalize a secure and verifiable distributed LLM inference framework that ensures privacy protection, model security, and trustworthy inference, while adapting and validating the framework in a low-resource Khmer language setting through a practical higher-education chatbot application that delivers real societal and institutional impact.                                                                                                                             |  |
| 8 | Research on Intelligent Processing Algorithms and Their Applications in Manufacturing                    | Mr. LAY Heng    | Cambodia-China Joint Research Program |       | The objective of this joint research program is to develop and demonstrate an AI-enabled, physics-informed smart manufacturing and quality control system based on cloud-edge-device collaboration and multi-agent intelligence, while establishing a Joint R&D Center for Intelligent Manufacturing in Cambodia to support technology transfer, capacity building, and long-term application of advanced manufacturing technologies.                                                                                                        |  |
| 9 | AI-Enabled Waterborne ETC System for Unmanned and Seamless Vessel Tolling                                | Dr. SRANG Sarot | Cambodia-China Joint Research Program |       | The objective of this project is to develop an AI-based waterborne ETC toll system that enables accurate vessel identification, non-contact tonnage measurement, intelligent navigation distance calculation, and reliable system integration, supporting unmanned,                                                                                                                                                                                                                                                                          |  |

|    |                                                                                                                                              |                   |                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|----|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|    |                                                                                                                                              |                   |                                       |  | non-stop, and seamless vessel passage in complex waterway environments.                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| 10 | Research on Efficient and Resource-Adaptive Collaborative Learning Algorithms for Edge-based Multi-Agent Systems                             | Dr. KUY Movsun    | Cambodia-China Joint Research Program |  | The objective of this project is to advance multi-agent collaborative learning in heterogeneous, resource-constrained edge environments by developing resource-adaptive learning methods, co-optimizing communication, storage, and computing resources, and establishing secure, trustworthy mechanisms that ensure safe training and reliable inference in open edge systems.                                                                                                               |  |
| 11 | Key Technologies for Trustworthy Multimodal Medical Foundation Models Targeting Major Neurological Diseases                                  | Dr. NGETH Rithea  | Cambodia-China Joint Research Program |  | The objective of this project is to develop trustworthy and interpretable AI foundation models for early and accurate detection of major neurological diseases, particularly Alzheimer's disease, by advancing generative multimodal medical data augmentation, dynamic cross-scale data fusion, and logic-driven reasoning frameworks, enabling precise, fair, and resource-efficient clinical decision support suitable for real-world and resource-constrained healthcare environments.    |  |
| 12 | Research on Key Technologies of Electric Power System Forecasting, State Estimation and Optimal Operation under limited and low-quality data | Dr. NOU Sotheany  | Cambodia-China Joint Research Program |  | The objective of this project is to develop an integrated forecast–estimate–control framework for power grids that enables secure and efficient operation under data-sparse conditions, by advancing spatiotemporal renewable and load forecasting, grid state estimation, and coordinated multi-agent control strategies to support high-penetration renewable energy integration, drawing on Cambodia–China collaboration to enhance grid stability and operational efficiency in Cambodia. |  |
| 13 | China-Cambodia Textile and Apparel Industrial Data Modeling and Optimization                                                                 | Dr. PHAUK Sökkhey | Cambodia-China Joint Research Program |  | The objective of this project is to establish a cross-border, data-driven intelligent management framework for the China–Cambodia textile and apparel supply chain by enabling secure data sharing and collaborative governance, developing advanced modeling and optimization methods for forecasting, production, logistics, and risk management, and implementing a closed-loop intelligent decision system to support dynamic, efficient, and resilient supply chain operations.          |  |

**Annex 39. Research Proposal in 2025-2026 of MSS Unit.**

| <b>No.</b> | <b>Project/Research Topic</b>                                                                                   | <b>Name of Researcher</b> | <b>Fund</b> | <b>Total budget (USD)</b> | <b>Objectives</b>                                                                                                                                                                                                                                 | <b>Status</b>       |
|------------|-----------------------------------------------------------------------------------------------------------------|---------------------------|-------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 1          | Enhancing Road Resilience through Rehabilitation to Support Socio-Economic Development for citizens in Cambodia | Dr. Phun Veng Kheang      | ARES        | 500000                    | Geological and geotechnical hazards linked to road infrastructure in Cambodia<br><br>The quality of current road infrastructure in Cambodia<br><br>The effect of the quality of road infrastructure on the socio-economic development of Cambodia | Reformulation Phase |
| 2          | Development of Bio-Stabilizer Products for Road Construction                                                    | Dr. Kuchvichea KAN        | HEIP2       | 20,000                    | Development of bio-based soil stabilizer.                                                                                                                                                                                                         | Pending             |
| 3          | (Re)Use: Waste to Worth for Sustainable Infrastructure (WWSI)                                                   | Dr. Kuchvichea KAN        | Ares        | 80000                     | - Strengthen the research capacities at ITC<br>- Develop bio-based soil stabilizers from biomass waste                                                                                                                                            | Under review        |
| 4          | Turning Trash into Tomorrow: Geopolymer Concrete from Biomass Ash                                               | Dr. Sounean Heng          | Ares        | 80000                     | - Upgrade teaching and research capacities at ITC<br>- Develop geopolymer concrete from biomass ash                                                                                                                                               | Under review        |

**Annex 40. Research Proposal in 2025-2026 of WAE Unit.**

| No. | Project/Research Topic                                                                                              | Name of PI       | Fund                                  | Total budget (USD) | Objectives                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Status                  |
|-----|---------------------------------------------------------------------------------------------------------------------|------------------|---------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 1   | Multimodal remote sensing change detection and dynamic monitoring for belt and road smart city development          | Dr. ANN Vannak   | MOST                                  | 210,000            | Advancing scientific research in multimodal remote sensing and ensuring practical outcomes for sustainable smart city development                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                         |
| 2   | Accelerating HHP Phase-Out via Regulation and Alternatives in the Lower Mekong                                      | Dr. Khy Eam Eang | UNEP                                  | 750,000            | Accelerate the phase-out of Highly Hazardous Pesticides (HHPs) in the Lower Mekong Region (LMR), focusing on Cambodia, Laos and Vietnam (CLV), and strengthen regulatory frameworks and actively promote safer alternatives.                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Submitted               |
| 3   | Sustainable Urban Soils: Strategies for Healthier Cities and Climate Resilience in Phnom Penh                       | Dr. MUON Ratha   | IRD                                   | 50,000             | to address these challenges by improving urban soil health, promoting plant biodiversity, and encouraging safe urban agriculture.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Rejected at final stage |
| 4   | Urbanisation-induced changes to soils, water cycle and the spread of pollution – examples from Phnom Penh and Paris | Dr. MUON Ratha   | jointly funded by France and Cambodia | 20,000             | The following objectives will be pursued in particular:<br>1) Initiate urban soil research in Cambodia as a key issue for rapidly growing cities such as Phnom Penh;<br>2) Strengthen partnerships between ITC and iEES-Paris and develop new collaborations on urban soil research with other partners;<br>3) Promote methodological development for studying urban soils and their anthropogenic constituents (e.g. microplastics and pollutants) at ITC;<br>4) Develop comparisons between cities in different pedoclimatic and socio-economic contexts (e.g. Phnom Penh and Paris) to inform responses to future research calls with a larger consortium on urban soil functioning. | Submitted               |

|   |                                                                                                                               |                   |           |        |  |          |
|---|-------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------|--------|--|----------|
| 5 | Development of an Advanced Multi-Hazard Mapping System to Strengthen Anticipatory Action in Indonesia, Malaysia, and Cambodia | Dr. SONG Layheang | ASEAN IVO | 80,000 |  | Rejected |
|---|-------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------|--------|--|----------|

#### Annex 41. List of publication for the last 5 year from ETM Research Unit.

1. Sreypich Say, Kosuke Yamazaki, Hiroshi Nakatsugawa(2025).Strategies to improve the thermoelectric performance of iron silicide-based materials.Science and Technology of Advanced Materials ,26(), 2585555.<https://doi.org/https://doi.org/10.1080/14686996.2025.2585555>
2. Sopheap Sam, Hiroshi Nakatsugawa(2025).P-type thermoelectric properties of  $\text{TiNi}_{1-x-y}\text{Co}_y\text{Sn}$  half-Heusler alloy with reduced interstitial Ni atoms.Solid State Sciences,169(), 108060.<https://doi.org/https://doi.org/10.1016/j.solidstatesciences.2025.108060>
3. Oudaya Eth, Vannak Vai and Long Bun. (2024). Optimal Topology with Improved Phase Balancing and PV Hosting Capacity in a Low Voltage Distribution System. IJEETC. Doi : 10.18178/ijeetc.13.5.343-353.
4. Samphors Eng, Vannak Vai, Sothea Oeun, Monychot Sary, Phanit So, Dara Eam, Sokleap Heang, Sievlong Suk, Chhith Chhlonh, Darong Sorn, Kimsrornn Khon, Oudaya Eth. (2023). Development of Distribution System Automation for Teaching and Research at ITC: Digital Tool and GUI in MATLAB and SCADA. APPEEC. Doi: 10.1109/APPEEC57400.2023.10561917
5. Chhlonh, C., Alvarez-Herault, M. C., Vai, V., & Raison, B. (2023, October). Designing AC Low-Voltage Topologies for a Non-Electrified Area—A Case Study in Cambodia. In 2023 IEEE PES Innovative Smart Grid Technologies Europe (ISGT EUROPE) (pp. 1-6). IEEE.
6. Chhlonh, C., Alvarez-Herault, M. C., Vai, V., & Raison, B. (2023, October). Low-Voltage Microgrid Planning Strategies for an Isolated Village—A Case Study in Cambodia. In IECON 2023-49th Annual Conference of the IEEE Industrial Electronics Society (pp. 1-6). IEEE.
7. Pheak Kor, Kinnaeth Vongchanh, Latin Heang, Sarin Chan, Jackie Yang, (2023). MEASUREMENT SURVEY ON CONSTRUCTION LABOUR PRODUCTIVITY UNDER HEAT STRESS DURING THE COOL SEASON IN CAMBODIA, Journal of emerging technologies and innovative research (JETIR), 10(10), e174-e180.
8. Pisal Ken, Kinnaeth Vongchanh, Sarin Chan, Latin Heang, Samoeurn Cheng, (2023). THERMAL PROPERTIES OF BIOMASS BRIQUETTES MADE FROM WASTE MATERIALS, , Journal of emerging technologies and innovative research (JETIR), 10(10), e532-e538.
9. Sam Oeurn Cheng, Kinnaeth Vongchanh, Sarin Chan, Pisal Ken, Latin Heang, (2023). Experimental Study and Energy Analysis of Biomass Briquettes Produced from Dried Tree Leaves, Sawdust, Sugar Bagasse, and Rice Husk Using Fish Oil as a Binder, Journal of emerging technologies and innovative research (JETIR), 10(10), e532-e538.
10. Pheakdey Choun, Viza Heang, Sarin Chan, Kinnaeth Vongchanh, (2023), Investigation of the Effectiveness of the Modeling on the Glazed Window by Energy Simulation using EnergyPlus, Case study: Phnom Penh City, Cambodia, Journal of emerging technologies and innovative research (JETIR), 10(9), g114-g122.
11. Sophal Pey, Sarin Chan, Kinnaeth Vongchanh, Pheakdey Choun, (2023), Simulation of the Indirect Evaporative Cooling System using the 2-D Model Cross-flow for Cambodia's Climate Conditions, Journal of emerging technologies and innovative research (JETIR), 10(10), c299-c309.
12. Phoeurng Tork, Sarin Chan, Kinnaeth Vongchanh, Pheakdey Choun, (2023) Feasibility Study on the use of rooftop solar-powered Air conditioning in Residential Building, Case study: Phnom Penh City, Cambodia, Journal of emerging technologies and innovative research (JETIR), 10(10), c169-c177.
13. Mengly Morn, Kinnaeth Vongchanh, Sarin Chan, (2023) DESCRIPTIVE RESULTS OF THE PRELIMINARY DESIGN APPROACH OF THE SURVEY ON HEAT STRESS AMONG PRIMARY SCHOOL STUDENTS IN CAMBODIA, Journal of emerging technologies and innovative research (JETIR), 10(10), e197-e205.
14. Kimhak Neak, Kakda Kret, Tola Sreu, Sirisokha Seang, Chanmoly Or. (2023). The Milestone of Cambodian First Oil Production in the Khmer Basin, Gulf of Thailand. Open Journal of Yangtze Gas and Oil. 10.4236/ojogas.2023.82003.
15. Kimhak Neak, Kakda Kret, Tola Sreu, Sirisokha Seang, Sokunthea Khoun, Chanmoly Or. (2023). Integrated Petrophysical and Petrographical Studies for Reservoir Characterization: A Case Study of the Khmer Basin in Cambodian Water, Gulf of Thailand. International Journal of Oil, Gas and Coal Engineering.

16. Sio, S., Or, Ch., Eng, Ch., Pech, S., Sreu, T. (2023). Review of Sedimentary Basin Evolution in Cambodia based on Tectonic Setting and Logical Information. *Berita Sedimentologi Indonesian Journal of Sedimentary Geology*, 9(2), 108-130. DOI: 10.51835/bsed.2023.49.2.403
17. Pech, S., Eng, C., Or, C., Rahim, A., Heng, R., Buth, C. and Sio, S. (2023) Depositional Environment of Sediments in Tonle Sap Sedimentary Basin, Western Part of Cambodia: Insights from Field and Geochemical Studies. *Open Journal of Geology*, 13, 651-666. doi: 10.4236/ojg.2023.137028.
18. Oeur, V., Or, C., Eng, C., Pech, S., Thorng, L., Sio, S. and Heng, R. (2023) Characterization of Sandstone Reservoir at Bokor Formation, Kampot Province, Kampong Som Basin, Onshore Cambodia. *International Journal of Geosciences*, 14, 792-811. doi: 10.4236/ijg.2023.148042.
19. Eam, D., Vai, V., Chhlonh, C., & Eng, S. (2023). Planning of an LVAC Distribution System with Centralized PV and Decentralized PV Integration for a Rural Village. *Energies*, 16(16), 5995. DOI: <https://doi.org/10.3390/app11052146>
20. Khon, K., Chhlonh, C., Vai, V., Alvarez-Herault, M. C., Raison, B., & Bun, L. (2023). Comprehensive Low Voltage Microgrid Planning Methodology for Rural Electrification. *Sustainability*, 15(3), 2841.
21. Kimsornn KHON, Chhith Chhlonh, Vannak VAI, Marie-Cecile ALVAREZ-HERAULT, Bertrand RAISON and Long BUN. 2023. Comprehensive low voltage microgrid planning methodology for rural electrification. <https://ieeexplore.ieee.org/abstract/document/10000324>
22. O. Eth, V. Vai, L. Bun, S. Eng and K. Khon, "Optimal Radial Topology with Phase Balancing in LV Distribution System Considering Energy Loss Reduction: A Case Study in Cambodia," 2022 4th International Conference on Electrical, Control and Instrumentation Engineering (ICECIE), Kuala Lumpur, Malaysia, 2022, pp. 1-6, doi: 10.1109/ICECIE55199.2022.10000324.
23. Ikeda, M., Kret, K., Tsuji, T., Ikeda, T., Tsuji, T., Onishi, K., & Nishizaka, N. (2022). Pore fabric anisotropy and elastic moduli of fault rocks from the Median Tectonic Line, Shikoku, southwest Japan. *Tectonophysics*, 834, 229366.
24. Kinnaeth VONGCHANH, Sarin CHAN, A preliminary study on investigation of the heat stress affecting the labor productivity, a case study: garment factory Phnom Penh, *ASEAN Engineering Journal*, 2022.
25. Kimsornn KHON, Vannak VAI, Marie-Cecile ALVAREZ-HERAULT, Long BUN, Bertrand RAISON. 2021., Planning Of Low Voltage Ac/Dc Microgrid For Un-Electrified Areas. <https://ieeexplore.ieee.org/abstract/document/9692581>
26. Kanika Yon, Marie-Cécile Alvarez-Hérault, Bertrand Raison, Kimsornn Khon, Vannak Vai, Long Bun., 2021. Microgrids planning for rural electrification. <https://ieeexplore.ieee.org/abstract/document/9494966>
27. V. Vai, «Design of AC Microgrid Topology with Photovoltaic Uncertainties in a Rural Village,» *Makara Journal of Technology*, 2021, <https://doi.org/10.7454/mst.v25i1.3759>
28. S. Suk, V. Vai, R. Lorm, C. Chhlonh, S. Eng and L. Bun, «Modifying Switch Opening and Exchange Method for Distribution Network Reconfiguration with Distributed Generations,» 2021 9th International Electrical Engineering Congress (iEECON), 2021, pp. 85-88, doi: 10.1109/iEECON51072.2021.9440343. (International peer review).
29. S. Suk, V. Vai, R. Lorm, C. Chhlonh, S. Eng and L. Bun, «Network Reconfiguration in Distribution Systems Based on Modified Sequential Switch Opening Method,» 2021 11th International Conference on Power, Energy and Electrical Engineering (CPEEE), 2021, pp. 143-146, doi: 10.1109/CPEEE51686.2021.9383247. (International peer review)
30. V. Vai et al., «Optimal Design of LVAC Distribution System Topology for a Rural Village,» 2021 9th International Electrical Engineering Congress (iEECON), 2021, pp. 93-96, doi: 10.1109/iEECON51072.2021.9440289. (International peer review)
31. V. Vai, S. Suk, R. Lorm, C. Chhlonh, S. Eng, and L. Bun. «Optimal Reconfiguration in Distribution Systems with Distributed Generations Based on Modified Sequential Switch Opening and Exchange» *Applied Sciences*, 2021, 11, no. 5 : 2146. <https://doi.org/10.3390/app11052146>. IF:2.679
32. R. Lorm, V. Vai, S. Suk, C. Chhlonh, S. Eng, L. Bun, «Service Restoration in Distribution Systems under Different Load Levels,» 2021 11th International Conference on Power, Energy and Electrical Engineering (CPEEE), 2021, pp. 122-126, doi : 10.1109/CPEEE51686.2021.9383358. (International peer review)

33. VAI Vannak, BUN Long, KHON Kimsrornn, Marie-Cécile Alvarez-Hérault, Bertrand Raison. 2020. Integrated PV and Battery Energy Storage in LVAC for a Rural Village: A Case Study of Cambodia. <https://ieeexplore.ieee.org/abstract/document/9255336>
34. R. Lorm, S. Eng, S. Suk, C. Chhlonh, L. Bun and V. Vai, « Service Restoration in Distribution System Using Modified Sequential Opening Branches, » 2021 9th International Electrical Engineering Congress (iEECON), 2021, pp. 69-72, doi : 10.1109/iEECON51072.2021.9440266. (International peer review)
35. C. Chhlonh, D. C. Riawan and H. Suryoatmojo, "Modeling and Simulation of Independent Speed Steering Control for Front In-wheel in EV Using BLDC Motor in MATLAB GUI," 2019 International Seminar on Intelligent Technology and Its Applications (ISITIA), Surabaya, Indonesia, 2019, pp. 270-275, doi: 10.1109/ISITIA.2019.8937199.

#### **List of Non-index publications for the last 5 years**

1. K. Thieng, V. Vai, O. Eth, "A Study of Decentralized Battery Energy Storage Integration into an Optimal Grid-Connected PV System with Zero Power Injection Considerations", Techno-Science Research Journal, Institute of Technology of Cambodia, Cambodia, 2023.
2. Y. Neov, K. Khon, O. Eth, "Comparative Analysis of Different Clustering Techniques in Hybrid AC/DC Microgrid", Techno-Science Research Journal, Institute of Technology of Cambodia, Cambodia, 2023.
3. Latin Heang, Porchaing Choeng, Kinnalesh Vongchanh, Sarin Chan. Experimental Investigation on Sawdust and Tree Leaf Briquette Using Fish Residues Oil as a Binder. Techno-Science Research Journal 8 (2020)
4. Porchaing Choeng, Latin Heang, Kinnalesh Vongchanh, Sarin Chan. Experimental Investigation on Rice Husk and Bagasse Briquette Using Fish Oil as Binder. Techno-Science Research Journal 8 (2020)

#### **List of Conferences for the last 5 years**

1. Sopheap Sam, Masatomo Sumiya, Liwen Sang(2025).The 5th International Online Conference on Nanomaterials .Evaluation of Thermal Transport of GaN Thin Films Using Raman Spectroscopy,Oral(Link conference: <https://sciforum.net/event/IOCN2025>).Link Proceeding: <https://sciforum.net/paper/view/23888>
2. Heang Latin, Kinnalesh Vongchanh, Chan Sarin, Kor Pheak(2024).International Conference on National Science and Engineering (ICNSE 2024).Environmental Heat Stress and Labor Productivity: A Case Study of Cambodian Construction Workers During Hot Months,Oral(Link conference: ).Link Proceeding: N/A
3. Heang Latin, Kinnalesh Vongchanh, Chan Sarin, Kor Pheak(2025).The 14th Scientific Day.Heat Stress and Construction Labor Productivity: Identifying Key Factors,Oral(Link conference: N/A).Link Proceeding: N/A
4. EAM Dara, VAI Vannak,Hideaki Ohgaki, SUK Sievlong, HEANG Sokleap, NEOV Yoklin(2025).The 16th International Symposium of Advanced Energy Science Symposium Poster Award.Residential Microgrid Design and Management with Open-Source Tool and GIS ,Oral(Link conference: N/A).Link Proceeding: N/A"
5. Nou Seyha, Chheng Hongchhay, Teng Teu, Seang Sirisokha, Kret Kakda, Teck Vanna(2025).The 4th EraGET.Assessing Land Cover Change and Its Implications for Urban Flood Risk Mitigation in Akreiy Ksatr City, Cambodia ,Oral(Link conference: N/A).Link Proceeding: N/A"
6. Chanthy Choem, Kakda Kret, SirisokhaSeang, ChanmolyOr (2025).The 14th Scientific Day.Assessing of air pollution using Sentinel-5P imageries: a case study of Phnom Penh, Cambodia,Poster(Link conference: N/A).Link Proceeding: N/A
7. Pheak KOR, Kinnalesh VONGCHANH, (2025). A Review of Environmental Factors Affecting Students' Cognitive Performance. 14th Scientific day conference, Institute of Technology of Cambodia.
8. Pagnasatyavorn Sreynattha, Vannak Vai, Kimsrornn Khon, (2025). A Frequency Stability Analysis for BESS placement under high penetration of IBRs (Solar PV) considering Load and Solar PV location. 14th Scientific day conference, Institute of Technology of Cambodia.



9. Sak SREY, Vannak VAI, Kimsrornn KHON, (2025). Coordinated Reactive Power Control Using Genetic Algorithm for Loss Minimization in PV Integrated Distribution Networks. 14th Scientific day conference, Institute of Technology of Cambodia.
10. Kechki OENG, Vannak VAI, Chhith CHHLONH, (2025). Optimal number of EV charger stations in distribution system with 24-hour EV Load Profiles Estimation. 14th Scientific day conference, Institute of Technology of Cambodia.
11. Samphors ENG, Julien ALLARD, Vannak VAI, François VALLEE, (2025). Maximizing PV Hosting Capacity in Low-Voltage Distribution Networks: A Case Study in Cambodia. 14th Scientific day conference, Institute of Technology of Cambodia.
12. Kimhab HANG, Chhith CHHLONH, Vannak VAI, (2025). A Comparative Study of Topology Design Strategies for Rural LV Distribution Systems. 14th Scientific day conference, Institute of Technology of Cambodia.
13. CHEA Chantola, Kinnalet VONGCHANH, HOEUNG Hollin, HEANG Latin, CHAN Sarin. (2025). Calibration of DEM Parameters Using the Angle of Repose for Biomass Materials. 14th Scientific day conference, Institute of Technology of Cambodia.
14. Latin Heang, Kinnalth Vongchanh, Chan Sarin, (2025). Heat Stress and Construction Labor Productivity: Identifying Key Factors Affecting Cambodian Construction Workers. 14th Scientific day conference, Institute of Technology of Cambodia.
15. Hollin Hoeung, Kinnalet Vongchanh, Chantola Chea, Latin Heang, Sarin Chan, (2025). 3D Modeling of a Continuous Mixing Machine for Biomass Briquette Systems. 14th Scientific day conference, Institute of Technology of Cambodia.
16. Prom Piseth, Vannak Vai, Kimsrornn Khon, (2025). Economic analysis of solar rooftop at Toyota Cambodia Office in Phnom Penh by using PVsyst software: EAC OLD vs New Regulation. 14th Scientific day conference, Institute of Technology of Cambodia.
17. Tangly Ty, Menghorng Bun, Vannak Vai, Sievlong Suk, (2025). Inverter Control Strategies for Active and Reactive Power in Photovoltaic Production for Grid Integration. 14th Scientific day conference, Institute of Technology of Cambodia.
18. Bun Panha, Kinnalet Vongchanh, Chan Sarin, (2025). Energy Consumption Simulation of a Three-Story Villa Using DesignBuilder. 14th Scientific day conference, Institute of Technology of Cambodia.
19. Sreynoch Dum, Chhor Yi Ly, Marany Sat, Navin Chheat, Nhornhoem Pich, Bunsong Sey, Sirisokha Seang, Kakda Kret, Chanthourn Thuy, Tharith Sriv, (2025). Analysis of Iron Ores and Slags from Archaeological Sites by Using Energy Dispersive X-ray Spectroscopy and X-ray Diffraction Technique. 14th Scientific day conference, Institute of Technology of Cambodia.
20. HANG Kimhab, CHHLONH Chhith, VAI Vannak, (2025). A Comparative Study of Topology Design Strategies for Rural LV Distribution Systems. 14th Scientific day conference, Institute of Technology of Cambodia. (Poster).
21. Vanda SRY, Darong SORN, Kimsrornn KHON, Raphael CAIRE, (2025). Agent-based Dynamic Distributed Optimization using ADMM in Microgrids. 14th Scientific day conference, Institute of Technology of Cambodia. (Poster).
22. Monychot SARY, Jérôme BUIRE, Anotine LABONNE, Vannak VAI, (2025). Modeling Assessment of Small-Scale System Integration Multi-Machine and Inverter-Based Resource. 14th Scientific day conference, Institute of Technology of Cambodia. (Poster).
23. Monioudom O., Vincent D, Remy. R.M., Marie-Cécile A., Lucas L., Vannak V., Kimsrornn K, (2025). Grid Impact of Battery Energy Storage Systems Participating in Energy Markets. 14th Scientific day conference, Institute of Technology of Cambodia. (Poster).
24. Bora NAING, Antoine LABONNE , Jérôme BUIRE, Vannak VAI, (2025). Voltage Coordination in Distribution Grid (HIL and Digital Twin). 14th Scientific day conference, Institute of Technology of Cambodia. (Poster).
25. Chakrya Chim, Benoit Delinchant, Vannak Vai, Kimsrornn Khon, (2025). Improving Solar Forecasting: A Machine Learning Approach with Nested Cross-Validation Strategies. 14th Scientific day conference, Institute of Technology of Cambodia. (Poster).
26. Sothea Oeun, Jérôme Buire, Antoine Labonne, Vannak Vai, Kimsrornn Khon, (2025). An Integrated Small-Signal and Electromagnetic Transient Analysis Tool for Power System Stability. 14th Scientific day conference, Institute of Technology of Cambodia. (Poster).

27. Heang Latin, Kinnalesh Vongchanh. Yang Yang, Chan Sarin, Kor Pheak (2024), Environmental Heat Stress and Labor Productivity: A Case Study of Cambodian Construction Workers During Hot Months, International Conference on National Science and Engineering (ICNSE 2024).
28. Kinnalesh Vongchanh, Sarin Chan, Albert Chan, Yang Yang (2024) Descriptive Analysis on the Impact of Thermal Environment on Construction Labor Productivity in Cambodia, International Conference on National Science and Engineering (ICNSE 2024).
29. Kakda Pov, Kakda Kret, Kimtho Po, Sirisokha Seang, Christophe Révillion, Thibault Catry, Renaud Hostache, Vincent Herbreteau, Vannak Ann (2024). Land Surface Temperature and Green Health Vegetation Variability across Lithology and Land Use and Land Cover in the Chrey Bak catchment. KHEOBS Day.
30. Chan Virak, Sirisokha Seang, Kakda Kret, Kotaro Yonezu, Koichiro Watanabe. 2024. Preliminary study on Petrography and Geochemistry of Basaltic rock in Ratanakiri province, Northeast Cambodia. The 13th Scientific day conference, Institute of Technology of Cambodia, Cambodia.
31. Jolsa Heng, Sirisokha Seang, Kakda Kret, Kotaro Yonezu, Koichiro Watanabe. 2024. The Quart veins, hydrothermal alteration, and ore mineralization of epithermal prospect, Phnom Sro Ngam, Chhouk district, Kampot province. The 13th Scientific day conference, Institute of Technology of Cambodia, Cambodia.
32. Yoklin Neov, Oudaya Eth, Kimsornn Khon, “Comparative Analysis of Different Clustering Techniques in Hybrid AC/DC Microgrid”, 12th Scientific day conference, Institute of Technology of Cambodia, Cambodia, 2023.
33. Kimtheng Thieng, Vannak Vai, Oudaya Eth, Samphors Eng “Study of the Technical Impact of Battery Energy Storage on PV Hosting Capacity in LVAC Distribution System: A Case Study in Cambodia” 12th Scientific day conference, Institute of Technology of Cambodia, Cambodia, 2023.
34. Kakda Pov, Kakda Kret, Sirisokha Seang, Kotaro Yonezu, Koichiro Watanabe, Chanmoly Or. Kimhak Neak, Chanmaly Chhun, Seangleng Hoeun. (2023). Remote sensing techniques using advanced space-borne thermal emission and reflection (ASTER) and Landsat-8 in the detection of alterations in Preah Vihear, North Cambodia. International Symposium on Earth Science and Technology, Japan.
35. Vannak Por, Seang Sirisokha, Kakda Kret, Kimhouy Oy, Jaydee Ammugauan, 2023. Lithology, Ore Mineralization, and Hydrothermal Alteration of Canada Wall Porphyry Cu-Mo-Au at Andongmeas, Ratanakiri, Cambodia. The 12th Scientific Day Institute of Technology of Cambodia.
36. Rorn Khanin, Seang Sirisokha, Kret Kakda, Kimhouy Oy. Lithology, 2023. Alteration Minerals, and Ore Mineralization in Memot, Tbong Khmum Province, Cambodia. The 12th Scientific Day Institute of Technology of Cambodia.
37. Soy Makara, Sath Sithea, Muon Ratha, Seang Sirisokha, Kret Kakda, Ann Vannak, Pascal Jouquet, Rainer Zaiss, 2023. Use of historical aerial photographs for land use mapping in Stung Chrey Back catchment between 1952-1972. The 12th Scientific Day Institute of Technology of Cambodia.
38. Pottheanaram Nhim, Sirisokha Seang, Kakda Kret, Kimhouy Oy, Jaydee Ammugauan Lithology, Ore mineralization, and Hydrothermal Alteration of Drill hole ZK\_40 in Chhouk District, Kampot Province, Cambodia, 2023. The 12th Scientific Day Institute of Technology of Cambodia.
39. Chandara Seng, Sirisokha Seang, Kakda Kret, Jolsa Heng, Yana Chhoeun, Ravey Chan, Mithona Horn, Vireak Chan, Muhammad Irman Khalif Ahmad Aminuddin, 2023. Preliminary Study on Petrography and Geochemistry of Basaltic Rock in Mondulkiri, and Ratanakiri Province, Northeast Cambodia, The 12th Scientific Day Institute of Technology of Cambodia.
40. Kheng Rothana, Sirisokha Seang, Kakda Kret, Oy Kimhouy, Hang Bunna, Jaydee Ammugauan, Samnang Kong, 2023. Lithology, Hydrothermal Alteration, and Ore Mineralization of Area 5 in Koh Sla, Chhouk District, Kampot Province, Southern Cambodia. The 12th Scientific Day Institute of Technology of Cambodia.
41. Kimhak Neak, Kakda Kret, Tola Sreu, Kakda Pov, Chanmoly Or, Sokunthea Khoun. (2023) Integrated Petrophysical and Petrographical Studies for Reservoir Characterization: A Case Study of the Khmer Basin in Cambodian Water, Gulf of Thailand. COORDINATING COMMITTEE FOR GEOSCIENCE PROGRAMMES IN EAST AND SOUTHEAST ASIA (CCOP), Thailand.
42. Latin Heang, Kinnalesh Vongchanh, Pheak Kor, Sarin Chan, Yang Yang, A CASE STUDY OF HEAT STRESS AND CONSTRUCTION LABOR PRODUCTIVITY IN PHNOM PENH, CAMBODIA, Heat on Human Health Symposium 2023, 15-16 Nov 2023, Bangkok, Thailand.

43. Kinnalesh Vongchanh, Heat stress investigation in industrial/workplace environment to prevent the productivity losses for Cambodia, 4th Asia Pacific Conference on Industrial Engineering and Operations Management in HCMC, 11-14 Sep 2023, Vietnam.
44. Pheak Kor, Kinnalesh Vongchanh, Latin Heang, Jackie Yang Yang , Sarin Chan, Investigation on the Impact of Heat Stress on Construction Labor Productivity during the Cool Season in Cambodia, the 12 Scientific Day, 08-09 June 2023, Phnom Penh, Cambodia.
45. Sophal Pey, Sarin Chan, Kinnalesh Vongchanh, Simulation of an indirect evaporative cooling system using the 2-D model cross flow for Cambodia's climates, the 12 Scientific Day, 08-09 June 2023, Phnom Penh, Cambodia.
46. C. Chhlonh, M. -C. Alvarez-Herault, V. Vai and B. Raison, "Low-Voltage Microgrid Planning Strategies for an Isolated Village — A Case Study in Cambodia," IECON 2023- 49th Annual Conference of the IEEE Industrial Electronics Society, Singapore, Singapore, 2023, pp. 1-6, doi: 10.1109/IECON51785.2023.10312050.
47. Eng, S., Chou, K., Thourn, K., Vai, V., Kim, B., Thiriet, J. M., & Yahoui, H. (2023, March). "A Survey on Industrial Sector Status for Curricula Improvement Linked to Industry 4.0 in Electrical Engineering Program at ITC". In 2023 Joint International Conference on Digital Arts, Media and Technology with ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunications Engineering (ECTI DAMT & NCON) (pp. 330-334), Phuket, Thailand, DOI: 10.1109/ECTIDAMTNCON57770.2023.10139750
48. Thourn, K., Kim, B., Eng, S., Vai, V., Chou, K., Thiriet, J. M., ... & Yahoui, H. (2023, March). "Center of Excellence for Control and Automation in the Context of ASEAN Factori 4.0 Project". In 2023 Joint International Conference on Digital Arts, Media and Technology with ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunications Engineering (ECTI DAMT & NCON) (pp. 415-418), Phuket, Thailand, DOI: 10.1109/ECTIDAMTNCON57770.2023.10139649
49. Neov, Y., Khon, K., Eth, O., & Vai, V. Comparative Analysis of Different Clustering Techniques in Hybrid AC/DC Microgrid: Hierarchical Vs K-M, Malaysia, 2023 8th IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE)-ICRAIE 2023.
50. Thieng, K., Eth, O., Samphors, E., Vai, V. A Study of Decentralized Battery Energy Storage Integration into an Optimal Grid-Connected PV System with Zero Power Injection Considerations, Techno-Science Research Journal 2023.
51. Heang, L., Vongchanh, K., Chan, S., Kor, P., & Yang, Y. 2023. Effects of Heat Stress on Cambodian Construction Productivity. The CCCA3 Knowledge Sharing Event 2023.
52. Oeun Sothea, Eng Samphors, Vai Vannak, Chim Charkya, So Phanit, Sary Monychot, LV System Modelling Considers Reverse Power Flow Analysis using Relay Vs Battery, the 12th scientific day of ITC, 8-9 June 2023, Phnom Penh, Cambodia.
53. SARY Monychot, VAI Vannak, ENG Samphors, SO Phanit, OEUN Sothea, CHIM Chakrya, Optimize Phase Balancing and Sizing DGs at the Rural Village in Cambodia, the 12th scientific day of ITC, 8-9 June 2023, Phnom Penh, Cambodia.
54. Chim Chakrya, Oeun Sothea, Eng Samphors, Vai Vannak, So Phanit, Sary Monychot, Rural Electrification with Off-Grid system, the 12th scientific day of ITC, 8-9 June 2023, Phnom Penh, Cambodia.
55. Thyra Thon, Vannak Vai, Darong Sorn, Samphors Eng, Techno-Economic Analysis of Feeder Routing for MV Distribution Systems, the 12th scientific day of ITC, 8-9 June 2023, Phnom Penh, Cambodia.
56. Kimtheng Thieng, Vannak Vai, Oudaya Eth, Samphors Eng, Study of the Technical Impact of Battery Energy Storage on PV Hosting Capacity in LVAC Distribution System: A Case Study in Cambodia, the 12th scientific day of ITC, 8-9 June 2023, Phnom Penh, Cambodia.
57. Rorn, K., Seang, S., Kret, K., Oy, K. and Ammugauan, J. (2023) Lithology, Alteration Minerals, and Ore Mineralization in Memot, Tbong Khmum Province, Cambodia. Proceedings of the ITC's 12th Scientific Day, 8-9 May 2023
58. Por, V., Seang, S., Kret, K., and Oy, K. (2023) Lithology, Ore mineralization, and Hydrothermal Alteration of Canada Wall Porphyry Cu-Mo-Au at Andongmeas, Ratanakiri, Cambodia. Proceedings of the ITC's 12th Scientific Day, 8-9 May 2023
59. Neov Yoklin, Oudaya Eth, Kimsrornn KHON, Comparative Analysis of Different Clustering Techniques in Hybrid AC/DC Microgrid, Proceedings of the ITC's 12th Scientific Day, 8-9 May 2023

60. Pheak Kor, Latin Heang, Jackie Yang Yang, Kinnaeth Vongchanh, Sarin Chan, Assessing on the Impact of Heat Stress on Construction Labor Productivity during Cool Season in Cambodia, Proceedings of the ITC's 12th Scientific Day, 8-9 May 2023.
61. Sophal Pey, Sarin Chan, Kinnaeth Vongchanh, Simulation of an indirect evaporative cooling system using the 2-D model cross flow for Cambodia's climates, Proceedings of the ITC's 12th Scientific Day, 8-9 May 2023.
62. K Vongchanh and S Chan, Testing the hydraulic press machine for densification of biomass briquette for household use, International postgraduate conference for energy research, December 19, 2022, Kuala Lumpur, Malaysia.
63. Pheakdey Choun, Viza Heang, Sarin Chan, Kinnaeth Vongchanh, Simulation of Energy consumption for Flat using EnergyPlus, the 11th scientific day of ITC, 5-6 May 2022, Phnom Penh, Cambodia.
64. V. Chea, L. Heang, K. Vongchanh, S. Chan, A Descriptive Results on Environment Affecting Pupils in Cambodia – Case Study Primary Schools in Phnom Penh, 2nd ASEAN International Conference on Energy and Environment, 14-15 September 2022, Phnom Penh, Cambodia.
65. Morn Mengly, Kinnaeth VONGCHANH, CHAN Sarin, Latin HEANG, A Descriptive Results on Environment Affecting Pupils in Cambodia – Case Study Primary Schools in Phnom Penh, 2nd ASEAN International Conference on Energy and Environment, 14-15 September 2022, Phnom Penh, Cambodia.
66. Samoeurn Cheng, Kinnaeth Vongchanh, Sarin Chan, Latin Heang, Pisal Ken, Exergy Analysis of Biomass Briquette System, The 15th Regional Conference on Energy Engineering And The 13th International Conference on Thermofluids 2022, 25-26, October, 2022, Yogyakarta, Indonesia.
67. Pisal Ken, Kinnaeth Vongchanh, Sarin Chan, Latin Heang, Samoeurn Cheng, Thermal Properties of Biomass Briquettes made from Waste Materials. (2022). The 15th Regional Conference on Energy Engineering and The 13th International Conference on Thermofluids 2022, 25-26, October, 2022, Yogyakarta, Indonesia.
68. Kinnaeth Vongchanh, Sarin Chan, Testing the hydraulic press machine for densification of biomass briquettes for household use, The International postgraduate conference for energy research 2022, 19 December 2022, Kuala Lumpur, Malaysia.
69. Ly, P., Seang, S., Kret, K., Oy, K., Yonezu, K., Watanabe, K., Sreu, T. (2022) Lithology, hydrothermal alteration, and ore characteristics of Area-1 in Koh Sla, Chhouk district, Kampot Province, southern Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan.
70. Chheuy, P., Kret, K., Seang, S., Or, C., Kong, S., Kry, R., Oy, K., Chan, C., Sreu, T., Hoeun, S., Hoeun, S., Chhun, C., Neak, K. (2022) Hydrothermal Alteration Mineral Mapping by Integrating of ASTER and Landsat-8: A case study in Phnom Peam Louk, Kompong Chhang Province, Southwest Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022.
71. Neak, K., Kret, K., Sreu, T., Or, C., Seang, S. (2022). Petrophysical and Petrographical Studies for Characterization of Reservoir Quality of Cambodian Offshore: A Case Study on the Khmer Basin in the Gulf of Thailand. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022.
72. Boeurn, C., Seang, S., Kret, K., Yonezu, K., Watanabe, Z., Zaw, K. (2022) Geology and Hydrothermal Alteration of Skarn Deposit in Area 4, Phnom So Ngam Tenement, Chhouk District, Kampot Province, Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022.
73. Kim, C., Kret, K., Seang, S., Kong, K., Or, C., Oy, K., Ammugauan, J., Heoun, S., Chhun, C., and Neak, K. (2022) Lithological Analysis of Koh Nheak, Mondoukiri Province Using Landsat-8 OLI and ASTER. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022.
74. M. Morn, K. Vongchanh, S. Chan, L. Heang (2022), A Descriptive Results on Environmental Affecting Pupils in Cambodia – Case Study Primary Schools in Phnom Penh, The 2nd ASEAN International Conference on Energy and Environment.
75. V. Chea, L. Heang, K. Vongchanh, S. Chan (2022), Workers' Perceptions of Occupational Heat Stress-a survey among garment workers in Phnom Penh, The 2nd ASEAN International Conference on Energy and Environment.
76. P. Ken, K. Vongchanh, S. Chan, L. Heang, S. Cheng (2022), Investigation of Briquette Thermophysical Properties and Gas Emissions, Seminar Thermofluid UGM
77. S. Cheng, S. Chan, K. Vongchanh, L. Heang, P. Ken (2022), Investigation of Briquette Thermophysical Properties and Gas Emissions, The 11<sup>th</sup> Scientific Day
78. P. Ken, K. Vongchanh, S. Chan, L. Heang, S. Cheng (2022), Exergy Analysis of Biomass Briquette System, The 11<sup>th</sup> Scientific Day.

79. Muoy Y. H., Chungyeun L., Saranyu H., Chandoeun E., Frederic N., 2022. Quality assurance of Concrete pile using Cross-hole Sonic Logging and Soil Profile. International Symposium on Earth Science and Technology 2022.
80. KEO T., HENG. M. Y., CHORK S., LANG R., HENG H., 2022., The Primary Geochemistry Evaluation on the Geothermal source in Te Teuk Pus Hot Spring in Oral district, Kompong Speu province, Cambodia., International Symposium On Earth Resources And Geo-Environmental Technology 2022.
81. Chungyeun L., Chandoeun E., Muoy Y. H., Phanny Y., 2022., Concrete Pile Defect Identification: Insights from Cross-Hole Sonic Logging and High Strain Dynamic Pile Test., The 4th ICCEE Proceedings.
82. Chungyeun L., Chandoeun E., Muoy Y. H., Phanny Y., 2022., Cross-Hole Sonic Logging and Dynamic Load Test for Concrete Pile Integrity Analysis., THE 11TH SCIENTIFIC DAY, Phnom Penh.
83. Sreymean Sio, Chandoeun Eng, Chanmoly Or. (2022). Seismic Interpretation and Tectonic Evolution of Tonle Sap Basin, Onshore Cambodia, the 11<sup>th</sup> Scientific Day of ITC
84. Sreymean Sio Chanmoly Or, Chandoeun Eng (2022). Review of Sedimentary Basin Formation and Petroleum System of Khmer Basin, Offshore Cambodia, the International Symposium on Earth Science and Technology 2022.
85. Sopheap PECH, Chandoeun ENG, Chanmoly OR, Sreymean SIO, Ratha HENG, Chitra BUTH (2022). Geochemistry of Shales and Limestones in Battambang Province: Implications for Depositional Environment, the 1<sup>st</sup> International Conference on Earth Resources and Geo-Environment Technology 2022.
86. Sreyleap Koem, Chandoeun Eng, Sopheap Pech, Kimhouy Oy, Sreymean Sio (2022). Sedimentary Facies and Sandstone Characteristics of Outcrop at Phnom Thippadei, Battambang Province, Cambodia, the 1<sup>st</sup> International Conference on Earth Resources and Geo-Environment Technology 2022.
87. They Chhun, Chandoeun Eng, Kimhouy Oy, Sopheap Pech, Sreymean Sio, Chaimongkhon Proeung. (2022). Petrography and geochemistry properties of limestone at Sampov Mountain in Battambang province, Cambodia, the 1<sup>st</sup> International Conference on Earth Resources and Geo-Environment Technology 2022.
88. Vechheka OEUR, Chandoeun ENG, Sopheap PECH, Kimhouy OY, Sreymean SIO. (2022). Lithofacies identification of outcrop in Takream mountain at Pouy Svay village, Takream Commune, Banan District, Battambang Province, Western Tonle Sap Basin, Onshore Cambodia, the 1<sup>st</sup> International Conference on Earth Resources and Geo-Environment Technology 2022.
89. Sreymean Sio, Chanmoly Or, Chandoeun Eng. (2021). Review of Petroleum Systems Around Cambodia, the 10<sup>th</sup> Scientific Day of ITC.
90. Reach S. L., Muoy. Y. H. (2021). Preliminary Investigation of Geothermal Reservoir in Oral District Kampong Speu Province, Cambodia. Virtual GEOSEA 2021.
91. Sokheng C., Muoy Y. H., Ichhuy N., and Phanny Y. (2021). The Preliminary Investigation on Geothermal Hot Spring, Te Tek Pus in Oral District, Kampong Speu Province, Cambodia., International Symposium on Earth Science and Technology 2021., p172-176., ( best paper award ).

## Annex 42. List of publication for the last 5 years from FTN Research Unit.

### List of Index publications for the last 5 year from 2021

1. Channmuny Thanh, Vincent Chochois, Caroline Douny, Kevin Bethune, Hasika Mith, Chanthol Peng, Adrien Servent, Ingrid Collombel, Sylvie Avallone(2025). Nutritional and microbiological dynamics in the preparation of prahoc fish paste. *PLOS One*, 20(4), e0321834. DOI: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0321834>
2. Sunleng Chhoeun, Chankhemra Vorn, Hasika Mith, Sengly Sroy(2025). Development and Stability of Dried Fish Powder Made From *Clupeoides borneensis*. *Journal of Food Processing and Preservation*, 2025(1), . DOI: <https://onlinelibrary.wiley.com/doi/epdf/10.1155/jfpp/8865754>
3. Lyda Chin, Adrien Servent, Sivmey Hor, Hasika Mith, Christophe Bugaud(2024). Predictive models for estimating the sugar content and organicacids in processed mangoes based on the initial content. *International Journal of Food Science & Technology*, 59(12), 8933-9665. DOI: <https://ifst.onlinelibrary.wiley.com/doi/epdf/10.1111/ijfs.17604>
4. Sokuntheary Theng, Lika Oeurn, Hasika Mith(2025). Quality Evaluation of Extruded Rice Snack. *Journal of Food: Microbiology, Safety & Hygiene*, 10(1), 1000333. DOI: <https://www.longdom.org/open-access-pdfs/quality-evaluation-of-extruded-rice-snack.pdf>
5. Adrien Servent, Marvin Soto, Tina Julien, Sela Cham, Savery Yon, Chanvorleak Phat, Elen Morm(2026). Evaluation of pectin and fiber in Cambodian mango peel and pulp from young to ripe maturity stages – a tool for industry. *Applied Food Research*, 6(1), 101671. DOI: <https://www.sciencedirect.com/science/article/pii/S2772502226000132>
6. Phal Sivchheng, Guigui Christelle , Didi Aurore, Tan Reasmey, Bessiere Yolaine, Guigui Christelle(2025). Role of natural organic matter on diclofenac adsorption on activated carbon produced from banana peels. *Journal of Water Process Engineering*, 77(N/A), 108495. DOI: <https://doi.org/10.1016/j.jwpe.2025.108495> "
7. Bunthan, M., Pov, L., Kong, S., Say, M., Nat, Y., Tan, C. P., & Tan, R. (2024). Study of kinetic model for the adsorption of  $\beta$ -carotene on activated bleaching earth in the bleaching of Cambodian soybean oil. *Journal of Food Science and Nutrition Research*, 7, 37-43.
8. Say, M., Kong, S., Nat, Y., Tan, C. P., & Tan, R. (2024, February). A study on the physicochemical characteristics of popular cooking oils in Cambodia. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1297, No. 1, p. 012002). IOP Publishing.
9. Oeum, K., Suong, M., Uon, K., Jobert, L., Bellaifiore, S., Comte, A., ... & Moulin, L. (2024). Comparison of plant microbiota in diseased and healthy rice reveals methylobacteria as health signatures with biocontrol capabilities. *Frontiers in Plant Science*, 15, 1468192.
10. Peng, C., Moniroth, S., Khy, P., Chea, S., Thanh, C., Heng, O., ... & Caruso, D. (2024). Antibiotic resistance profiles of sentinel bacteria isolated from aquaculture in Cambodia. *Journal of Water and Health*, 22(6), 1033-1043.
11. Thanh, C., Mith, H., Peng, C., Servent, A., Poss, C., Laillou, A., ... & Avallone, S. (2024). Assessment of the nutritional profiles and potentially toxic elements of wild and farmed freshwater fish in Cambodia. *Journal of Food Composition and Analysis*, 133, 106357.
12. Lay, S., & Houng, P. (2024). Maximizing Yield of Phenolic Compounds Extracted from White Turmeric Through Extraction Process Design. In *Journal of Physics: Conference Series* (Vol. 2671, No. 1, p. 012018). IOP Publishing.
13. Say, M., Heng, P., Kong, S., & Tan, C. P. (2024). Sivchheng Phal, Yukleav Nat, Reasmey Tan. Characterization of Physicochemical Properties of Cooking Oils Sold in Phnom Penh, Cambodia. *Journal of Food Science and Nutrition Research*, 7, 28-36.
14. Rodriguez, C., Mith, H., Taminiau, B., Korsak, N., Garcia-Fuentes, E., & Daube, G. (2023). Microbial Food Safety Assessment of Organic Food and Feed: Notifications in the EU RASFF during 2020–2022. A Systematic Review. *Transboundary and Emerging Diseases*, 2023.
15. Kong, S., Keang, T., Bunthan, M., Say, M., Nat, Y., Tan, C. P., & Tan, R. (2023). Hydraulic Cold-Pressed Extraction of Sacha Inchi Seeds: Oil Yield and Its Physicochemical Properties. *ChemEngineering*, 7(4), 69.
16. Say, M., Kong, S., Nat, Y., Tan, C. P., & Tan, R. (2023). Oil extraction through hydraulic pressing from Cambodian soybean seeds and analysis of its physicochemical quality. *Journal of Food Technology*, 10(4), 93-102.

17. Mich, M., Kong, S., Say, M., Nat, Y., Tan, C. P., & Tan, R. (2023). Optimization of solvent extraction conditions of Cambodian soybean oil using response surface methodology. *Journal of Food Technology Research*, 10(1), 1-10.
18. Uon, K., Sorn, S., Stéphane, B., & Suong, M. (2023, November). The Effects of Soil Microbiomes on Preventing Nematode Damage to Rice Plants. In *Biology and Life Sciences Forum* (Vol. 27, No. 1, p. 49). MDPI.
19. Lay, S., Sen, S., & Houn, P. (2023). Assessment of Bioactive Compounds in Red Peppercorns (*Piper nigrum* L.) for the Development of Red Peppercorns Powder. *ChemEngineering*, 7(5), 83.
20. Chrun, R., Mith, H., Meng, S., Long, S., Born, P., & Inatsu, Y. (2023). Assessing Prevalence and Antibiotic Resistance of *Escherichia coli* and Other Enterobacteriaceae Isolated from Cambodian Fermented Fish and Vegetables. *Japan Agricultural Research Quarterly: JARQ*, 57(4), 311-320.
21. Nguyen, H. T., Vang, S., Phan, N. T., Czernic, P., Trinh, P. Q., Ha, C. V., ... & Bellafiore, S. (2023). Identification and characterization of a virulent population of *Meloidogyne graminicola*. *Australasian Plant Pathology*, 1-15.
22. Ly, L., Te, C., Chanto, M. T., & Tan, R. (2023). Impact of Different Raw Materials on Changes in Volatile Compounds during Moromi Fermentation. In *Biology and Life Sciences Forum* (Vol. 26, No. 1, p. 103). MDPI.
23. Bunthan, M. ., Say, M. ., Kong, S. ., Nat, Y. ., Tan, C. P. ., & Tan, R. (2023). Oil extraction through hydraulic pressing from Cambodian soybean seeds and analysis of its physicochemical quality. *Journal of Food Technology Research*, 10(4), 93–102. <https://doi.org/10.18488/jftr.v10i4.3545>
24. Choeng, L., Peng, C., Set, L., & Doeurn, S. (2023). Determination of Histamine Level and Its Correlation with Viable Bacterial Count in Cambodian Fermented Fish. *International Journal of Environmental and Rural Development*, 14(1), 52-58.
25. Chor, L., Sroy, S., Peng, C., Doeurn, S. (2023). Process Optimization and Quality Assessment of Nem, a Traditional Cambodian Lactic Acid Fermented Fish Product. *Journal of Food Science and Nutrition Research*, 6 (4)
26. Nget, S., Mith, H., Boué, G., Curet, S., & Boillereaux, L. (2023). The Development of a Digital Twin to Improve the Quality and Safety Issues of Cambodian Pâté: The Application of 915 MHz Microwave Cooking. *Foods*, 12(6), 1187.
27. Houn, P., Ly, K., & Lay, S. (2023). Valorization of kaffir lime peel through extraction of essential oil and process optimization for phenolic compounds. *Journal of Chemical Technology & Biotechnology*. DOI 10.1002/jctb.7354
28. Yin, M., Bohuon, P., Avallone, S., In, S., & Weil, M. (2022). Postharvest treatments of turmeric (*Curcuma longa* L.) in Cambodia-Impact on quality. *Fruits*, 77 (6) : pp. 1-13. <https://doi.org/10.17660/th2022/026>
29. Yin, M., Weil, M., Avallone, S., Maraval, I., Forestier-Chiron, N., Servent, A., ... & Bohuon, P. (2022). Impact of cooking, drying and grinding operations on chemical content, functional and sensorial qualities of *Curcuma longa* L. *Journal of Food Measurement and Characterization*, 1-11.
30. Chin, L, N. Therdthai and W. Ratphitsanti. (2022). Effect of conventional and microwave cooking conditions on quality and antioxidant activity of Chinese kale (*Brassica alboglabra*). *Applied Food Research*. 2 (1). Article ID 100079. <https://doi.org/10.1016/j.afres.2022.100079>
31. Lorn, S.; Ket, P.; Or, C.; Kong, S.; Um, D.; Aun, S.; Taing, C.; Hang, L. Health Impact Assessment from Rice Straw Production in Cambodia. *Appl. Sci.* 2022, 12, 10276. <https://doi.org/10.3390/app122010276>
32. Chea, C. , Ket, P. , Taing, L. , Kong, S. , Um, D. , Taing, C. , Or, C. , Aun, S. and Hang, L. (2022) Life-Cycle Impact Assessment of Air Emissions from a Cement Production Plant in Cambodia. *Open Journal of Air Pollution*, 11, 85-99. doi: 10.4236/ojap.2022.114007.
33. Hor S., Lechaudel M., Lebrun M., Avallone S., Bugaud C.. (2022). How cold storage influences physicochemical properties of mango cv. 'Kent' according to the density. *Fruits*, 77 (3) : p. 1-11.
34. Siesto, G., Pietrafesa, R., Infantino, V., Thanh, C., Pappalardo, I., Romano, P., & Capece, A. (2022). In Vitro Study of Probiotic, Antioxidant and Anti-Inflammatory Activities among Indigenous *Saccharomyces cerevisiae* Strains. *Foods*, 11(9), 1342. (F : 5.561)
35. DOI: <https://doi.org/10.3390/foods11091342>
36. Richter, J. K., Pietrysiak, E., Ek, P., Dey, D., Gu, B.-J., Ikuse, M., Nalbandian, E., Žak, A., & Ganjyal, G. M. (2022). Extrusion characteristics of ten novel quinoa breeding lines. *Journal of Food Science*, 87, 5349– 5362. <https://doi.org/10.1111/1750-3841.16360>

37. Richter, J. K., Gu, B.-J., Ek, P., Dey, D., Saunders, S. R., & Ganjyal, G. M. (2022). Potential interactions between starch and fruit pomace may impact the expansion ratio of direct expanded extrudates. *Journal of Food Science*, 87, 3513– 3527. <https://doi.org/10.1111/1750-3841.16240>
38. Yin, M., Weil, M., Avallone, S., Lebrun, M., Conejero, G., In, S., & Bohuon, P. Impact of cooking and drying operations on colour, curcuminoids and aroma of *Curcuma longa* L. *Journal of Food Processing and Preservation*, e16643. (IF : 2.190)
39. DOI: <https://doi.org/10.1111/jfpp.16643>
40. Phuong, H., Masse, A., Dumay, J., Vandanjon, L., Mith, H., Legrand, J., & Arhaliass, A. (2022). Enhanced liberation of soluble sugar, protein, and R-phycoerythrin under enzyme-assisted extraction on dried and fresh *Gracilaria gracilis* biomass. *Frontiers in Chemical Engineering*, 21. (IF:4.204)
41. DOI: <https://doi.org/10.3389/fceng.2022.718857>
42. Masson A.S., Vermeire M.L., Leng V., Simonin M., Tivet F., Thi H. N., Brunel C., Suong M., Kuok F., Moulin L., & Bellafore S. (2022). Enrichment in biodiversity and maturation of the soil food web under conservation agriculture is associated with suppression of rice-parasitic nematodes. *Agriculture, Ecosystems & Environment*, 331,107913. (IF : 5.567) DOI:10.1016/j.agee.2022.107913
43. Ek, P., Gu, B.-J., Saunders, S. R., Huber, K., & Ganjyal, G. M. (2021). Exploration of physicochemical properties and molecular interactions between cellulose and high-amylose cornstarch during extrusion processing. *Current Research in Food Science*. 4(June), 588–597. <https://doi.org/10.1016/j.crfs.2021.07.001>
44. Ek P., Gu, B.-J., & Ganjyal, G. M. (2021). Whole seed lentil flours from different varieties (Brewer, Crimson, and Richlea) demonstrated significant variation in their expansion characteristics during extrusion. *Journal of Food Science*. 86(3), 942-951. <https://doi.org/10.1111/1750-3841.15623>
45. Dey, D., Gu, B.-J., Ek, P., Rangira, I., Saunders, S. R., Kiszona, A. M., & Ganjyal, G. M. (2021). Apple pomace pretreated with hydrochloric acid exhibited better adherence with the corn starch during extrusion expansion. *Carbohydrate Polymer Technologies and Applications*. 2, 100089. <https://doi.org/10.1016/j.carpta.2021.100089>
46. Yusoff, A. H., Roslan, N. N., Chang, C. S., Lazim, A. M., Nadzir, M. S. M., Oslan, S. N. H., ... & Tan, R. (2021). Heavy Metals in Marsh Clam (*Polymesoda expansa*) as Bioindicators for Pollution in Industrial and Sand Mining Area of Kelantan River Basin, Malaysia. *Trends in Sciences*, 18(20), 10-10. (IF:0.146)  
DOI: <https://doi.org/10.48048/tis.2021.10>
47. Lorn, D., Ho, P. H., Tan, R., Licandro, H., & Waché, Y. (2021). Screening of lactic acid bacteria for their potential use as aromatic starters in fermented vegetables. *International Journal of Food Microbiology*, 350, 109242.
48. Rodriguez, C., Mith, H., Taminiau, B., Bouchafa, L., Van Broeck, J., Soumillion, K., ... & Daube, G. (2021). First isolation of *Clostridioides difficile* from smoked and dried freshwater fish in Cambodia. *Food Control*, 124, 107895.
49. Sroy, S., Arnaud, E., Servent, A., In, S., & Avallone, S. (2021). Nutritional benefits and heavy metal contents of freshwater fish species from Tonle Sap Lake with SAIN and LIM nutritional score. *Journal of Food Composition and Analysis*, 96, 103731.
50. Sroy, S., Arnaud, E., Servent, A., In, S., & Avallone, S. (2021). Nutritional benefits and heavy metal contents of freshwater fish species from Tonle Sap Lake with SAIN and LIM nutritional score. *Journal of Food Composition and Analysis*, 96, 103731.

#### **List of Non-index publications for the last 5 year from 2021**

1. Yuok Lyda, Ly Luka, Net Marinich, Pramuk Parakulsuksatid, Tan Reasmey (2025). Effect of Enzyme on Physicochemical and Sensory Characteristics of Black Soy Sauce. *Techno-Science Research Journal*, 13(3), 27-35. Link: <https://techno-srj.itc.edu.kh/menuscript/1ecddde549783be1eb367d0f1508449>
2. Sea Sreylin, Pey Mouylen, Sim Sopanha, Say Chanpheng, Sang Davin, Phal Sivchheng , Tan Reasmey (2025). Activated Carbon Derived from Cassava Peels (*Manihot esculenta*) for the Removal of Diclofenac. *Techno-Science Research Journal*, 13(3), 36-43. Link: <https://techno-srj.itc.edu.kh/menuscript/c9b75778ddb3f1ea3e735c12f7510d63>
3. Kimhouy Nou, Sereyvath Yoeun, Chanvorleak Phat, Vattana Mom, Sovannmony Lay, Caroline Douny, Marie-Louise Scippo, Hasika Mith(2025). Impact of Smoking Materials on Smoked Fish Quality and



- Polycyclic Aromatic Hydrocarbon Contamination. *Techno-Science Research Journal*, 13(3), 52-60. Link: <https://techno-srj.itc.edu.kh/menuscrypt/cde8551a5fcd7991c44175374d111a0>"
4. Vireak Chanthy, Kong Sela, Say Manit, Nat Yukleav, Tan Chin Ping, Tan Reasmey(2025). Effects of Different Bleaching Conditions on Bleaching Efficiency and Physicochemical Characteristics of Cambodian Soybean Oil. *Techno-Science Research Journal*, 13(1), 34-42. Link: <https://techno-srj.itc.edu.kh/menuscrypt/1257f8b345e2240acd8ffa9b4ce4ce33>"
  5. Sochetra Sen, Peany Houg(2025). Optimization of Extraction Condition for Oleoresin from Red Pepper Residues. *Techno-Science Research Journal*, 13(1), 46248. Link: <https://techno-srj.itc.edu.kh/menuscrypt/985a97d13142d628e953cce090d9f0da>
  6. Sreyleaphy Chhunry, Peany Houg(2025). Effect of microwave pretreatment method on essential oil extraction on key lime peel (*Citrus × aurantiifolia*). *Techno-Science Research Journal*, 13(1), 15-23. Link: <https://techno-srj.itc.edu.kh/menuscrypt/5fa85429108b860758ed92088fa66f72>"
  7. Soeum, S., Phuong, H., Mom, V., Yong, P., Hor, S., Chin, L., Mith, H (2024). Assessment of proximate chemical composition of Cambodia rice varieties. *Techno-Science Research Journal Vol 12*, 53-60.
  8. Ly, H., Phoung, H., Sovann, R., Ek, P., Theng, S., Puth, S., Mith, H (2024). Investigation of the influence of extrusion conditions on Cambodian extruded rice vermicelli. *Techno-Science Research Journal Vol 12*, 19-26.
  9. Sovann, R., Mith, H., Ek, P., Ly, H., Phoung, H., Theng, S (2024). Physico-chemical characteristics of rice-based cereal processed by twin-screw extrusion and microwave cooking. *Techno-Science Research Journal Vol 12*, 10-18.
  10. Peng, C., Choeng, L., Yoeun, S., Doeurn, S (2023). Evaluation of Histamine Content in Lactic Fermented Fish Product, Nem, by Enzymatic Test Kit. *STI Focus: Science, Technology and Innovation*, 2 (2), 27-31
  11. S. Som, M. Buthan, S. Kong, Y. Nat, R. Tan (2023). Oil extraction from soybean seeds through hydraulic pressing and valorization of its by-product. *STI Focus: Science, Technology and Innovation*, 2 (2), 04-17
  12. P. Yong, S. Soem, V. Mom, S. Theng, H. Mith (2023). Characterization of physicochemical properties and microbiological quality of Khmer Rice Vermicelli (Num Banhchok) collected in Phnom Penh Capital, Cambodia. *Techno-Science Research Journal Vol 11*, 66-73.
  13. S. Khut, O. Heng, C. Peng, D. Caruso. Preliminary study on physicochemical quality and antibiotic-resistant *E. coli* and *Aeromonas* spp. in aquaculture of *Pangasius* in Kampong Thom Province. *Techno-Science Research Journal Vol 11*, 46-52A. Chung, S. Yoeun, S. Chek, C. Chey, T. Sriv, V. Soav, K. Phon (2022). Assessment of pesticide contamination in water sources in the vegetable farms in S'ang Kandal province. *The Bulletin of Cambodian Chemical Society Vol 13*.
  14. L. Set, S. Sroy, L. Chor, H. Mith, S. Yoeun, S. Doeurn, C. Thanh, C. Peng\* (2022). Chemical and Microbiological Analysis of Traditional Fermented Fish and Meat Products Collected from Battambang, Cambodia. *Techno-Science Research Journal Vol 10*.
  15. L. Thourn, C. Phat, M. Suong, S. Sieng, S. Heng, S. Yoeun (2022). Identification of Pesticide Contamination in Water Sources Surrounding Agrochemical-Free Rice Farming in Battambang Province. *Techno-Science Research Journal Vol 10*.
  16. P. Chhay, P. Houg, and S. Lay, 2022. Effect of pretreatment on extraction of essential oil from kaffir lime leaves. *Techno-Science Research Journal Vol 10*.
  17. S. Song, P. Houg, and S. Lay, 2022. Optimization of extraction conditions for phenolic compounds extracted from Cassumunar ginger (*Zingiber montanum*). *Techno-Science Research Journal Vol 10*.
  18. S. Met, P. Houg, P. Ek, P. Yun, and S. Lay, 2022. Drying kinetic and the changes of physicochemical properties and bioactive content of dried tomatoes during hot air drying. *Techno-Science Research Journal Vol 10*.
  19. Y. Nat, P. Houg, S. Lay, 2021. Effect of Ultrasound-Assisted Extraction Condition on Extraction of Bioactive Compounds from Khmer White Turmeric (*Curcuma Zedoaria*). *The Bulletin of Cambodian Chemical Society 12*.
  20. S. Yoeun, S. Ly, F. Kuok, 2021. Alcohol-Based Hand Rub Analysis by High Performance Liquid Chromatography. *The Bulletin of Cambodian Chemical Society 12*.
  21. S. Hoeun, S. Lay, P. Houg, S. In, 2021. Impact of Blanching and Drying on Bioactive Compounds of Black Turmeric. *The Bulletin of Cambodian Chemical Society 12*.
  22. S. Lay, P. Houg, S. In, 2021. Effects of Solvent and Time on Extraction of Bioactive Compounds from Cambodia Black Turmeric Using Ultrasound-Assisted Extraction. *Techno-Science Research Journal 9*.

23. M. Yin, S. Heng, S. Rem, L. Chin, 2021. Development of Spicy Sweet Chili Sauce. *Techno-Science Research Journal* 9.
24. M. Yin, W. Ratphitsanti, N. Therdthai, 2021. Changes on Qualities of Gluten-free Chalky Rice Breadstick during Storage. *Techno-Science Research Journal* 9.
25. S. Chuon, M. T. Chanto, R. Tan, C. Peng, 2021. Isolation and Characterization of Lactic Acid Bacteria from Soy-based Products. *Techno-Science Research Journal* 9.

#### **List of Conferences for the last 5 year from 2021**

1. Sereyvath Yoeun, Kimleang Khoeurn, Channmuny Thanh, Monny Nang, Yuthyea Nget, Liv Em, Molyna Sok, Sievchhiv Sokly, Kongpiseth Ouch, Muhammad Amin, Chanmoly Or, Mitsuhiko Hata, Masami Furuuchi(2026).2026 16th International Conference on Future Environment and Energy (ICFEE 2026) .Polycyclic aromatic hydrocarbon exposure during commuting: A comparative analysis of Bus and Tuk-Tuk in Phnom Penh,Oral(Link conference: <https://www.icfee.org/>).Link Proceeding: under process
2. Sreyvich SIENG, Pengsreng NGOUN, Seyha DOEURN, Sochan SAO, Fumikazu IKEMORI, Chanmoly OR, Masami FURUUCHI, and Mitsuhiko HATA(2026).2026 16th International Conference on Future Environment and Energy (ICFEE 2026) .Carbonaceous components in airborne nanoparticles (PM0.1) during the dry season in the urban area of Phnom Penh City, Cambodia,Oral(Link conference: <https://www.icfee.org/>).Link Proceeding: under process
3. Net Marinich, Chim Saiya, Lorn Sreyleap, Say Mani, Bunthan Monyneath, Tangsuphoom Nattapol, Tan Reasmey (2025).2025 International Conference on Industry-University-Research-Application-Collaboration (Hebei Agricultural University, China).Development of Oyster Sauce using Japanese Oyster, Green Mussels and Clams ,Oral(Link conference: N/A).Link Proceeding: No
4. Tan Reasmey, Heng Punlork, Pen Chira, Say Mani, Kong Sela, Tan Chin Ping(2025).The International Symposium on Future Lipid Technology & One Health (Jinan University, China).Physicochemical Evaluation of Cooking Oils Sold in Phnom Penh Supermarkets and Their Blends ,Oral(Link conference: N/A).Link Proceeding: N/A
5. Tan Reasmey, Bross Dolla, Phourng Sopheak, Mao Socheata, Wache Yves(2025).The 1st International Online Conference on Fermentation.Effect of Rehydration Media, Freezing Temperature and Combination of Cryoprotectants on Survival Rate of Freeze-dried Lactic Acid Bacteria,Poster(Link conference: <https://sciforum.net/event/IOCFE2025>).Link Proceeding: N/A
6. Net Marinich, Phourng Sopheak, Bross Dolla, Mao Socheata, Wache Yves, Tan Reasmey(2025).The 1st International Online Conference on Fermentation.Study on the Effect of Different Cryoprotectants on the Survival Rate of Freeze-dried Lactic Acid bacteria (LAB) Powder for Cucumber Fermentation,Poster(Link conference: <https://sciforum.net/event/IOCFE2026>).Link Proceeding: N/A"
7. Mao Socheata, Nguyen Thi Kim Chi, Tan Reasmey, Licandro Helene, Wache Yves(2025).The 1st International Online Conference on Fermentation.Lactococcus lactis, an original producer of volatile compounds during the fermentation of mashed cucumber,Poster(Link conference: <https://sciforum.net/event/IOCFE2027>).Link Proceeding: No"
8. Chhun Lyhour, Tan Reasmey, Ly Luka, Chanto Monychot Tepy(2025).The 1st International Online Conference on Fermentation.Comparison of Physicochemical Characteristics of Soy Sauces Made from Germinated Soybeans with Different Salt Concentrations,Poster(Link conference: <https://sciforum.net/event/IOCFE2028>).Link Proceeding: N/A"
9. Navin SRENG(2025).The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth.Assessment of Antimicrobial Resistance Patterns in Salmonella Isolates from Different Food Matrices in Cambodia,Oral(Link conference: ).Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
10. Chea Sokly, Net Marinich, Som Sokunthea, Tan Reasmey(2025).The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth.Consumer Preferences and Development of the Sourdough Bread with Different Flavors,Oral(Link conference: <https://ric.itc.edu.kh/sd14/#Overview>).Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)
11. Net Marinich, Lorn Sreyleap, Say Mani, Bunthan Monyneath, Tangsuphoom Nattapol , Tan Reasmey (2025).The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth.Development

- of Oyster Sauce Using Japanese Oysters, Green Mussels, and Clams, Oral (Link conference: <https://ric.itc.edu.kh/sd14/#Overview>). Link Proceeding: N/A
12. Song Kimmuoy, Tan Reasmey, Ly Luka, Pramuk Parakulsuksatid (2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Comparing the Quality of Fermented Soy Sauces Made by Using Whole Soybeans and Defatted Soybeans, Oral (Link conference: <https://ric.itc.edu.kh/sd14/#Overview>). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
  13. Sengly SROY (2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Effects of monoglyceride and guar gum on the quality and sensory properties of mango frozen yogurt, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
  14. Caroline Douny, Marie-Louise Scippo, Vattana Mom, Hasika Mith (2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Nutritional quality of Farmed striped snakehead (*C. striata*): Fatty acid profile and proximate composition analysis, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
  15. Chanvorleak Phat, Stephane Bellafiore (2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Optimisation of Method Liquid Extraction of Aroma Compound (2-acetyl-1-pyrroline) from Phka Rumdoul Rice Variety, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
  16. Mich Monika, Pen Chanchira, Say Mani, Tan Chin Ping, Tan Reasmey (2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Comparing the Physicochemical Properties of Soybean Oil Blended with Different Oils, Oral (Link conference: <https://ric.itc.edu.kh/sd14/#Overview>). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
  17. Luka LY, Parakulsuksatid PRAMUK (2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Comparing the Quality of Fermented Soy Sauces Made by Using Whole Soybeans and Defatted Soybeans, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
  18. Michel BARBIER, Stéphane BELLAFIORE (2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Identification of cuticle-binding bacteria from *Meloidogyne graminicola* as potential biocontrol agent affecting the pest mobility, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
  19. Kimleang KHOEURN, Peanny HOUNG, Monika MICH, Soukheng MENG, Mathilde SESTER, Florent TIVET (2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Evaluation of Nutrient Profiles of Single and Mixed Cover Crops Species Collected from Rovieng, Preah Vihear Province, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
  20. Malyna SUONG, Kakada OEUM, Vichny VICHETH, Rada KONG, Florent TIVET, Myriam ADAM (2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Evaluation of rice seed quality of Cambodian varieties produced under conventional and agroecology practices, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
  21. Stephane Bellafiore, Sereyvath Yoeun, Sreymom Sieng, Socheat Keo, Sambo Pheap (2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Influence of the Soil Physicochemical Properties on Phka Rumdoul Rice Quality and Yield in Cambodia, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
  22. Chanvorleak Phat, Leanghok Bun, Mathilde Sester, Florent Tivet, Thanon Nuon (2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Analysis of pesticide residues in rice grains using QuEChERS method followed by GC-MS, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
  23. Chanvorleak Phat, Mathilde Sester, Florent Tivet, Thanon Nuon (2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Assessment of Pesticide Residues in Rice and Water

- from Kanghot Paddy Fields in Battambang Province, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
24. Sereyvath Yoeun, Leanghok Bun, Mathilde Sester, Florent Tivet, Rama Sry(2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Assessment of Pesticide Residues in Rice and Irrigation Canal: A Study of Agrochemical-Free Farming in Rovieng District, Preah Vihear Province, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
  25. Leanghok Bun, Sereyvath Yoeun (2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Seasonal Pesticide Residues in Surface Waters of Banteay Meanchey Province, Cambodia, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)
  26. Keakaknika Ly, Samphois Nut(2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Development of Dishwashing Liquid Through Utilization of Various Active Ingredients, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)"
  27. Sambath Chea, Sengly Sroy, Pichmony Ek(2025). 2025 International Conference on Industry-University-Research-Application Collaboration. Development Of Wafer Rolls Using Clupeoides borneensis Fish Powder, Oral (Link conference: ). Link Proceeding:
  28. Vuthy Ruos, Channmuny Thanh, Kimleang Khoeurn, Muhammad Amin, Chanvorleak Phat(2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Preliminary Assessment of Air Quality in the Workplace in the Institute of Technology of Cambodia, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)
  29. Bophavry Sarav, Sereyvath Yoeun, Kimleang Khoeurn, Muhammad Amin(2025). The 14th Scientific Day of ITC on Leveraging R&D for Innovation and Growth. Preliminary Assessment of Indoor Air Quality in Residences in Phnom Penh, Oral (Link conference: ). Link Proceeding: [https://techno-srj.itc.edu.kh/public/journal/document/SD14\\_Proceedings\\_Online\\_Final.pdf](https://techno-srj.itc.edu.kh/public/journal/document/SD14_Proceedings_Online_Final.pdf)
  30. "Hasika Mith, Sovannmony Lay, Samiha Boutaleb, Caroline Douny, Bernard Taminiau, Geoges Daube, Marie-Louise Scippo(2025). Belgium Society for Food Microbiology .Assessment of Microbial community and biogenic amines in Cambodian fermented fish paste (Prahok) ,Poster (Link conference: <https://www.bsfm.be/en/>). Link Proceeding: N/A"
  31. Sreyvich SIENG, Raksa REN, Chhaytong MENG, Srean AUN, Pengsreng NGOUN, Fumikazu IKEMORI, Chanmoly OR, Masami FURUUCHI, and Mitsuhiko HATA(2025). The Science and Technology Interdisciplinary Forum. Carbonaceous Components in Aerosol Particles During the Dry Season in the Urban Area of Phnom Penh City, Cambodia, Poster (Link conference: NA). Link Proceeding: NA
  32. Chanvorleak Phat, Samiha Boutaleb, Marie-Louise Scippo, Vattana Mom, Hasika Mith(2025). The 12th Farah Day of ULiège, Belgium .Effect of deep-frying and air-frying on fatty acid profile and lipid oxidation of common carp (*Cyprinus carpio*), Oral (Link conference: [https://www.farah-day.uliege.be/cms/c\\_12353604/en/farahday](https://www.farah-day.uliege.be/cms/c_12353604/en/farahday)). Link Proceeding: [https://documentsserver.uhasselt.be/bitstream/1942/48247/1/proceedings\\_farahday2025.pdf](https://documentsserver.uhasselt.be/bitstream/1942/48247/1/proceedings_farahday2025.pdf)
  33. Sreyvich SIENG, Pengsreng NGOUN, Worrador PHAIRUANG, Muhammad AMIN, Masami FURUUCHI, Mitsuhiko HATA, Uty TANG, Sotheanith POV, Srean AUN, Leakhena HANG, Chanmoly OR(2024). The 41st Symposium on Aerosol Science and Technology .Spatial–Temporal Aerosol Emissions from Rice Residue Burning and Forest Fires in Cambodia, Oral (Link conference: <https://sites.google.com/view/jaast41ku/>). Link Proceeding: NA"
  34. Hasika Mith, Sovannmony Lay, Samiha Boutaleb, Caroline Douny, Marie-Louise Scippo(2024). FARAH Day .Biogenic amines in fermented fish (Prahok) collected from the Cambodia's market, Poster (Link conference: ). Link Proceeding: N/A"
  35. S. Yan, M. Barbier, M. Suong, S. Bellafiore. Identification of cuticle-binding bacteria from *Meloidogyne graminicola* as potential biocontrol agent affecting the pest mobility. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
  36. S. Vuth, K. Phan, L. Huoy. Isolation and Characterization of Salmonella Bacteriophages from Chicken Breast Samples in Phnom Penh Markets as a Biocontrol Agent. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.

37. V. Vicheth, S. Bellafigliore, S. Yoeun, S. Sieng, S. Keo. Influence of the Soil Physicochemical Properties on Phka Rumdoul Rice Quality and Yield in Cambodia. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
38. K. Vaphat, P. Houn, K. Ly, S. Nut. Development of Dishwashing Liquid Through Utilization of Various Active Ingredients. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
39. C. Sovann, N. Sreng, H. Mith. Assessment of Antimicrobial Resistance Patterns in Salmonella Isolates from Different Food Matrices in Cambodia. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
40. K. Song, R. Tan, L. Ly, P. Pramuk. Comparing the Quality of Fermented Soy Sauces Made by Using Whole Soybeans and Defatted Soybeans. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
41. S. Sary, C. Phat, S. Bellafigliore, S. Yoeun. Optimisation of Method Liquid Extraction of Aroma Compound (2-acetyl-1-pyrroline) from Phka Rumdoul Rice Variety. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
42. V. Tit, L. Bun, S. Yoeun, C. Phat. Seasonal Pesticide Residues in Surface Waters of Banteay Meanchey Province, Cambodia. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
43. M. Net, S. Lorn, M. Say, M. Bunthan, N. Tangsuphoom, R. Tan. Development of Oyster Sauce Using Japanese Oysters, Green Mussels, and Clams. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
44. M. Mich, C. Pen, M. Say, C. P. Tan, R. Tan. Development of Blended Cooking Oil For Commercialization in Cambodia. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
45. R. Ly, S. Yoeun, L. Bun, M. Sester, F. Tivet, R. Sry, C. Phat. Assessment of Pesticide Residues in Rice and Irrigation Canal: A Study of Agrochemical-Free Farming in Rovieng District, Preah Vihear Province. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
46. S. Lay, C. Douny, M-L. Scippo, V. Mom, H. Mith, C. Phat. Nutritional Quality of Farmed Striped Snakehead (*C. striata*): Fatty Acid Profile and Proximate Composition Analysis. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
47. S. Huor, P. Ek, S. Sroy. Effects of monoglyceride and guar gum on the quality and sensory properties of mango frozen yogurt. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
48. S. Ho, L. Moulin, M. Suong, K. Oeum, V. Vichet, R. Kong, F. Tivet, M. Adam. Evaluation of rice seed quality of Cambodian varieties produced under conventional and conservation agriculture practices. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
49. A. Heng, C. Phat, L. Bun, M. Sester, F. Tivet, T. Noun, S. Yoeun. Analysis of pesticide residues in rice grains using QuEChERS method follow by GC-MS. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
50. M. Han, K. Khoeurn, P. Houn, M. Mich, S. Meng, M. Sester, F. Tivet. Evaluation of Nutrient Profiles of Single and Mixed Cover Crops Species Collected from Rovieng, Preah Vihear Province. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
51. S. Chea, S. Som, R. Tan. Study on Consumer Preferences and Development of the Sourdough bread-making Process with Added Flavors. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
52. L. Bun, C. Phat, M. Sester, F. Tivet, T. Nuon, S. Yoeun. Assessment of Pesticide Residues in Rice and Water from Kanhrot Rice Fields in Battambang. The 14th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 5-6 June 2025.
53. S. Kiv, S. Sroy, P. Ek. Enhancement of nutritional quality and shelf life of dried fish powder made from Thai river sprat fish (*Clupeoides borneensis*) and striped snakehead fish (*Channa Striata*). The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
54. M. Phang, Y. Nat, M. Hun, M. Say. Effect of screw press speed on peanuts oil extraction. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.

55. P. Chamreoun, P. Ek, P. Houg. Comparison of drying rates and quality of dried fish (Giant snake head and Snake head fish) using different drying technologies. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
56. S. Hoeun, M. Khit, S. Then, S. Chhorng, S. In. The study on fermented pangasius fish processing. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
57. S. Svay, M. Net, S. Kong, M. Mich, M. Say, A. K. Anal, R. Tan. Development and quality analysis of instant fish Broheu soup formulated from Khmer traditional recipe. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
58. K. Khun, S. Hoeun, C. Lor, C. Heng, S. Y, S. In. Quality change of koh kong green mussels (*Perna viridis*) at different cooking times. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
59. M. Bunthan, M. Net, M. Say, V. Chan, N. Tangsuphoom, R. Tan. Market survey and online survey of commercial oyster sauces sold in Cambodia. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
60. L. Yuok, R. Tan, L. Ly, M. T. Chanto, P. Pramuk. Preliminary study of physicochemical characteristics of black soy sauce by fermentation. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
61. S. Lay, H. Mith, V. Mom, M-L. Scippo, C. Douny, C. Phat. Proximate compositions of farmed and wild *Channa* spp. (*Channa striata* and *Channa micropeltes*). The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
62. E. Chan, V. Chan, M. Net, S. Kong, M. Mich, M. Say, A. K. Anal, R. Tan. Studying of three different forms and drying times on fish for making instant fish soup. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
63. P. Ourk, M. Net, S. Kong, M. Mich, M. Say, A. K. Anal, R. Tan. Development of Instant Khor Trey (Instant Caramelized Snakehead) formulated from Khmer traditional recipe. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
64. K. Souk, C. Lor, S. Hoeun, S. In. Observe the effect of blanching durations and drying temperatures on the color and physicochemical properties of dried fish (Trey Riel). The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
65. M. Hun, M. Say, M. Phang, Y. Nat. Extraction sesame seed oil through screw press technique. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
66. M. Phang, Y. Nat, M. Hun, M. Say. Effect of screw press speed on peanuts oil extraction. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
67. P. Chhan, M. Mich, K. Theng, Y. Nat. Effect of brine solution period on refined salt quality using hydro-extraction technique. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
68. V. Mom, S. Lay, C. Douny, C. Phat, M-L. Scippo, H. Mith. Observation on smoked fish processing and assessment of Polycyclic Aromatic Hydrocarbon contaminants in Kampong Chhnang province. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
69. K. Nou, V. Mom, C. Douny, C. Phat, S. Yoeun, S. Lay, M-L. Scippo, H. Mith. Assessment of Polycyclic Aromatic Hydrocarbons (PAHs) contamination in smoked fish collected from Orussey Market in Phnom Penh. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
70. P. Peuv, M. Suong, S. Meakh, S. Yoeun, C. Phat, S. Sieng, K. Uon. Application of Bandol Pech (*Tinospora crispa*) stem extract as biopesticide against Golden Apple Snail (*Pomacea canaliculata*). The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
71. S. Meakh, M. Suong, P. Peuv, S. Yoeun, C. Phat, S. Sieng, K. Uon. Application of neem (*Azadirachta indica*) leaves crude extract as biopesticide against Golden Apple Snails (*Pomacea canaliculate*). The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
72. S. Sea, M. Pey, S. Sim, C. Say, D. Sang, S. Phal, R. Tan. Comparative study of activated carbon made from fresh and dried cassava peels for diclofenac removal. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
73. V. Roschhuk, M. Suong, L. Bun, S. Yoeun, C. Phat, S. Sieng, K. Uon, S. Srey. Assessment of pesticide contaminants in vegetables from cooperative farms in Kampong Chhnang and Battambang provinces. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.

74. L. Bun, M. Suong, V. Roschhuk, S. Yoeun, C. Phat, S. Sieng, K. Uon, S. Srey. Assessment of pesticide contaminants in leafy vegetables from different markets in Phnom Penh. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
75. S. Chhin, P. Ek, P. Houg. Comparison of drying rates and quality of dried fish Catfish (Trey Andeng) using different drying technologies. The 13th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 6-7 June 2024.
76. K. Oeum, M. Suong, L. Moulin. Exploration and exploitation of rice microbiome as sustainable agriculture in Cambodia. Transitioning Towards Agroecology and Regenerative Agriculture: A Contribution to Food Systems Transformation (TARASA23), 24 - 27 OCTOBER 2023, Borei Angkor Resort & Spa, SIEM REAP, CAMBODIA.
77. M. Barbier, C. Perrollaz, J. Aribi, K. Uon, M. Suong, S. Bellafore. Identification of suppressive soils against the plant-parasitic nematode, *Meloidogyne graminicola*: an alternative to the use of pesticides. Transitioning Towards Agroecology and Regenerative Agriculture: A Contribution to Food Systems Transformation (TARASA23), 24 - 27 OCTOBER 2023, Borei Angkor Resort & Spa, SIEM REAP, CAMBODIA.
78. K. Oeum, M. Suong, L. Moulin. Exploring and exploiting the rice-associated microbiome for Sustainable Rice Farming in Cambodia. 16th plant bacteria meeting, Aussois, March 20 - 24, 2023.
79. S. Curet, S. Nget, Boug, M. Eshiett, L. Boillereaux. Modelling bacteria inactivation during the steaming process: application to Cambodian pate pasteurization. Internation Congress on Engineering and Food (ICEF 14), Nantes, France, 20-23 June 2023.
80. S. Nget, H. Mith, S. Curet, Boillereaux, L. Improvement of Microwave Heating Uniformity by Moving Sliding Short Circuit: Application to 915 MHz Single-Mode Microwave Pasteurization of Solid Food. The 9th International Conference on Microwave and High Frequency Application: AMPERE 2023, Cardiff, UK, 11-14 September 2023.
81. K. Ly, P. Houg. Extration of bioactive compound from Kaffir lime peel using subcritical water. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
82. S. Sen, P. Houg. Determination of yield and bioactive compounds of oleoresin extracted from red pepper and its residues. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
83. H. Ly, R. Sovann, H. Mith, H. Phuong. Determination of the composition of different rice varieties collected from local markets in four provinces. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
84. D. Pheap, E. Morm, S. In. Study on physicochemical properties, nutritional values, and sensory evaluation of spicy sour seasoning developed from 8 different spices. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
85. S. Chhunry, P. Houg. Evaluation of the development of physicochemical properties from fresh key lime (*citrus aurantifolia*) to pickled lime. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
86. S. Chhoeung, S. Doeurn, C. Penh. Optimization of fish sausage processing methods based on physicochemical quality assessment and consumer acceptability. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
87. M. Vong, P. Cheng, S. Mao, R. Tan. Production of bacteriocin by Lactic Acid Bacteria for its potential use as natural preservative for fermented cucumbers. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
88. C. Vireak, S. Kong, M. Say, Y. Nat, R. Tan. Influnce of activated bleaching earth on the physicochemical quality of soybean oil. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
89. S. Toch, S. Mao, L. Ly, R. Tan, M. T. Chanto. Isolation for the desired yeasts from different types of food to improve soy sauce fermentation process and quality. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
90. S. Hoeun, S. Tin, S. In. Determination of curcuminoids in different types of Freez-dried Tumeric varities by HPLC. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.
91. S. Kin, M. Suong, S. Yoeun, C. Phat, K. Uon, P. Sreng, V. Sreng, S. Sieng. Heavy metals analysis in rice grain collected from agrochemical-free paddy fields, Battambang province. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023.

92. P. Sreng, M. Suong, S. Yoeun, C. Phat, K. Uon, S. Kin, V. Sreng, S. Sieng. Analysis of heavy metals in soil collected from agrochemical-free paddy fields: a case study at Sangkae district, Battambang Province. The 12th Scientific day Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia, 8-9 June 2023. MA Chiva, Tep Channeath, PENG Chanthol, HENG Oudom, (2023). Identification and Characterization of Lactic acid bacteria isolated from fermented products (Nem Sbak Chrouk) in Battambang province. The 14th International Conference on Environmental and Rural Development at Siem Reap, Cambodia, 3-5 March 2023.
93. Lengheang CHOENG, Chanthol PENG, Leangey SET, and Seyha DOEUN (2023). Determination of Histamine Level and Its Correlation with Viable Bacterial Count in Cambodian Fermented Fish. In The 14th International Conference on Environmental and Rural Development at Siem Reap, Cambodia, 3-5 March 2023.
94. Set LeangEy, Tep Channeath, Peng Chanthol, (2022). Traditional fermented products from Battambang, Cambodia: Their lactic acid bacteria and physicochemical characteristics. In the FOODI International Conference 2022, Nov. 2022.
95. Seyha Doeurn, Channeath Tep, Chanthol Peng, Oudom Heng, LeangEy Set, (2022). Diversity of Lactic Acid Bacteria Isolated from Nem Trey, A Traditional Fermented Fish Product of Cambodia. In the FOODI International Conference 2022, Nov. 2022.
96. Y. Nat, L. Vorleak, K. Tongor, S. Kong, S. Manit, C.P. Tan, R. Tan (2022). Effect Of Different Extraction Techniques On Yield And Physicochemical Properties Of Sacha Inchi Oil. Foodi International Conference 2022 (FOODI 2022), Universiti Teknologi Malaysai, Kuala Lumpur, Malaysia, 07-09 November, 2022.
97. S. Kong, V. Chanthay, P. Heng, M. Say, Y. Nat, C.P. Tan, R. Tan (2022). Evaluating Shelf-Life Of Commercial Soybean Oil Using An Empirical Modelling: A Case Study In Phnom Penh, Cambodia. Foodi International Conference 2022 (FOODI 2022), Universiti Teknologi Malaysai, Kuala Lumpur, Malaysia, 07-09 November, 2022.
98. M. Bunthan, S. Kong, T. Keang, M. Say, Y. Nat, T. Chin Ping, R. Tan (2022). Soybean oil extraction by hydraulic pressing. 6th International Conference of Chemical Engineering & Industrial Biotechnology (ICCEIB 2022), Universiti Malaysia Pahang, Malaysia, 15-16 August 2022.
99. Y. Nat, V. Leng, M. Say, S. Kong, T.C. Ping, R. Tan. Application of Response Surface Methodology on Extraction of Sacha Inchi Oil Using Conventional Solvent Extraction. 6th International Conference of Chemical Engineering & Industrial Biotechnology (ICCEIB 2022), Universiti Malaysia Pahang, Malaysia, 15-16 August 2022.
100. S. Kong, T. Keang, M. Bunthana, M. Say, Y. Nat, T. Chin Ping, R. Tan (2022). Effect of pressure and pressing time on oil yields of sachu inchi using hydraulic cold-pressed extraction. 6th International Conference of Chemical Engineering & Industrial Biotechnology (ICCEIB 2022), Universiti Malaysia Pahang, Malaysia, 15-16 August 2022.
101. S. Lay and P. Houn, 2022. Effect of pickling on bioactive compounds variation of lime. Foodi International Conference 2022, Kuala Lumpur, Malaysia 07-09 November, 2022.
102. K. Ly, P. Houn and S. Lay, 2022. Determination of essential oils content for development of herb and spice powders. Foodi International Conference 2022, Kuala Lumpur, Malaysia 07-09 November, 2022.
103. S. Sen, P. Houn and S. Lay, 2022. Effect of extraction of essential oil on aromatic compounds of red pepper powder. Foodi International Conference 2022, Kuala Lumpur, Malaysia 07-09 November, 2022.
104. S. Lay, and P. Houn, 2022. Maximizing yield of phenolic compounds extracted from white turmeric through extraction process design. 2022 International Conference on Functional Material and Chemical Engineering (ICFMCE, 2022), Nanjin, China 23-25 September, 2022.
105. K. Ly, S. Lay, and P. Houn, 2022. Valorization of kaffir lime peel waste through extraction of phenolic compounds and process optimization. 6th International Conference of Chemical Engineering and Industrial Biotechnology (ICCEIB 2022), Pahang Darul Makmur, Malaysia 15-16 August 2022.
106. S. Sen, S. Lay, and P. Houn, 2022. Effects of solvent extraction condition on yield of phenolic compounds from red pepper (piper nigrum l.). 6th International Conference of Chemical Engineering and Industrial Biotechnology (ICCEIB 2022), Pahang Darul Makmur, Malaysia 15-16 August 2022.
107. Thourn, L., Yoeun, S. Phat, C. Suong, M., 2022. Analytical Methods For Pesticide Residues in Paddy Rice and Soil Using Gas Chromatography Mass Spectrometry (GC-MS): A Review. The 11th Scientific Day, Institute of Technology of Cambodia, Phnom Penh, Cambodia.



108. L. Thourn, C. Phat., M. Suong (2021). Assessment of Extraction Technique of Natural Compounds of Plant Origin for Nematicidal Properties: A Review. The 10th Scientific Day of ITC, Institute of Technology of Cambodia, Phnom Penh, Cambodia.
109. Yusoff, A. H., Azmi, M. S. W., Chang, C. S., Sulaiman, A. F., Nor, A. N. M., Tan, R., & Ahmed, M. F. (2021, August). Vertical distribution of heavy metals in core sediments from Kelantan River off Tanah Merah, Kelantan, Malaysia. In *IOP Conference Series: Earth and Environmental Science* (Vol. 842, No. 1, p. 012037). IOP Publishing.
110. S. Lay, P. Houg, 2021. Optimization of Ultrasound-Assisted Extraction of Phenolic Compounds from Cambodia Black Turmeric. *14<sup>th</sup> AUN/SEED-Net Regional Conference on Chemical Engineering 2021 (RCChE2021), In Conjunction with 1<sup>st</sup> International Conference on Innovation in Chemical Engineering & Technology (ICICET 2021)*, Selangor, Malaysia.
111. S. Sieng, L. Thourn, S. Sorn, T. Va, K. Tho, S. Bellafiore, M. SUONG, 2021. Current status of the Rice Root-Knot Nematode in Cambodian rice fields and management approaches. *The 3<sup>rd</sup> National Research Forum*, Phnom Penh, Cambodia.
112. T. Or, M. Lim, D. Sang, M. T. Chanto, R. Tan, 2021. Improving Removal Efficiency of Natural Organic Matter from Drinking Water Treatment Plant by Powder Activated Carbon Injection in Coagulation Process. *The 6th International Symposium on Conservation and Management of Tropical Lakes, In Conjunction with The 3rd International Conference on Tropical Limnology (TROPLIMNO III)*, Phnom Penh, Cambodia.
113. L. Meak, S. Khoun, T. Mao, C. Phat, 2021. Assessment of Pesticides Residue in Groundwater in Kampong Thom, Cambodia. *The 6th International Symposium on Conservation and Management of Tropical Lakes, In Conjunction with The 3rd International Conference on Tropical Limnology (TROPLIMNO III)*, Phnom Penh, Cambodia.
114. S. Yoeurm, S. Khuon, C. Phat, S. Yeoun, 2021. Assessment of Pesticides Residues in the Farm Soils and Sediment from Chhnok Tru, Kampong Chhnang. *The 6th International Symposium on Conservation and Management of Tropical Lakes, In Conjunction with The 3rd International Conference on Tropical Limnology (TROPLIMNO III)*, Phnom Penh, Cambodia.
115. V-D. Pham, S. In, S. Sroy, M. Soeung, M. Nishiyama, S. Heng, H. Mith, S. Nget, T. Watanabe, 2021. Assessment of Heavy Metal(loid) Accumulation and Sources in Six Edible Fish Species of Tonle Sap Lake, Cambodia. *The 6th International Symposium on Conservation and Management of Tropical Lakes, In Conjunction with The 3rd International Conference on Tropical Limnology (TROPLIMNO III)*, Phnom Penh, Cambodia.
116. C. Phat, S. Yoeun, M. Ouk, K. Kun, F. Kuok, B. Ty, W. Kurniawan, E. G. Mariquit, H. Hinode, 2021. Assessment of pesticide contamination in vegetable and water from Chhnok Tru floating communities of Tonle Sap Lake. *The 35th Congress of the International Society of Limnology (SIL2021)*, Gwangju, Republic of Korea.
117. R. Tan, C. Be, C. Peng, P. Ung, K. Miyanaga, Y. Tanji, 2021. Investigation of Multidrug-Resistant Bacteria in Tonle Sap Lake, Tonle Sap River, Mekong River, and Wastewater. *The 35th Congress of the International Society of Limnology (SIL2021)*, Gwangju, Republic of Korea.
118. P. Ung, K. Seang, S. Keo, R. Tan, K. Miyanaga, Y. Tanji, 2021. Assessment of Microbiological Water Quality in Tonle Sap River and Kob Srov Lake in Phnom Penh, Cambodia. *The 35th Congress of the International Society of Limnology (SIL2021)*, Gwangju, Republic of Korea.

### **Annex 43. List of publication for the last 5 years from MIT Research Unit.**

#### **List of indexed publications from 2021**

1. Kimlong Ngin, Dona Valy(2026). Online Handwriting Identification from Khmer Script Using a Deep Learning Approach with KhNet. Springer - The 14th Conference on Information Technology and its Applications, (), . DOI: [https://link.springer.com/chapter/10.1007/978-3-032-00972-2\\_55](https://link.springer.com/chapter/10.1007/978-3-032-00972-2_55)
2. Vichet Sreng, Dona Valy, Sarot Srang, Phang Chhay, Sophannet Phan, Sokhunraksmey Thuol(2025). Synthetic Data and Deep Learning for Bilingual Text Detection in Low-Resource Khmer-English Scenes. IEEE - 2025 9th International Conference On Electrical, Electronics And Information Engineering (ICEEIE), (), . DOI: 10.1109/ICEEIE66203.2025.11252260
3. Sros Nhek, Sarot Srang, Channareth Srun, Chivon Choeung, Horchhong Cheng(2025). PI Backstepping Control of a Surface-Mounted Permanent Magnet Synchronous Motors. International Journal of Electrical and Electronics Research (IJEER), 13(1), 69-79. DOI: <https://doi.org/10.37391/IJEER.130111>
4. Sophyn Srey, Sarot Srang, Lycheck Keo(2025). Adaptive controller for multirotor based on estimated parameters. Engineering Science and Technology, an International Journal, 69(), . DOI: <https://doi.org/10.1016/j.jestch.2025.102121>
5. Sarin Sereyvatha, Choeung Chivon, Srey Sophyn, Srang Sarot(2025). Simulation and Modeling of Position Control for an X-Configuration Quadcopter Using PID Controller. International Journal of Electrical and Electronics Research, 13(1), . DOI: 10.37391/IJEER.130120
6. Seven Siren, Rothna Pec, Channareth Srun, Chivon Choeung, Virbora Ny, Sokoeun Un(2025). Design and Implementation of a Real-Time Water Quality Monitoring System Using IoT. IEEE - 2025 1st International Conference on Computational Intelligence Approaches and Applications (ICCIAA), (), . DOI: 10.1109/ICCIAA65327.2025.11013242
7. Rounsang Chaisricharoen, Denis Genon-Catalot, Vimontha Khieovongphachanh, Denis Lubineau, Séphane Mocanu, Emil Novakov, Phosy Panthongsy, Kanthanet Tharot, Jean-Marc Thiriet, Kosorl Thourn, Hamed Yahoui(2025). Curricula Developments regarding Industry 4.0 in an Asian-European partnership in 3 countries in South-East Asia. IEEE - 2025 34th Annual Conference of the European Association for Education in Electrical and Information Engineering (EAEIE), (), . DOI: 10.1109/EAEIE65428.2025.11136585
8. Pliaodee, C., Madsahi, P., Songsan, K., Inthasuth, T., Boonsong, W., & Hel, C. (2024). Internet of Things sensor placement: Impacts on energy management system data integrity. 2024 International Technical Conference on Circuits/Systems, Computers, and Communications (ITC-CSCC), Okinawa, Japan, 1-5. <https://doi.org/10.1109/ITC-CSCC62988.2024.10628169>
9. Bun, M., Chrin, P., Kim, B., Azzaro-Pantel, C., & Maussion, P. (2024). Life cycle assessment of e-tuk-tuk using second life components and renewable energy. SDEWES 2024, Rome, Italy.
10. Kuy, M., Schumacher, L., & Sreng, S. (2024). Managing and orchestrating cross-cloud VNFs with deployable sidecar VNF coordinators. NetSoft 2024.
11. Nhim, C. S., Chek, N., Hel, C., & Pec, R. (2023). Experiment on smart mushroom cultivation using an environmental control system. Environmental and Rural Development, 144.
12. Kean, J., Raveu, N., Kaouach, H., Sreng, S., & Thourn, K. (2023). Analysis and characterization of electromagnetic reverberation chamber with metamaterial walls. 3rd IEEE International Conference on Signal, Control and Communication (SCC 2023).
13. Kumar, K. D., Srang, S., & Valy, D. (2023). Visual storytelling: A generative adversarial networks (GANs) and graph embedding framework. International Journal on Recent and Innovation Trends in Computing and Communication, 11(9), 1899–1906. (Scopus Indexed).
14. Keo, C., Srang, S., & Seng, R. (2023). Performance investigation of low-cost dual-axis solar tracker using light dependent resistor. International Journal of Robotics & Control Systems, 3(4).

15. Kumar, K. D., Srang, S., & Valy, D. (2023). Evaluating text-to-image GANs performance: A comparative analysis of evaluation metrics. *International Journal on Recent and Innovation Trends in Computing and Communication*, 11(8s), 618–627. (Scopus Indexed).
16. Kuy, M., Schumacher, L., & Sreng, S. (2023). Experimental demonstration of NFV deployment with RPi and MAAS. *NetSoft 2023*. IEEE.
17. Nhim, C. S., Chek, N., Hel, C., & Pec, R. (2023). Experiment on smart mushroom cultivation using the environmental control system. *14th International Conference on Environmental and Rural Development*, Siem Reap, Cambodia.
18. Chhorn, S., Tep, S., Hel, C., & Pec, R. (2022). Development of ESP32-based smart greenhouse controller. *IEEE IoT World Forum*.
19. Born, S., Valy, D., & Kong, P. (2022). Encoder-decoder language model for Khmer handwritten text recognition in historical documents. *14th International Conference on Software, Knowledge, Information Management and Applications (SKIMA)*, IEEE, 234-238.
20. Kumar, K. D., Srang, S., & Valy, D. (2022). A review of generative adversarial networks (GANs) for technology-assisted learning: Solving teaching and learning challenges. *International Conference on Automation, Computing and Renewable Systems (ICACRS)*, IEEE, 820-826.
21. Siv, R., Mancas, M., Gosselin, B., Valy, D., & Sreng, S. (2022). People tracking and re-identifying in distributed contexts: Extension study of PoseTReID. *9th International Conference on Electrical Engineering, Computer Science and Informatics (EECSI)*, IEEE, 337-342.
22. Kong, P., Mancas, M., Gosselin, B., & Po, K. (2022). DeepRare: Generic unsupervised visual attention models. *Electronics*, 11(11), 1696. <https://doi.org/10.3390/electronics11111696>
23. Nhim, C. S., Hel, C., Chhorn, S., Tep, S., & Pec, R. (2022). Development of multi-parameter tester for agricultural application. *9th International Conference on Information Technology, Computer, and Electrical Engineering*.
24. Sok, K., Colin, J. N., & Po, K. (2022). Multi-authority decentralized attribute-based authorization framework. In Horkoff, J., Serral, E., & Zdravkovic, J. (Eds.), *Advanced Information Systems Engineering Workshops (CAiSE 2022)*, *Lecture Notes in Business Information Processing* (Vol. 451). Springer, Cham. [https://doi.org/10.1007/978-3-031-07478-3\\_2](https://doi.org/10.1007/978-3-031-07478-3_2)
25. Chea, R., Thourn, K., & Chhorn, S. (2022). Improving V-I trajectory load signature in NILM approach. *IEECON 2022*, Thailand.
26. Kean, J., Raveu, N., Kaouach, H., Thourn, K., & Sreng, S. (2021). Analysis of metamaterial walls reverberation chamber by using modal expansion theory. *Asia-Pacific International Symposium on Electromagnetic Compatibility (APEMC)*, IEEE, 1-4.
27. Chin, C. D., Hel, C., & Pec, R. (2021). Fab Lab initiative in higher education: Digital solutions diverted to traditional farming in Cambodia context. *6th International STEM Education Conference (iSTEM-Ed)*, IEEE.
28. Peu, T., Yean, S., Sethy, B., & Srang, S. (2021). PD controller and dynamic compensation design for a DC motor based on estimated parameters. *International Conference on Advanced Mechatronics, Intelligent Manufacture and Industrial Automation (ICAMIA)*, Indonesia.
29. Srey, S., Chhour, V., & Srang, S. (2021). Lumped parameter estimation of a low-cost DC motor for position controller design. *International Conference on Advanced Mechatronics, Intelligent Manufacture and Industrial Automation (ICAMIA)*, Indonesia.
30. Ban, S., Dan, A., Guinet, F., Portanguen, J., Srang, S., & Luras, M. (2021). Assessing the potentialities of physical internet for developing countries' last-mile deliveries. *8th International Physical Internet Conference (IPIC 2021)*, Germany.
31. Thavath, S., Proeung, B., Tep, S., Chhorn, S., Pec, R., Nall, V., Ket, P., Oeurng, C., & Hel, C. (2021). Prototyping of smart irrigation system using IoT technology. *7th International Conference on Electrical, Electronics and Information Engineering (ICEEIE)*, IEEE.

### List of non-indexed publications from 2021

1. Lyheng Sam, Sokkhey Phauk, Dona Valy(2025). Undergraduate Student Dropout Prediction with Class Balancing Techniques. Techno-Science Research Journal, 13(2), . Link:
2. Phannet Pov, Sokkhey Phauk, Dona Valy, Narith Saum(2025). Bus Arrival Time Prediction Using Machine Learning Approaches. Techno-Science Research Journal, 13(1), . Link:
3. Heng Ham, Dona Valy, Phutphalla Kong(2025). Empowering Education with Online Khmer Handwritten Text Recognition for Teaching and Learning Assistance . Techno-Science Research Journal, 13(2), . Link:
4. Kimlong Ngin, Dona Valy, Vannaro Pin(2025). A Deep Learning Approach for Identifying Individuals Based on Their Handwriting. Techno-Science Research Journal, 13(1), . Link:
5. Kimleang Ly, Dona Valy, Phutphalla Kong(2025). Khmer Question-Answering Model by Fine-tuning Pre-trained Model. Techno-Science Research Journal, 13(1), . Link:
6. Leakana Ouk, Rothna Pec, Sopkeakra Chhorn(2025). Low-Complexity Detection of Primary Synchronization Signal for 5G New Radio Terrestrial Cellular System. Techno-Science Research Journal, 13(2), . Link:
7. Both Chan, Dona Valy, Phutphalla Kong(2025). CNN-based Reinforcement Learning with Policy Gradient for Khmer Chess. Techno-Science Research Journal, 13(2), . Link:
8. Hengly Em, Dona Valy, Bernard Gosselin, Phutphalla Kong(2025). Word Spotting on Khmer Printed Documents. Techno-Science Research Journal, 13(2), . Link:
9. Nita Chek, Rothna Pec, Sokchenda Sreng (2025). Tuning Hyperparameters in Gym Environment Inverted Pendulum. Techno-Science Research Journal, 13(2), . Link:
10. Selasak Song, Dara Tith, Dona Valy(2025). Security Management of Reputation Records in the Self-Sovereign Identity Network for the Trust Enhancement. Techno-Science Research Journal, 13(3), . Link:
11. Pork, C., Valy, D., & Phauk, S. (2024). Text image reconstruction and reparation for Khmer historical document. Techno SRJ.
12. Nom, V., Valy, D., Phauk, S., & Leng, S. H. (2024). Word spotting on Khmer palm leaf manuscript documents. Techno SRJ.
13. Korn, V., Sok, K., & Valy, D. (2024). Enhancing the accuracy and reliability of Docker image vulnerability scanning technology. Techno SRJ.
14. Srey, S., & Srang, S. (2024). Comparison of control performance for a low-cost DC motor with single-loop and cascade control architectures. Techno SRJ.
15. Chun, D., Thourn, K., & Sreng, S. (2024). Design of multi-layer planar electromagnetic wave absorber using 1D-FDTD integrated with ASA and gradient descent optimization method. Techno SRJ.
16. Ny, S., Valy, D., & Kong, P. (2023). Lock and unlock door with face detection using OpenCV, Python, and Arduino board. Techno SRJ.
17. Than, S., Valy, D., & Kong, P. (2023). Crop disease dataset and recognition using convolutional neural networks. Techno SRJ.
18. Chheang, V. R., Valy, D., & Tith, D. (2023). Decentralized blockchain-based PKI for patient identification in the blockchain network. Techno SRJ.
19. Samrit, C., Srang, S., & Yonrith, P. (2023). Study on mechanical structure design for plug-and-play wheel mobile robot. Techno SRJ.
20. Gnhiok, P., Srang, S., & Yonrith, P. (2023). PI controller for velocity controller design based on Luraped parameter estimation: Simulation and experiment. Techno SRJ.
21. Yi, V., Srang, S., & Keo, C. (2023). Attitude estimation by using unscented Kalman filter with constraint state. Techno SRJ.
22. Leng, S. H., Phauk, S., & Has, S. (2023). An empirical investigation of gold price forecasting using ARIMA compared with LSTM model. Techno SRJ.
23. Chou, M., & Thourn, K. (2023). Non-intrusive load monitoring classification based on multi-scale electrical appliance load signature. Techno SRJ.
24. Eang, K., Phauk, S., Has, S., & Din, S. (2023). The study of cereals price prediction in terms of trade flows for anticipated price fluctuations in Cambodia by using ARIMA model. Techno SRJ.
25. Seng, R., & Srang, S. (2023). Development of control framework based on ROS platform for a 3-axis gimbal. Techno SRJ.
26. Oum, S., Srang, S., & Yonrith, P. (2022). Integration of RRT\* path planning with trajectory tracking for wheeled mobile robot. Techno-Science Research Journal.

27. Srean, P., Sakal, M., Berthet, M., & Srang, S. (2022). Development of orbital simulator for Cambodian CubeSat mission in LEO. *Techno-Science Research Journal*.
28. Siek, S. A., & Srang, S. (2021). Design and prototyping of solar hybrid switch controller and monitoring system. *Techno-Science Research Journal*.
29. Yonrith, P., Srang, S., Sakal, M., & Sethy, B. (2021). Mobile robot localization using extended Kalman filter with kinematic model. *Techno-Science Research Journal*.
30. Tim, H., Srang, S., & Sakal, M. (2021). Simulation and numerical characterization of gaseous oxygen injector for ABS/GOX hybrid rocket motor. *Techno-Science Research Journal*.
31. Chao, V., Srang, S., Sakal, M., & Keo, C. (2021). Helipad detection for UAV based on YOLOv4 transfer learning model. *Techno-Science Research Journal*.
32. Srang, S., Taing, N., & Kuok, F. (2021). Policy brief: Minimum pre-requisite for creating high-tech and deep-tech startup ecosystem in Cambodia. Asian Vision Institute.
33. Soun, D., Sakal, M., Sor, H., & Srang, S. (2021). Design and implementation of the commercial-off-the-shelf electrical power system for the satellite training kit – DemoSat. *Techno-Science Research Journal*.

### List of Conferences from 2021

1. Hel Chanthan, Ket Pinnara, Valy Dona, Hirooki Aoki(2025).LMS2025.Experimenting on the Relationship Between NDVI and Water Content in Leafy Crops,Oral(Link conference: <https://lifemechatronics.com/lms2025/>).Link Proceeding:
2. Sreylen CHAB, Dona Valy, Sotheany Nou(2025).LMS2025.Toward End-to-End Document Layout Analysis for Khmer Document,Oral(Link conference: <https://lifemechatronics.com/lms2025/>).Link Proceeding:
3. Ousa ANG, Movsun KUY, Reatrey PICH(2025).LMS2025.Ensemble-based Malicious URL Detection,Oral(Link conference: <https://lifemechatronics.com/lms2025/>).Link Proceeding:
4. Seyha Yean, Dona Valy(2025).LMS2025.An LLM-Based Approach for Extracting In-Demand Job Skills to Enable AI-Powered Curriculum Enhancement,Oral(Link conference: <https://lifemechatronics.com/lms2025/>).Link Proceeding:
5. Sou Sopheap, Valy Dona(2025).LMS2025.Building a Multi-direction Conversational Chatbot in Khmer,Poster(Link conference: <https://lifemechatronics.com/lms2025/>).Link Proceeding:
6. Tito TIM, Dona VALY, Sotheany NOU(2025).LMS2025. AI-Based Vision System for Intelligent Plant Detection to Support Smart Autonomous Agriculture,Poster(Link conference: <https://lifemechatronics.com/lms2025/>).Link Proceeding:
7. "Techchhiv LIM, Dona VALY,
8. Sotheany NOU(2025).LMS2025.Next-Stroke Prediction for Khmer Online Handwriting Using Recurrent Neural Networks,Poster(Link conference: <https://lifemechatronics.com/lms2025/>).Link Proceeding: "
9. Lymonyratanak HIEK, Sotheany NOU, Dona VALY(2025).LMS2025.Real-Time Pose Recognition with Localized Audio Assistance,Poster(Link conference: <https://lifemechatronics.com/lms2025/>).Link Proceeding:
10. Phearun OL, Dona VALY, Sotheany NOU(2025).LMS2025.A Deep Reinforcement Learning Framework for Khmer Chess AI,Poster(Link conference: <https://lifemechatronics.com/lms2025/>).Link Proceeding:
11. "Lathea CHORN, Tekngim KHEANG, Seanghai SOK, Koksai CHOU, Rithea SUM(2025).LMS2025.Energy-Aware Sensor Fusion Control for Off-Grid Solar-Powered
12. Deep Water Culture Systems,Poster(Link conference: <https://lifemechatronics.com/lms2025/>).Link Proceeding: "
13. Dararaksmei Seng, Dona Valy, Koksai Chou(2025).LMS2025.Mediapipe hand Landmark preprocessing for LSTM-based Sign Language Recognition,Oral(Link conference: <https://lifemechatronics.com/lms2025/>).Link Proceeding:
14. Chheang, R., Srang, S., & Srey, S. (2025, June). Model-Based PMSM Control in the dq Frame Using Full-State Feedback with Integral Action and EKF for State Estimation under Stochastic Dynamics. The 14th Scientific Day.
15. Chhorn, D., Phauk, S., Carlitti, T., & Nhim, M. (2025, June). Reconstructing Higher-Order Interaction in Algal Communities. The 14th Scientific Day.

16. Em, D. (2025, June). Predictive Modeling of Garment Trade Flows in Cambodia: A Data-Driven Approach to Forecasting Export Trends. The 14th Scientific Day.
17. Has, S., Plougouven, R., Fischer, A., Rani, R., Lott, F., Hertzog, A., & Podglajen, A. (2025, June). Balloon-observed Gravity Wave Momentum Flux Reconstruction using Transfer Learning Bayesian Neural Network. The 14th Scientific Day.
18. Hort, H., Phauk, S., Neang, P., & Khean, V. (2025, June). KHR/USD Daily Exchange Rate Short Term Prediction using Deep Learning. The 14th Scientific Day.
19. Koum, S., Ngin, K., Phao, C., Bo, S., & Ma, O. (2025, June). A Multilingual Deep Learning Approach Fine-Tuning to Khmer News Summarization. The 14th Scientific Day.
20. Leang, P. I. N., Ly, L., Phorn, S., Ly, S., & Ngeth, R. (2025, June). Continuously Uploading ECG Waveform Data to Google Sheet using ESP32. The 14th Scientific Day.
21. Leng, P., Phauk, S., Nhim, M., & Tann, C. (2025, June). Comparing Time Series, Machine Learning, and Deep Learning Models for Paddy Rice Price Forecasting in Battambang Province, Cambodia. The 14th Scientific Day.
22. Li, N., Heng, S., Seng, L., Moon, J., Phauk, S., & Hong, C. (2025, June). Enhancing Khmer Language AI: A Privacy-Focused Chatbot with Retrieval-Augmented Generation. The 14th Scientific Day.
23. Ly, T., Phauk, S., Has, S., & Valy, D. (2025, June). Uncovering Factors Contributing to Cambodian High School Students' Mathematics Achievement through Machine Learning Algorithms. The 14th Scientific Day.
24. Ngin, K., Valy, D., Phoeurn, K., Va, S., Pel, B., Ty, K., Yin, S., & Pho, R. (2025, June). Handwritten Khmer Digit Recognition Using Sequential RNN Models. The 14th Scientific Day.
25. Pen, C., Phauk, S., Has, S., & Valy, D. (2025, June). Harnessing Predictive Analytic for Detecting Students' Learning and Behavioral Engagement in Moodle Platform. The 14th Scientific Day.
26. Seun, S., Phauk, S., Ngin, K., & Long, P. (2025, June). Analysis on Machine Learning Models for Imbalanced Data Problem in Payment Fraud Detection. The 14th Scientific Day.
27. Sithach, T., Phauk, S., Has, S., & Phok, P. (2025, June). The Forecasting for Cambodia's Rice Production Using Multiple Linear Regression and Tree-Based Ensemble Learning Methods. The 14th Scientific Day.
28. Sok, S., Thourn, K., & Po, K. (2025, June). Toward a Case Study on Event Detection in Non-Intrusive Load Monitoring Using Geometric Features of the Cumulative Sum. The 14th Scientific Day.
29. Songeam, S., Valy, D., & Has, S. (2025, June). AI-Based Skill Trend Analysis: Enhancing Job Market Insights and Curriculum Development in Cambodia. The 14th Scientific Day.
30. Soeng, P., Valy, D., & Kong, P. (2025, June). Applying Deep Learning Approaches to Khmer Speech Recognition and Text-to-Speech in Conversational Domains. The 14th Scientific Day.
31. Sreyvi, U. (2025, June). Interacting Neural Networks: A Comparative Study of Standard and Distributed Architectures on Image Classification. The 14th Scientific Day.
32. Taing, B. (2025, June). Investigating Efficiency of PMSM Using Full State Feedback Control with integral action and Dynamic Compensation. The 14th Scientific Day.
33. Yann, S., Valy, D., & Kong, P. (2025, June). Lip-Synchronized Talking Avatar Generation for Khmer Language Using Audio-to-Landmark Modeling. The 14th Scientific Day.
34. Bunrong, P., Thourn, K., & Chhorn, S. (2025, June). Development of Low-Cost CSRR-Based Sensor for Soil Moisture Monitoring in Agriculture. The 14th Scientific Day.
35. Houn, S., Hang, M., Hun, S., Chhouk, P., & Choeurn, B. (2025, June). PREDICTING LIKELIHOOD OF DIABETES USING MACHINE LEARNING TECHNIQUES. The 14th Scientific Day.
36. Khean, V., Phauk, S., & Nam, Y. (2025, June). Enhancing Facial Emotion Classification and Recognition in VR Environments Using Machine Learning. The 14th Scientific Day.
37. Kleng, V., Am, S., Bun, M., Phon, L., & Gyselinck, J. (2025, June). Modification of a DC/DC Forward Converter to a DC/AC Inverter Based on Second-Life Computer Power Supplies for Replacing Smooth Sine wave Solar Inverter. The 14th Scientific Day.
38. Luk, C., Phouak, S., & Has, S. (2025, June). Time Series and Deep Learning Models for Weekly PM2.5 Forecasting: A Comparative Study in Bangkok, Thailand. The 14th Scientific Day.
39. Minh, M. H., Srang, S., & Tang, S. B. (2025, June). Development and Evaluation of a Reinforcement Learning Framework for Autonomous Land Leveling Path Planning. The 14th Scientific Day.
40. Sou, S., & Valy, D. (2025, June). Conversational Chatbot in Khmer, Backed by a Knowledge Base. The 14th Scientific Day.

41. Thourn, K., & Chhorn, S. (2025, June). Improving the Navigation performance based on low-cost IMU sensor Array Through Data Fusion Estimation and Error Compensation Method. The 14th Scientific Day.
42. Rey, E., Ngin, K., & Phauk, S. (2024). Web application using deep learning approaches for automated prediction of tomato leaf disease. Life Mechatronics Symposium (LMS2024).
43. Sou, S., & Valy, D. (2024). Conversational chatbot in Khmer. Life Mechatronics Symposium (LMS2024).
44. Songeam, S., & Valy, D. (2024). Analysis of online job recruitments to identify industry's trending skills for designing market-aligned curriculum. Life Mechatronics Symposium (LMS2024).
45. Yann, S., & Valy, D. (2024). Audio2Video: Advancing generative AI for realistic virtual person creation. Life Mechatronics Symposium (LMS2024).
46. Soeng, P., & Valy, D. (2024). Khmer speech recognition and text-to-speech. Life Mechatronics Symposium (LMS2024).
47. Ngin, K., Valy, D., & Oeng, S. (2024). Handwriter identification from Khmer script using multiple features with deep learning approach. Life Mechatronics Symposium (LMS2024).
48. Ly, K., Leang, P. I. N., & Ngeth, R. (2024). Continuously uploading data to Google Sheet using linear network coding. Life Mechatronics Symposium (LMS2024).
49. Phoeurn, C. A., Degré, A., Oeurng, C., & Ket, P. (2024). Assessing the effects of climate change on the yield and water use efficiency of various dry-season rice varieties grown under traditional and alternate wetting and drying (AWD) methods. Life Mechatronics Symposium (LMS2024).
50. Ngin, K., Valy, D., & Phauk, S. (2024). Online identification of individuals from Khmer handwriting using a deep learning approach. ACET2024.
51. Ngin, K. (2024). A deep learning approach for identifying individuals based on their handwriting. The 13th Scientific Day.
52. Heng, H. (2024). Utilizing online Khmer handwritten text recognition for educational assistance. The 13th Scientific Day.
53. Chan, B. (2024). CNN-based reinforcement learning with policy gradient for Khmer chess. The 13th Scientific Day.
54. Ly, K. (2024). Exploring deep learning techniques for Khmer language: Fine-tuning models for chatbot tasks. The 13th Scientific Day.
55. Sakal, K. Y. (2024). Khmer large language model. The 13th Scientific Day.
56. Phannet, P. (2024). Bus arrival time prediction using machine learning approaches. The 13th Scientific Day.
57. Lyheng, S. (2024). A comparative study between machine learning and deep learning approaches for predicting student dropouts. The 13th Scientific Day.
58. Chhunheng, S. (2024). Utilizing data mining and AI to enhance Cambodian high school student performance and stakeholder success. The 13th Scientific Day.
59. Hengly, E. (2024). Enhancing word spotting accuracy for Khmer printed documents. The 13th Scientific Day.
60. Chun, D. (2024). Design of inverted planar F-shape antenna with dual-band frequency for WiFi application. The 13th Scientific Day.
61. Hakeng, H. (2024). State machine development of a takeoff and landing process of a hybrid unmanned aerial vehicle. The 13th Scientific Day.
62. Hang, H. (2024). Temporal graph learning with application to large-scale flight traffic prediction. The 13th Scientific Day.
63. Kosal, S. (2024). Examining passenger loyalty in Phnom Penh public bus system: A structural equation modelling approach. The 13th Scientific Day.
64. Vannuth, V. (2024). Human detection with WiFi CSI. The 13th Scientific Day.
65. Oudom, Y. (2024). Adapting an access control model to enhance security for distributed ledger access. The 13th Scientific Day.
66. Selasak, S. (2024). Security management of reputation records in the self-sovereign identity network for the trust enhancement. The 13th Scientific Day.
67. Monyvann, C. (2024). Enhanced robot navigation through reinforcement learning with Khmer direction recognition. The 13th Scientific Day.
68. Pechmunivann, S. (2024). Fine-tuning pretrained models using Siamese networks on a Cambodian face dataset. The 13th Scientific Day.

69. Roatny, N. (2024). Predictive analysis of stock closing prices: A comparative study of SVM, XGBoost, and LSTM. The 13th Scientific Day.
70. Nita, L. (2024). Unlocking agricultural potential with machine learning approach: A soil-centric approach to crop selection in Cambodia. The 13th Scientific Day.
71. Chandeth, H. (2024). Rubber prices forecasting: Comparative study of ARIMA, 1D CNN, ensemble, and hybrid model. The 13th Scientific Day.
72. Heng, S. (2024). Comparative study of clustering analysis: On KIVA-enhancing microfinance impact through cluster-driven loan strategies in Cambodia. The 13th Scientific Day.
73. Seng, V. (2024). Testing quadcopter with adaptive controller based on estimated random parameters for quadcopter trajectory tracking control. The 13th Scientific Day.
74. Bun, R. (2024). Automatic recognition of Cambodian license plates. The 13th Scientific Day.
75. Hoem, R. (2024). Flight simulation and control of a fixed-wing UAV using LQR controller. The 13th Scientific Day.
76. Phon, L. (2024). Machine learning-based battery state-of-health estimation for railway applications. The 13th Scientific Day.
77. Him, V. (2024). Designing a self-stabilized thrust vector control system for small-scale rockets. The 13th Scientific Day.
78. Tang, S. B. (2024). Smart motor driver for DC motor. The 13th Scientific Day.
79. Chek, N., Harispe, S., Pec, R., & Sreng, S. (2023). Tuning hyperparameters on Gym environment inverted pendulum. LMSDec2023.
80. Ham, H., & Valy, D. (2023). Online Khmer handwritten text recognition for teaching and learning assistance. LMSDec2023.
81. Em, H., & Valy, D. (2023). Word spotting on Khmer printed document. LMSDec2023.
82. Ly, K., & Valy, D. (2023). Khmer chatbot using deep learning technique. LMSDec2023.
83. Longkim, H., Mok, L., Neang, S., Chou, P., Pov, P., Keo, P., Keo, C., & Srang, S. (2023). Structural design and aero-dynamics simulation of fixed-wing UAV. LMSDec2023.
84. Pich, M., Prim, R., Keo, C., & Srang, S. (2023). Design and fabricate low-cost 4-axis CNC foam cutting. LMSDec2023.
85. Chan, B., & Valy, D. (2023). Khmer chess using reinforcement learning. LMSDec2023.
86. Hort, S., Him, V., & Srang, S. (2023). Detection of apogee with Kalman filter for flight avionics of solid rocket. LMSDec2023.
87. Hor, H., Hoem, R., Keo, C., & Srang, S. (2023). Case study on low-cost adaptive light intensity sensor for solar tracker by using light dependent resistor. LMSDec2023.
88. Ouk, L., Pec, R., & Chhorn, S. (2023). Development of cell identification technique for 5G new radio terrestrial cellular system. LMSDec2023.
89. Ham, H., & Valy, D. (2023). Online Khmer handwritten text recognition dataset. ACET 2023.
90. Huon, S., & Valy, D. (2023). Khmer text semantic similarity: Developing a deep learning model for sentence vectorization and comparison. ACET 2023.
91. Nom, V., Valy, D., & Phauk, S. (2023). Word spotting on Khmer palm leaf manuscript documents. The 12th Scientific Day of ITC.
92. Pork, C., Valy, D., & Phauk, S. (2023). Text-image reconstruction and reparation for Khmer historical documents. The 12th Scientific Day of ITC.
93. Huon, S., & Valy, D. (2023). Plagiarism detection system for Khmer language. The 12th Scientific Day of ITC.
94. Visal, K., Valy, D., Vanda, Y., Hongsin, A., Monit, K., Ham, H., Soknara, Y., Kimheng, P., Chhordaphea, S., Kakada, C., Sopheak, S., & Sonimith, H. (2023). Air handwriting recognition for Khmer characters. The 12th Scientific Day of ITC.
95. Sek, S., & Valy, D. (2023). Masked language modeling for Khmer palm leaf manuscript. The 12th Scientific Day of ITC.
96. Oeng, M. T., Thu, Y. K., Soeum, Z., & Sam, S. (2023). Two SignWriting keyboard layouts for Cambodian fingerspelling. The 12th Scientific Day of ITC.
97. Khun, D., Tith, D., Colin, J. N., & Valy, D. (2023). Reputation model for trust-based policy in self-sovereign identity systems. The 12th Scientific Day of ITC.
98. Chhoem, S., Tith, D., Colin, J. N., & Valy, D. (2023). The trust model in self-sovereign identity systems. The 12th Scientific Day of ITC.



99. Liv, B., Tith, D., Colin, J. N., & Valy, D. (2023). Security enhancement of digital wallet in self-sovereign identity of healthcare system. The 12th Scientific Day of ITC.
100. Korn, V., Sok, K., & Heng, R. (2023). Enhancing the accuracy and reliability of docker image vulnerability scanning technology. The 12th Scientific Day of ITC.
101. Heng, N., Sok, K., & Heng, R. (2023). Case study of organization-task-based access control (OTBAC). The 12th Scientific Day of ITC.
102. Srey, S., & Srang, S. (2023). Comparison of control performance for a low-cost DC motor with single-loop and cascade control architecture. The 12th Scientific Day of ITC.
103. Moeurn, D., & Srang, S. (2023). Performance comparison of ball image detection using deep learning models, UNet, Unet Crop, and FCNN. The 12th Scientific Day of ITC.
104. Seng, R., & Srang, S. (2023). Development of control framework based on ROS platform for a 3-axis gimbal. The 12th Scientific Day of ITC.
105. Virak, A., Virak, S., & Srang, S. (2023). Hardware development of 6 degree-of-freedom robot manipulator. The 12th Scientific Day of ITC.
106. Hort, S., Him, V., & Srang, S. (2023). Investigation of rocket motor performance with syrup-mixture propellant. The 12th Scientific Day of ITC.
107. Nuon, P., & Thourn, K. (2023). Development of a low-cost air leak testing system to analyze pipes quality based on Raspberry Pi and OpenPLC. The 12th Scientific Day of ITC.
108. Un, S. O., Po, K., Thourn, K., & Pec, R. (2023). Communication back-up for natural disaster by emergency amateur radio operator implemented using APRS as location tracker in Cambodia. The 12th Scientific Day of ITC.
109. Sai, T., Tep, S., Hel, C., & Pec, R. (2023). Development of smart greenhouse controller using IoT. The 12th Scientific Day of ITC.
110. Sok, S., Thourn, K., & Po, K. (2023). Development model of non-intrusive appliance load monitoring for household energy improvement basing on VI trajectory. The 12th Scientific Day of ITC.
111. Chun, D., & Thourn, K. (2023). Design of an electromagnetic wave absorber using time-domain techniques. The 12th Scientific Day of ITC.
112. Khe, P., Em, T., Keng, M., Chhorn, S., Kot, T., & Ngeth, R. (2023). Indoor location tracking using UWB. The 12th Scientific Day of ITC.
113. Ouk, L., Pec, R., & Chhorn, S. (2023). Design efficient cell identification technique for 5G terrestrial cellular system. The 12th Scientific Day of ITC.
114. Din, S., & Phauk, S. (2023). Anomaly detection of time series data based on deep learning for feature learning. The 12th Scientific Day of ITC.
115. Eng, K., Phauk, S., Has, S., & Din, S. (2023). The study of Cambodia's commodity price flow trade: The cereal price prediction for anticipated price fluctuation by using the ARIMA model. The 12th Scientific Day of ITC.
116. Leng, S. H., Phauk, S., & Has, S. (2023). An empirical investigation of gold price prediction using LSTM model. The 12th Scientific Day of ITC.
117. Oeun, S., Meng, S., Nhim, C. S., Hel, C., Chhorn, S., Tep, S., & Ket, P. (2023). Development of lab-scale composter for mushroom substrate residual. LMS 2023.
118. Sophanarith, B., Bunthern, K., & Vai, V. (2023). Optimal placement of electric vehicle charging stations using mixed-integer linear programming: A case study in Cambodia. LMS 2023.
119. Chhorn, S., Tep, S., Hel, C., & Pec, R. (2022). Development of ESP32-based smart greenhouse controller. IEEE IoT World Forum.
120. Oum, S., Srang, S., & Yonrith, P. (2022). Integration of RRT\* path planning with trajectory tracking for wheeled mobile robot. 2022 Annual Conference on Electronics, Information and Systems, Japan.
121. Huon, S., & Valy, D. (2022). Handwritten Khmer digit recognition using artificial neural network. The 11th Scientific Day of ITC, Cambodia.
122. Born, S., Valy, D., & Kong, P. (2022). Encoder-decoder language model for Khmer handwritten text recognition on historical documents (Sleuk-Rith). The 11th Scientific Day of ITC, Cambodia.
123. Chheang, V. R., Tith, D., & Valy, D. (2022). Distributed authentication infrastructure using public key infrastructure and blockchain. The 11th Scientific Day of ITC, Cambodia.
124. Oum, S., Srang, S., & Yonrith, P. (2022). Integration of RRT\* path planning with trajectory tracking for wheeled mobile robot. The 11th Scientific Day of ITC, Cambodia.
125. Gnhiok, P., Srang, S., & Yonrith, P. (2022). PI controller for velocity controller design based on lumped parameter estimation of a low-cost PMDC motor. The 11th Scientific Day of ITC, Cambodia.

126. Samrit, C., Srang, S., & Yonrith, P. (2022). Design structure for plug and play wheel mobile robot. The 11th Scientific Day of ITC, Cambodia.
127. Yi, V., Srang, S., & Keo, C. (2022). Roll and pitch angle estimation by using unscented Kalman filter. The 11th Scientific Day of ITC, Cambodia.
128. Seng, R., Srang, S., & Keo, C. (2022). Flight transition state machine design for vertical takeoff landing for fixed-wing unmanned aerial vehicle. The 11th Scientific Day of ITC, Cambodia.
129. Oeun, S., Meng, S., Nhim, C. S., Chhorn, S., Tep, S., Hel, C., & Ket, P. (2022). The prototype of smart compost bin (S-Mush Bin). The 11th Scientific Day of ITC, Cambodia.
130. Ros, S., & Valy, D. (2022). Face mask recognition using ResNet and DenseNet. The 11th Scientific Day of ITC, Cambodia.
131. Sea, H., Valy, D., & Kong, P. (2022). Insects and abnormalities detection using convolutional neural network. The 11th Scientific Day of ITC, Cambodia.
132. Than, S., Valy, D., & Kong, P. (2022). Crop disease data & detection using convolutional neural network. The 11th Scientific Day of ITC, Cambodia.
133. Ny, S., Valy, D., & Kong, P. (2022). Lock and unlock door with face detection using OpenCV, Python, and Arduino board. The 11th Scientific Day of ITC, Cambodia.
134. Un, L., & Valy, D. (2022). Isolated Khmer character recognition. The 11th Scientific Day of ITC, Cambodia.
135. Koun, R., Ly, P., Vong, T., Bun, S., Tim, H., & Keo, C. (2022). Concept study of dual axes camera tracker and rocket detection by using color-based detection. The 11th Scientific Day of ITC, Cambodia.
136. Chhorn, S., Tep, S., Hel, C., & Pec, R. (2022). Development of ESP32-based smart greenhouse controller. IEEE IoT World Forum.
137. Oum, S., Srang, S., & Yonrith, P. (2022). Integration of RRT\* path planning with trajectory tracking for wheeled mobile robot. 2022 Annual Conference on Electronics, Information and Systems, Japan.
138. Huon, S., & Valy, D. (2022). Handwritten Khmer digit recognition using artificial neural network. The 11th Scientific Day of ITC, Cambodia.
139. Born, S., Valy, D., & Kong, P. (2022). Encoder-decoder language model for Khmer handwritten text recognition on historical documents (Sleuk-Rith). The 11th Scientific Day of ITC, Cambodia.
140. Chheang, V. R., Tith, D., & Valy, D. (2022). Distributed authentication infrastructure using public key infrastructure and blockchain. The 11th Scientific Day of ITC, Cambodia.
141. Oum, S., Srang, S., & Yonrith, P. (2022). Integration of RRT\* path planning with trajectory tracking for wheeled mobile robot. The 11th Scientific Day of ITC, Cambodia.
142. Gnhiok, P., Srang, S., & Yonrith, P. (2022). PI controller for velocity controller design based on lumped parameter estimation of a low-cost PMDC motor. The 11th Scientific Day of ITC, Cambodia.
143. Samrit, C., Srang, S., & Yonrith, P. (2022). Design structure for plug and play wheel mobile robot. The 11th Scientific Day of ITC, Cambodia.
144. Yi, V., Srang, S., & Keo, C. (2022). Roll and pitch angle estimation by using unscented Kalman filter. The 11th Scientific Day of ITC, Cambodia.
145. Seng, R., Srang, S., & Keo, C. (2022). Flight transition state machine design for vertical takeoff landing for fixed-wing unmanned aerial vehicle. The 11th Scientific Day of ITC, Cambodia.
146. Oeun, S., Meng, S., Nhim, C. S., Chhorn, S., Tep, S., Hel, C., & Ket, P. (2022). The prototype of smart compost bin (S-Mush Bin). The 11th Scientific Day of ITC, Cambodia.
147. Ros, S., & Valy, D. (2022). Face mask recognition using ResNet and DenseNet. The 11th Scientific Day of ITC, Cambodia.
148. Sea, H., Valy, D., & Kong, P. (2022). Insects and abnormalities detection using convolutional neural network. The 11th Scientific Day of ITC, Cambodia.
149. Chin, C. D., Hel, C., & Pec, R. (2021). Initiation of the creation of Fab Lab for advanced studies: Digital solutions focusing on traditional agriculture in the context of Cambodia. 2021 3rd National Research Forum.

#### **Annex 44. List of publication for the last 5 years from MSS Research Unit.**

##### **List of Index publications from 2021**

1. PLACK Sokhit; PHUN Vengkheang(2026). Assessing the impact of road traffic composition on pedestrian exposure to air pollution in urban area: Evidence from Phnom Penh Streets, Cambodia. *Journal of the Eastern Asia Society for Transportation Studies*, 16(), . DOI:
2. PLACK Sokhit; PHUN Vengkheang(2026). Weighting Approach for Assessing Walkability Index of Urban Streets: Case Study of Phnom Penh, Cambodia. *Journal of the Eastern Asia Society for Transportation Studies*, 16(), . DOI:
3. Leangheng Chea, Piseth Doung, Sovan Dimanche, Sutat Leelataviwat(2025). Evaluation of bond strength and failure modes of post-installed bundled reinforcing bars embedded in concrete structure. *Construction and Building Materials*, 500(144232), . DOI: <https://doi.org/10.1016/j.conbuildmat.2025.144232>
4. Leangheng Chea, Piseth Doung, Sutat Leelataviwat(2025). Energy-based plastic design of steel moment resisting frames considering cumulative damage. *Journal of Building Engineering*, (113831), . DOI: <https://doi.org/10.1016/j.jobe.2025.113831>
5. Leangheng Chea, Piseth Doung, Sutat Leelataviwat(2025). Energy Demand and Damage Assessment of a Multi-Story Frame Based on Static Pushover Analysis. *Lecture Notes in Civil Engineering*, 692(), . DOI: . [https://doi.org/10.1007/978-3-031-97129-7\\_24](https://doi.org/10.1007/978-3-031-97129-7_24)
6. "Keth, K., Ben Rajeb, S., & Han, V. (2025). Identification of Key Barriers to BIM Adoption for the Construction Sector: Specific to Asia. *Lecture Notes in Networks and Systems* , 1443(), . DOI: [https://doi.org/10.1007/978-981-96-6935-6\\_30](https://doi.org/10.1007/978-981-96-6935-6_30) "
7. PHUN Vengkheang(2025). Exploring Factors Affecting Passengers' Willingness to Relocate Intercity Bus Terminals in Phnom Penh, Cambodia. *Journal of the Eastern Asia Society for Transportation Studies*, 16(), . DOI: <https://doi.org/10.11175/easts.16.PP4008>
8. SRORN Piseth; PHUN Vengkheang; SAUM Narith; KOV Monyrath(2025). Study on Public Bus Ridership Prediction using Machine Learning: A Case Study of Public Bus in Phnom Penh City. *Journal of the Eastern Asia Society for Transportation Studies*, 16(), . DOI: <https://doi.org/10.11175/easts.16.PP3886>
9. Ohn Zin Lin, Libor Stepanec, Eftichios Koutroulis, Dagmar Juchelkova, Hnin Yee Aye, Marlon de Luna Era, PHUN Vengkheang (2025). Barriers to electric vehicle adoption in ASEAN emergin economies: comparative analysis of Cambodia, Myanmar, and the Philippines. *Discover Sustainability*,. *Discover Sustainability*, 6(725), . DOI: <https://doi.org/10.1007/s43621-025-01637-4>
10. YANG Panha(2025). Illegal Parking Behavior at Pub-Street and Night Market Area, Siem Reap. *Journal of the Eastern Asia Society for Transportation Studies*, 16(), . DOI:
11. Taing, K.; Reiter, S.; Han, V.; Leclercq, P. (2025). Bioclimatic Design Guidelines for Design Decision Support to Enhance Residential Building Thermal Performance in Tropical Regions, *Sustainability*. <https://doi.org/10.3390/su17041591>
12. Long, M., Han, V., Leclercq, P., & Reiter, S. (2024). Integration of Affordable Housing and Green Residential Building Design in the Construction Sector in Cambodia. In *WIT Transactions on Ecology and the Environment*. Volume 262 (pp. 215-227). doi:10.2495/sdp240181
13. Pisey Keo, Thaileng Oeng, Mohammed Hjiatj. (2024) Mixed-formulation with non-penetration constraint for planar composite beams in partial interaction. *Journal of Computational Mechanics*. <https://doi.org/10.1007/s00466-024-02476-2> (IF = 4.1)
14. Sreng, L., Yos, P., Seang, S. and A.A, Rashid (2024) Effect of pottery clay on mechanical and impact absorption properties of natural rubber floor mat. *J Rubber Res*. <https://doi.org/10.1007/s42464-024-00264-4>
15. Chea, L., Doung, P., Leelataviwat, S. (2023) Relation Between Input Energy and Equivalent Monotonic Response Curve, *IWEBSE 2023, Lecture Notes in Civil Engineering*, vol. 236. Springer Nature. [https://doi.org/10.1007/978-3-031-36562-1\\_7](https://doi.org/10.1007/978-3-031-36562-1_7)
16. Lin, C., Chhin, R., Han, V., Doung, P. (2023) Determination of Basic Wind Speed for the Design of Buildings in Cambodia, *IOP Conference Series: Earth and Environmental Science*, Vol. 1205 (1), 012044. <https://doi.org/10.1088/1755-1315/1205/1/012044>

17. Taing, K., Andre, P., & Leclercq, P. (2023). Analysis of Thermal Performance of Naturally Ventilated Residential Building in Tropical Climate: Case Study of Phnom Penh, Cambodia. IOP Conference Series: Earth and Environmental Science, 1199(1), 012038. <https://doi.org/10.1088/1755-1315/1199/1/012038>
18. Keth, K., Ben Rajeb, S., & Han, V. (2023). Identification of Workflow in Construction Projects in Cambodia: With and Without Building Information Modeling/ Models/Management Approaches. International journal on advances in intelligent systems, 16(1942-2679), 3-4, 74-88.
19. Kan, K., & François, B. (2023). Triaxial tension and compression tests on saturated lime-treated plastic clay upon consolidated undrained conditions. Journal of Rock Mechanics and Geotechnical Engineering. <https://doi.org/10.1016/j.jrmge.2023.03.017> (IF = 5.915)
20. Mao, P., Hashikawa, H., Sasaoka, T., Shimada, H., Wan, Z., Hamanaka, A., Oya, J. (2022) Numerical Investigation of Roof Stability in Longwall Face Developed in Shallow Depth under Weak Geological Conditions. Journal of Sustainability. 14(3). <https://doi.org/10.3390/su14031036> (IF = 3.889)
21. Bun, P., Cyr, M., Laniesse, P., Bun, K. N., Idir, R. (2022) Concrete made of 100% recycled materials - Feasibility study. 180 (2022). 106199. <https://doi.org/10.1016/j.resconrec.2022.106199> (IF = 13.716)
22. Mom, A., Hoeun, S., Bernard, F., Kamali-Bernard, S., Han, V. (2022) The Effect of Thermal Contact Conductance (TCC) between Aggregate Inclusion and Matrix on Thermal Conductivity of Cement-based Material. International Journal of Integrated Engineering. 14(5). pp. 99-106.
23. Chea, C., Ket, P., Taing, L., Kong, S., Um, D., Taing, C., Or, C., Aun, S. and Hang, L. (2022) Life-Cycle Impact Assessment of Air Emissions from a Cement Production Plant in Cambodia. *Open Journal of Air Pollution*, 11, 85-99. doi: 10.4236/ojap.2022.114007. (IF = 0.79)
24. Lorn, S., Ket, P., Or, C., Kong, S., Um, D., Aun, S., Taing, C., Hang, L. (2022) Health Impact Assessment from Rice Straw Production in Cambodia. *Appl. Sci*, 12, 10276. <https://doi.org/10.3390/app122010276> (IF = 2.838)
25. Leelataviwat, S., Doung, P., Naiyana, N. (2021) A review on performance-based plastic design method: concept and recent developments. 155. [https://doi.org/10.1007/978-3-030-73932-4\\_8](https://doi.org/10.1007/978-3-030-73932-4_8) (Book chapter)
26. Piseth, D., Sutath, L., Eiichi, S. (2021) Tensile strength and failure mechanism of internal diaphragms in wide flange beam-to-box column connections with concrete filling. Elsevier, <https://doi.org/10.1016/j.jobbe.2020.102037> (IF: 5.138)

#### List of Non-index publications from 2021

1. PHINY Lihong; PHUN Vengkheang, SAUM Narith; PLACK Sokhit(2025). Assessing the impact of Motorcycle Emissions on Urban Air Quality: A Case Study at the Institute of Technology of Cambodia. *Techno-Science Research Journal*, (), . Link:
2. ROS Khemataavid; PHUN Vengkheang; YANG Panha (2025). The Negative Experiences of Low-Income Citizens Commute and Their Intentions Toward Public Bus in Phnom Penh. *Techno-Science Research Journal*, 13(3), 80-91. Link:
3. SENG Hongheng; PHUN Vengkheang; YANG Panha; SAUM Narith(2025). Reducing traffic congestion during flyover construction: A case study of flyover construction at the intersection 2004, Phnom Penh, Cambodia. *Techno-Science Research Journal*, 13(1), 22-33. Link:
4. SUON Kosal; PHUN Vengkheang; SAUM Narith(2025). Examining Passenger Loyalty in Phnom Penh Public Bus System: A Structural Equation Modelling Approach. *Techno-Science Research Journal*, 13(2), 50-59. Link:
5. AN Oudom; YEN Yat; PHUN Vengkheang(2025). Using Distance Measures to Assess Accessibility to Urban Services from Public City Bus Stops in Phnom Penh. *Techno-Science Research Journal*, (), . Link:
6. R. Thai, P. Doung. (2024). An Investigation of External Pressure Coefficient for Low-Rise Building: A Comparison between CFD and ASCE7-22 Models for Cambodia Wind, *Techno-Science Research Journal* 12 (Special Issue), <https://techno-srj.itc.edu.kh/>
7. Manuth Ny, Muoy Yi Heng, Phanny Yos, Tithya Keo, Than Heng, Vitharong Chan. (2024). Characterization of Plaster from Sambor Prei Kuk Temples, Kompong Thom, Cambodia, *Techno-Science Research Journal* 12 (Special Issue), <https://techno-srj.itc.edu.kh/>
8. David Tung, Keangse Pouy, Sambath Ky. (2024). Numerical Analysis of Bearing Capacity of Defected Bored Piles, *Techno-Science Research Journal* 12 (Special Issue), <https://techno-srj.itc.edu.kh/>
9. Mengsean Heng, Muoy Yi Heng, Phanny Yos, Tithya Keo, Than Heng, Vitharong Chan. (2024). Laterization Origin of Heritage Rampart of Sambor Prei Kuk Area, Kompong Thom Province, Cambodia, *Techno-Science Research Journal* 12 (Special Issue), <https://techno-srj.itc.edu.kh/>

10. Lymeng Ty, Narith Prok, Sovann Sathya Rath, Sovanvichet Lim, Wee Keong Ong. (2024). Experimental and Numerical Study of Tyfo® FibrAnchors Inserting to Concrete Cylinder Confined by Glass Fiber Reinforcing Polymer, *Techno-Science Research Journal* 12 (Special Issue), <https://techno-srj.itc.edu.kh/>
11. Mengla An, Narith Prok, Sovann Sathya Rath, Sovanvichet Lim, Wee Keong Ong. (2024). Experimental and Numerical Study of Tyfo® FibrAnchors Embedded in Low Compressive Strength Concrete Cylinder, *Techno-Science Research Journal* 12 (Special Issue), <https://techno-srj.itc.edu.kh/>
12. Ya Phall, Mouy Yi Heng, Phanny Yos, Than Heng, Vitharong Chan. (2024), Mineral and Chemical Characteristics of Ancient brick of Sambor Prei Kuk Temple, Kompong Thom, Cambodia, *Techno-Science Research Journal* 12 (Special Issue), <https://techno-srj.itc.edu.kh/>
13. Chann, S., Hin, R., Sangleboeuf, J.-C., (2024) Experimental study on the improvement of bolted connection of glass structure by using ion-exchange. *Techno Science Research Journal*. 12 (1)
14. Doung, P., Lin, C., Vong, S., Sion, R., Chhin, R., Han, V. (2023) Basic Wind Speed Prediction for the Design of Building in Siem Reap, *Cambodian Journal of STEM and Education Research*, 1(1). (in Khmer)
15. Seang, S., Kan, K., & Okamoto, M. (2022). Feasibility Study of Using Recycled Waste Plastic in Bituminous Concrete Application. *Techno Science Research Journal*. 10(2).
16. Oeung, K., Doung, P., Leelataviwat, S., Han, V. (2022) Analytical Assessment of Earthquake Energy Demand in Single Degree of Freedom Systems, *Techno Science Research Journal*. 10(1).
17. Doung, P., Leelataviwat, S. (2022) Direct Seismic Design Methods for Buckling-Restrained Knee-Braced Frames with Single Plate Shear Connections. *Techno Science Research Journal*. 10(1).
18. Sreng, L., Azura, A. R., Yos, P. (2021) Effects of Cambodian Clay on the Physical and Mechanical Properties of Natural Rubber Latex Foams. *Techno Science Research Journal*, In Press

#### List of Conferences from 2021

1. S. Chim\*, P. Doung. (2025).GeoE2025&EraGET2025 Conference.Analysis Assessment of Bond Resistance and Failure Modes of Post-Installed Bundled Forcing Bars,Oral(Link conference: <https://facultyggeitc.wixsite.com/faculty-of-geo-resou/copy-of-3rd-eraget-2024>).Link Proceeding:
2. S. Lun, P. Doung.(2026).GeoE2025&EraGET2025 Conference.A Case Study of Damage Identification of Steel Bridge Girder using Numerical Modal Analysis,Oral(Link conference: <https://facultyggeitc.wixsite.com/faculty-of-geo-resou/copy-of-3rd-eraget-2025>).Link Proceeding:
3. P. Doung.(2025).PIU Research Seminar.Buckling-Restrained Knee-Braced Frames for Seismic Application: Design, Performance, and Perspectives Towards Sustainable Development,Oral(Link conference: ).Link Proceeding:
4. P. Doung.(2025).The 5th International Forum of NFEES.Energy-Based Seismic Design Concept of Buckling-Restrained Knee-Braced Frames,Oral(Link conference: ).Link Proceeding:
5. PHUN Vengkheang(2025).The 16th EASTS Conference 2025.Exploring Factors Affecting Passengers' Willingness to Relocate Intercity Bus Terminals in Phnom Penh, Cambodia,Oral(Link conference: <https://east.uns.ac.id/>).Link Proceeding:
6. PLACK Sokhit; PHUN Vengkheang(2025).The 16th EASTS Conference 2025.Assessing the impact of road traffic composition on pedestrian exposure to air pollution in urban area: Evidence from Phnom Penh Streets, Cambodia,Oral(Link conference: <https://east.uns.ac.id/>).Link Proceeding:
7. PLACK Sokhit; PHUN Vengkheang(2025).The 16th EASTS Conference 2025.Weighting Approach for Assessing Walkability Index of Urban Streets: Case Study of Phnom Penh, Cambodia,Oral(Link conference: <https://east.uns.ac.id/>).Link Proceeding:
8. PHINY Lihong; PHUN Vengkheang, SAUM Narith; PLACK Sokhit(2025).The 16th EASTS Conference 2025.Factors affecting air quality at urban parking area: Case study of motorcycle emissions inside Institute of Technology of Cambodia,Oral(Link conference: <https://east.uns.ac.id/>).Link Proceeding: [https://east.info/on-line/proceedings/vol.15/pdf/F\\_PP3891.pdf](https://east.info/on-line/proceedings/vol.15/pdf/F_PP3891.pdf)
9. SRORN Piseth; PHUN Vengkheang; SAUM Narith; KOV Monyrath(2025).The 16th EASTS Conference 2025.Study on Public Bus Ridership Prediction using Machine Learning: A Case Study of Public Bus in Phnom Penh City,Oral(Link conference: <https://east.uns.ac.id/>).Link Proceeding:
10. "Narith SAUM; Sokhit PLACK; Piseth SRORN; Davy VIN; Vong Panharith EK(2025).The 16th EASTS Conference 2025.Bus Route Planning using Dijkstra Algorithm: A Case Study of the Public

- Bus System in Phnom Penh, Oral (Link conference: <https://easts.uns.ac.id/>). Link Proceeding: [https://easts.info/on-line/proceedings/vol.15/pdf/G\\_PP3861.pdf](https://easts.info/on-line/proceedings/vol.15/pdf/G_PP3861.pdf)
11. YANG Panha (2025). The 16th EASTS Conference 2025. Illegal Parking Behavior at Pub-Street and Night Market Area, Siem Reap, Poster (Link conference: <https://easts.uns.ac.id/>). Link Proceeding:
  12. Likea Heng, Soma Tey Nuon, Seka Kong, Laymey Sreng, Phanny Yos. (2025). Investigation on Mechanical Properties and Antimicrobial Activity of Natural Rubber Latex Examination Gloves Incorporated with Pomelo Peel Powder, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
  13. Kakda Yiem, Yukleav Nat, Laymey Sreng, Phanny Yos. (2025). Utilization of Fly Ash as an Eco-friendly filler in Styrene Butadiene Rubber compound for tire tread application, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
  14. Kong Sreynich, Nat Yukleav, Phanny Yos, Laymey Sreng. (2025). Investigation of Natural Oils as Processing Aids and Activators Alternative to Naphthenic Oils in Rubber Composites, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
  15. Mengly IEM, Yana Chhoeun, Bunchoeun Pich, Sirisokha Seang, Kimhouy Oy. (2025). Lithology, Geochemistry, Hydrothermal Alteration and Mineralization of Cu-Mo porphyry deposits at Canada Wall prospect, Andong Meas District, Ratanakiri Province, Cambodia. 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
  16. Chanbo Buoy, Kuchvichea Kan, Bertrand François. (2025). Resilient modulus of lime-treated materials for pavement design in the Cambodian context, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
  17. Sambath KEO, Vengkheang PHUN, Yat YEN. (2025). Deploying ANPR Technology to Detect Traffic Violation at Intersections in Phnom Penh, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
  18. Phearun MAO, Veng Kheang PHUN, Narith SAUM. (2025). Low-Cost Road Surveying: 3D Road Surface Reconstruction From 2D LiDAR Sensor and GPS, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
  19. Lihong PHINY, Veng Kheang PHUN, Narith SAUM, Sokhit PLACK. (2025). Assessing Motorcycle Emissions and Their Impact on Urban Air Quality: A Case Study at ITC, Phnom Penh, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
  20. Bopheaktra PHO, Narith SAUM, Tetsya SOK, Lyhour CHHAY. (2025). Correlation Between Dynamic Cone Penetrometer (DCP) and California Bearing Ratio (CBR) for Subgrade Soil Materials in Cambodia, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
  21. Piseth SRORN, Veng Kheang PHUN, Narith SAUM. (2025). Machine Learning-Based Prediction of Public Bus Ridership: A Case Study in Phnom Penh City, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
  22. Chy TENG, Kuchvichea KAN, Phanny YOS. (2025). Evaluation of Modified Asphalt Binders Incorporating Recycled Plastic Waste for Enhanced Pavement Performance, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
  23. Vanntheng Yoeunthy, Kuchvichea Kan, Bertrand François, Kean Thai Chhun. (2025). IMPROVING THE DURABILITY AND STRENGTH OF EXPANSIVE SOILS STABILIZED WITH EMULSION ASPHALT AND CEMENT, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
  24. Rayuth Keat, Raveth Hin, Chansopheak Seang. (2025). Design and modelling of cost-effective manufacturing of glass tempering furnace used in industrial applications, 14th Scientific Day of ITC, 5-6 June 2025, Phnom Penh.
  25. Taing, K., Reiter, S., Leclercq, P., & Han, V. (2024). Integration of BIM and BES in sustainable architecture design process: case study of a developing country, PLEA 2024 Conference, 25-28 June 2024, Wrocław, Poland. <https://hdl.handle.net/2268/324356>
  26. Taing, . (2024). Processus de conception d'un bâtiment bioclimatique dans environnement pédagogique, Conference SCAN'24, 06-09 November 2024, Tunis, Tunisia. <https://hdl.handle.net/2268/324354>
  27. Taing, K., Jeunejean, A., Han, V. (2024) VIRELI : Visualisation de processus de design à travers les ressources, les moyens de conception et les livrables, ModACT 2024 Conference, Paris, France
  28. Sreyya YIV, Srean AUN, Yukleav NAT, Chanbormey MIEN, Siekheng RAKSMEY, Sreynith KOU, Sovannleakhena HAK, Bunhav HUN. (2024) Development of Native Cassava Starch/Poly(lactic acid) for film sheet fabrication, The ITC's 13th Scientific Day, 6-7 June 2024
  29. Siekheng RAKSMEY, Srean AUN, Yukleav NAT, Bunhav HUN, Sreyya YIV, Chanbormey MIEN, Sovannleakhena HAK, Sreynit KOU. (2024) Cassava Starch Extraction for Film Fabrication, The ITC's 13th Scientific Day, 6-7 June 2024

30. Raksa Ren , Worradon Phairuang, Mitsuhiro Hata, Masami Furuuchi, Muhammed Amin, Chhaytong Meng, Chanmoly Or, Koemlang Theng, Srean Aun. (2024) Preliminary study of the diurnal and nocturnal size-segregated particulate mass concentration in atmospheric air quality, The ITC's 13th Scientific Day, 6-7 June 2024
31. Chhaytong MENG, Srean AUN, Worradon Phairuang, Mitsuhiro Hata, Masami Furuuchi, Muhammed Amin, Raksa REN, Chanmoly OR, Koemlang THENG. (2024) Difference of Particulate Matter in Ambient Environment during Daytime and Nighttime in Phnom Penh City, The ITC's 13th Scientific Day, 6-7 June 2024
32. Chanseyha But, Kuchvichea Kan, Bertrand François. (2024) Various Pavement Management Systems (PMS), already applied or to be applied, for road management in Cambodia, The ITC's 13th Scientific Day, Phnom Penh, 6-7 June 2024
33. But, C., **Doung, P.** (2023) Updating Basic Wind Speed for Wind Load Design in Sihanoukville, International Conference on Earth Resources and Geo-Environmental Technology 2023, 23-25 September 2023, Phnom Penh, Cambodia
34. Thai, R., **Doung, P.** (2023) An Investigation of External Pressure Coefficient for Low-Rise Building: A Comparison between CFD and ASCE7-22 Models for Cambodia Wind, International Conference on Earth Resources and Geo-Environmental Technology 2023, 23-25 September 2023, Phnom Penh, Cambodia
35. Vong, S., Chin, R., **Doung, P.** (2023) Evaluation of Gust Loading Effects on Tall RC Building in Cambodia: A Comparison between International Load Standards. Extended Abstract of The ITC's 12th Scientific day, 8-9 June 2023, Cambodia
36. Thai, R., Chhin, R., Han, V., **Doung, P.** (2023) A comparative evaluation of directionality factor between international load codes for low-rise steel building and their conformity to Cambodia wind. Extended Abstract of The ITC's 12th Scientific day, 8-9 June 2023, Cambodia
37. Sovann, D., Heng, S., **Doung, P.** (2023) Evaluation of strength and failure of post-installed bundled rebar in concrete using finite element analysis. Extended Abstract of The ITC's 12th Scientific day, 8-9 June 2023, Cambodia
38. Mengla A., Narith P., Sovann Sathya R., Sovanvichet L., Wee Keong O. (2023) Experimental and Numerical Study of Tyfo(R)FibrAnchors Embedded in Low Compressive Strength Concrete Cylinder. The 14th AUN/SEED-NET Regional Conference on Geological and Geo-Resources Engineering, Phnom Penh, Cambodia.
39. Lymeng T., Narith P., Sovann Sathya R., Sovanvichet L., Wee Keong O. (2023) Experimental and Numerical Study of Tyfo(R)FibrAnchors Inserting to Concrete Cylinder Confined by Glass Fiber Reinforcing Polymer. The 14th AUN/SEED-NET Regional Conference on Geological and Geo-Resources Engineering, Phnom Penh, Cambodia.
40. S. Chann, R. Hin, J. C. Sangleboeuf, 2023, Experimental study on the improvement of bolted connection of glass structure by using ion-exchange. The 2nd International Conference on Earth Resources and Geo-Environment Technology 2023 (EraGET2023), Phnom Penh, Cambodia
41. Ngoun, P., **Srean, A.**, Muhammad A., Hang, L., Hata, M., Taing, C., Kong, S., Or, C., Um, D., Furuuchi, M. (2023). "Monitoring Particulate Matters and Total Suspended Particles Along the Roadside and Public Area in Phnom Penh" *2nd ASEAN International Conference on Energy and Environment*. [doi:10.1088/1755-1315/1199/1/012020](https://doi.org/10.1088/1755-1315/1199/1/012020)
42. Chy, S., **Srean, A.**, Hang, L., Hata, M., Mitsuhiro, H., Or, C., Kong, S., Taing, C., Um, D., Furuuchi, M. (2023) "Determination of Particulate Matters and Total Suspended Particles emitted from Incense Burning" *2nd ASEAN International Conference on Energy and Environment*. [doi:10.1088/1755-1315/1199/1/012019](https://doi.org/10.1088/1755-1315/1199/1/012019)
43. Phairuang, W., Hata, M., Takao, M., Taing, C., Ho, S., **Aun, S.**, ... & Furuuchi, M. (2023, July). Ten Years Behavior of Carbonaceous Ultrafine Particulate Matter (PM<sub>0.1</sub>) in Phnom Penh, Cambodia. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1199, No. 1, p. 012024). IOP Publishing
44. Taing, K., Leclercq, P., Han, V. (2023) Visualisation d'une design timeline et des outils mobilisés en conception architecturale bioclimatique, ModACT Conference, Paris, France
45. Taing, K., Han, V., Leclercq, P. (2023) BIM Model and BES Model Approach in Designing a Bioclimatic Building, The 12<sup>th</sup> Scientific Day 8-9 June 2023, Phnom Penh, Cambodia
46. Keth, K., Han, V., Rajeb, B-S. (2023) Guideline/Protocols for Collaborative Design and Build Process in Cambodia, ITC's 12<sup>th</sup> Scientific day, 8-9 June 2023, Cambodia

47. Long, M., Han, V., Leclercq, P., Reiter, S. (2023) Sustainable Building Design Strategy from Life Cycle Thinking Perspective Case Study: A Townhouse in Phnom Penh, Cambodia, ITC's 12<sup>th</sup> Scientific day, 8-9 June 2023, Cambodia
48. Raksa, S., S, Aun., Worrador, P., Mitsuhiro, H., Leakhena, H., Muhammad, A., Chanmoly, O., Masami, F. (2023) Seasonal Variation of Carbon Composition in Total Suspended Particles in Phnom Penh, Cambodia. Extended Abstract of The ITC's 12<sup>th</sup> Scientific day, 8-9 June 2023.
49. Muhammad, A., S, Aun., Leakhena, H., Chanmoly, O., Mitsuhiro, H., Masami, F. (2023) Preliminary assessment of personal exposure to ultrafine particle (UFP) in Phnom Penh, Cambodia. Extended Abstract of The ITC's 12<sup>th</sup> Scientific day, 8-9 June 2023.
50. E, Torabi., S, Aun., M, Hata., M, Amin., Leakhena, H., M, Furruchi. (2023) Development of a Small Nano-Particle Sensor Using Light Scattering and its Application to On-line Ambient Monitoring. Extended Abstract of The ITC's 12<sup>th</sup> Scientific day, 8-9 June 2023.
51. Keth, K., Ben Rajeb, S., Han, V. (2023) Collaborative Works in Construction Project in Cambodia: Toward a Workflow Scenario Identification. COLLA 2023: The Thirteenth International Conference on Advanced Collaborative Networks, Systems and Applications 13-17 March, 2023 - Barcelona, Spain.
52. Rorn, K., Seang, S., Kret, K., Oy, K. and Ammuguan, J. (2023) Lithology, Alteration Minerals, and Ore Mineralization in Memot, Tbong Khmum Province, Cambodia. Proceedings of the ITC's 12th Scientific Day, 8-9 June 2023
53. Por, V., Seang, S., Kret, K., and Oy, K. (2023) Lithology, Ore mineralization, and Hydrothermal Alteration of Canada Wall Porphyry Cu-Mo-Au at Andongmeas, Ratanakiri, Cambodia. Proceedings of the ITC's 12th Scientific Day, 8-9 June 2023
54. Rothana Kheng, Sirisokha Seang, Kotaro Yonezu, Kimhouy Oy, Kakda Kret, Koichiro Watanabe, Seangleng Hoeu, Panhavong Ly, Bunna Hang (2023) Hydrothermal Alteration, Mineralization and Geochemistry of Igneous rocks of Area-5 in Koh Sla, Kampot province, Southwestern Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan.
55. Kouleam, S., Prok, N., Rath, S. S. (2022) Experimental Study on Performance of Fiber Anchor Under Axial Tension, NPIC Conference Proceeding. 12<sup>th</sup> December 2022, Cambodia
56. Chan, R., Prok, N., Rath, S. S. (2022) Experimental Study of the Effectiveness of Anchor Fibers Inserting into Concrete Cylinder Confined by Glass Fiber Reinforcing Polymer, NPIC Conference Proceeding. 12<sup>th</sup> December 2022, Cambodia
57. Sreng, L., Seang, S., Azura, A.R., Yos, P. (2022) Characterization of Cambodian natural rubber/common clay composites for shock absorption applications: Primary results. Materials Today: Proceedings. 66(5). pp. 3112-3115, <https://doi.org/10.1016/j.matpr.2022.08.013>.
58. Taing, K., Leclercq, P. (2022) Adoption contextuelle des pratiques pédagogiques: entre écosystèmes physique et logiciel, le cas de l'architecture bioclimatique en Asie du sud-est. SHS Web of Conferences. 147(2022). <https://doi.org/10.1051/shsconf/202214707002> (open access)
59. Doung, P., Leelataviwat, S., Chea, L., Sorn, C. (2022) Experimental Assessment of Strength and Failure Modes of Post-Installed Bundled Rebar in Concrete. Second International Conference on Construction Materials and Structures (ICCMS-2022). 13-20 December 2022, National Institute of Technology Calicut (NITC), India (online)
60. Ly, P., Seang, S., Kret, K., Oy, K., Yonezu, K., Watanabe, K., Sreu, T. (2022) Lithology, hydrothermal alteration, and ore characteristics of Area-1 in Koh Sla, Chhouk district, Kampot Province, southern Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan
61. Chheuy, P., Kret, K., Seang, S., Or, C., Kong, S., Kry, R., Oy, K., Chan, C., Sreu, T., Hoeun, S., Hoeun, S., Chhun, C., Neak, K. (2022) Hydrothermal Alteration Mineral Mapping by Integrating of ASTER and Landsat-8: A case study in Phnom Peam Louk, Kompong Chhang Province, Southwest Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022
62. Neak, K., Kret, K., Sreu, T., Or, C., Seang, S. (2022) Hydrothermal Alteration Mineral Mapping by Integrating of ASTER and Landsat-8: A case study in Phnom Peam Louk, Kompong Chhang Province, Southwest Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022
63. Boeurn, C., Seang, S., Kret, K., Yonezu, K., Watanabe, Z., Zaw, K. (2022) Geology and Hydrothermal Alteration of Skarn Deposit in Area 4, Phnom So Ngam Tenement, Chhouk District, Kampot Province, Cambodia. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022



64. Kim, C., Kret, K., Seang, S., Kong, K., Or, C., Oy, K., Ammugauan, J., Heoun, S., Chhun, C., and Neak, K. (2022) Lithological Analysis of Koh Nheak, Mondoukiri Province Using Landsat-8 OLI and ASTER. Proceedings of the International Symposium on Earth Science and Technology, Japan 2022
65. Seang, S., Kan K., & Okamoto, M. (2022). Feasibility Study of Using Recycled Waste Plastic in Bituminous Concrete. Proceedings of Conference on Business, Social Sciences and Technology (CoNeScINTech), 2(1), 59-66.
66. Lin, L., Chhin, R., Han, V., Doung, P. (2022) Prediction of Basic Wind Speed for Battambang Province. Conference on Business, Proceedings of Social Sciences and Technology (CoNeScINTech). 2(1), pp. 67-72. ISSN 2808-5485
67. Lin, L., Chhin, R., Han, V., Doung, P. (2022) Determination of Basic Wind Speed for the Design of Buildings in Cambodia. The 4th International Symposium on Civil and Environmental Engineering (ISCEE 2022). Universiti Tun Hussein Onn Malaysia, 3-4 October 2022. (online)
68. Lin, L., Chhin, R., Han, V., Doung, P. (2022) Beginning Step of the Development of Basic Wind Speed for Structural Design in Cambodia. AUN/SEED-NET Joint Graduate Research Seminar in Civil Engineering. Institute of Technology of Cambodia, 21 December 2022
69. Keth, K. (2022) Understanding the Collaborative Works in Construction Projects in Phnom Penh, Cambodia. AUN/SEED-NET Joint Graduate Research Seminar in Civil Engineering. Institute of Technology of Cambodia, 21 December 2022
70. Keth, K., Ben Rajeb, S., Han, V. (2022) Multidisciplinary Collaboration in Construction projects in the Cambodian Context. Séminaire inaugural de l'école doctorale thématique (Architecture, Urbanisme, Ingénierie Architecturale et Urbaine – EDT 62, Brussels, 4 March 2022
71. Long, M., Leclercq, P., Han, V., Reiter, S. (2022) Life Cycle Assessment Approach for the Future Green Affordable Housing in Phnom Penh, Cambodia. AUN/SEED-NET Joint Graduate Research Seminar in Civil Engineering. Institute of Technology of Cambodia, 21 December 2022
72. Long, M., Leclercq, P., Han, V., Reiter, S. (2022) Green Building Design Strategy for a House in Phnom Penh from Life Cycle Assessment. Young Researchers Overseas Day, 12 December 2022
73. Khim, R., Han, V., Doung, P. (2022) Performance-Based Plastic Design and Evaluation of Tall Knee-Braced Frames with Simple Connections. AUN/SEED-NET Joint Graduate Research Seminar in Civil Engineering. Institute of Technology of Cambodia, 21 December 2022
74. Vong, S., Chhin, R., Doung, P. (2022) Basic wind speed analysis and serviceability evaluation of tall reinforced concrete building subjected to wind and earthquake: a case study in Phnom Penh. NPIC Conference Proceeding. 12<sup>th</sup> December 2022, Cambodia
75. Sorn, C., Heng, S., Doung, P. (2022) Assessment of Bond Behavior of Post-Installed Bundled Reinforcement using Finite Element Method. NPIC Conference Proceeding. 12<sup>th</sup> December 2022, Cambodia
76. But, R., Heng, S., Doung, P. (2022) Bond Strength Assessment of Post-Installed Single Reinforcement using Finite Element Analysis. NPIC Conference Proceeding. 12<sup>th</sup> December 2022, Cambodia
77. Taing, K., Andre, P., Leclercq, P. (2022) Analysis of thermal performance of naturally ventilated residential building in tropical climate: case study of Phnom Penh, Cambodia, 2nd ASEAN International Conference on Energy and Environment (AICEE), Phnom Penh, Cambodia
78. Karagianni, C., Schwede, D., Taing, K., Han, V., (2022) Smart technology supporting traditional and bioclimatic building functions in reducing cooling energy demand in Cambodia, Digital Insights
79. Taing, K., (2022) Bio-climatic design as a solution for residential building thermal comfort in tropical climate, 2nd Biennial of Tropical Architecture of Reunion Island, Reunion Island
80. Hun, P., Chung, C., Doung, P. (2022) A Comprehensively Comparative Review of Wind Load Codes for the Conformity to Cambodia Wind. 4th National Research Forum. 20-21 October 2022, Phnom Penh, Cambodia
81. Lim, M., Seang, S., Kret, K., Oy, K., Ammugauan, J. (2022) Ore Mineralization, Hydrothermal Alteration of China Wall Porphyry Cu-Mo-Au at Adongmeas, Ratanakiri, Cambodia. Proceedings of the ITC's 11th Scientific Day, 5-6 May 2022
82. Boeurn, C., Seang, S., Kret, K., Oy, K., Kong, S., Kong, S. (2022) Petrography and Hydrothermal alteration of Skarn prospect in Area 4, Phnom Sro Ngam Tenement, Chhouk District, Kompot province, Cambodia. Proceedings of the ITC's 11th Scientific Day, 5-6 May 2022
83. Ly, P., Seang, S., Kret, K., Oy, K., Kong, S., Ammugauan, J., Kong, S. (2022) Hydrothermal Alteration and Ore Mineralization of Area-1 in Koh Sla, Chhouk district, Kampot Province, Southern Cambodia. Proceedings of the ITC's 11th Scientific Day, 5-6 May 2022

84. Kim, C., Kret, K., Seang, S., Kong, S., Or, C., Kry, R., Oy, R., Ammugauan, R., Keat, L., Neak, K., Chhun, C., Hoeun, S., Hoeun, S., Sreu, T. (2022) Lithological Mapping using Landsat-8 Oli and Aster Multispectral Data in Koh Nheak, Monduliri Province, Northeast Cambodia. Proceedings of the 1st International Conference on Earth Resources and Geo-Environmental Technology 2022
85. Boeun, C., Seang, S., Oy, K., Kret, K., Kong, S., Ammugauan, J. (2022) Lithology and Skarn Mineralogy in Area 4, Phnom So Ngam Tenement, Chhouk District, Kampot Province, Cambodia. Proceedings of the 1st International Conference on Earth Resources and Geo-Environmental Technology 2022
86. Sreng, L., Seang, S., Rashid, A. A., and Yos, P. (2022) Performance Study of Cambodian Natural Rubber/Clay Composites for Shock Absorption Application: Primary Results. Proceedings of the 1st International Conference on Earth Resources and Geo-Environmental Technology 2022
87. Chheuy, P., Kret, K., Seang, S., Or, C., Kong, S., Kry, R., Keat, L., Chhun, C., Hoeun, S., Sreu, T. (2022) Application of ASTER and Landsat-8 for hydrothermal alteration mineral mapping for prospective mineral deposits exploration in Kompong Chhnang, in Southwest of Cambodia Proceedings of the 1st International Conference on Earth Resources and Geo-Environmental Technology 2022
88. Yuth, Y. O., Kret, K., Seang, S., Or, C., Kong, S., Sokeang, Hoeun, S., Hoeun, S. (2022) Estimation of Land Surface Temperature Using Landsat-8 in Teh Teuk Pus Geothermal Field, Kompong Speu province, Southwest Cambodia. Proceedings of the 1st International Conference on Earth Resources and Geo-Environmental Technology 2022
89. Ly, P., Seang, S., Hlaing, K. M., Oy, K., Kret, K. (2022) Initial investigations on the alteration mineralogy and ore characteristics of Area-1 in Koh Sla, Chhouk district, Kampot province, southern Cambodia. Proceedings of the 1st International Conference on Earth Resources and Geo-Environmental Technology 2022
90. Lin, L., Chhin, R., Han, V., Doung, P. (2022) Prediction of Basic Wind Speed for Design of Building in Sihanoukville. the ITC's 11th Scientific Day, 5-6 May 2022
91. Soung, R., Doung, P. (2022) Numerical Performance Evaluation of Steel Ring Damper Under Uni-axial Cyclic Loading. Proceedings of the ITC's 11th Scientific Day, 5-6 May 2022
92. Sion, R., Chhin, R., Han, V., Doung, P. (2022) Estimating Basic Wind Speed used for Building Design in Phnom Penh. Proceedings of the ITC's 11th Scientific Day, 5-6 May 2022
93. Mut, M., Phann, P., Ung, C., Yuos, O., Sry, V. (2022). Tensile Properties of PE/rPETG blend from 3D printing. Proceedings of the ITC's 11th Scientific Day, 5-6 May 2022
94. Mai, S., Sok, S., Soun, N., Prok, N., Rath, S. S. (2022) Durability of Concrete beam Strengthened with Fibrwrap® System and of Fiber Composite Laminate. Proceedings of the ITC's 11th Scientific Day, 5-6 May 2022
95. Oeung, K., Doung, P., Leelataviwat, S., Han, V. (2022) Assessment Study of Energy Demand in Multi-Story Steel Moment Frames. The Regional Conference in Civil Engineering, 22-23 January 2022, Malaysia. (online)
96. Sreng, L., Seang, S., Azura, A. R., Yos, P. (2021) Characterization of Cambodian Natural Rubber/Common Clay Composites. Proceeding of the 14th AUN/SEED-Net Regional Conference on Materials 2021 & 4th International Postgraduate Conference on Materials
97. Seang, S., Kakda, K., Jaydee, A., Kov, R., Hang, B., Ly, S. C. S., Chan, C., Oy, K., Sitha, K. (2021) Initial Study on Lithological, Hydrothermal Alteration, and Geochemistry for Mineral Exploration in Chhouk District, Kampot Province, Southwest Cambodia. Regional Conference on Natural Disaster, Yangon University Research Center, Yangon, Myanmar
98. Kret, K., Chan, C., Seang, S., Kuoch, T., Kong, S., Kry, R., Boeut, S., Hoeun, S. (2021) Hydrothermal alteration mineral mapping by integrating ASTER and Landsat-8 OLI: A case study in Ratanakiri province, northeast Cambodia. Regional Conference on Natural Disaster, Yangon University Research Center, Yangon, Myanmar
99. Ly, S., Sirisokha, S., Oy, K., Kakda, K., Kov, R., Hang, B., Chorn, S., Jaydee, A., Kong, S., Sitha, K., Kotaro, Y., Koichiro, W., Sophea, B., Tola, S., Seangleng, H. (2021) Preliminary study on lithology, hydrothermal alteration, and soil and rock geochemistry for gold and copper at Area 6, Phnom Sro Ngam Tenement, Chhouk District, Kampot Province, Cambodia. International Symposium on Earth Science and Technology, Japan
100. Chhayo, C., Kakda, K. t., Sirisokha, S., Chanmoly, O., Sitha, K., Reaksmeay, K., Sophea, B., Kimhouy, O., Seangleng, H., Jaydee, A., Kong, S. (2021) Hydrothermal alteration mapping from ASTER and Landsat-8 in Kampot Fold Belt, southwest Cambodia. International Symposium on Earth Science and Technology, Japan

101. Leakhena, H., Phalla, T., Srean, A., Dalin, U., Taing, C. (2021) Air Emission Inventory of Factory Boiler and impact to human health. Case Study in Phnom Penh, Cambodia The 6th International Symposium on Conservation and Management of Tropical Lakes” In Conjunction with
102. Leakhena, H., Phalla, T., Srean, A., Dalin, U., Taing, C. (2021-A) Assessment of human health impact of particulate matter formation from industry textile boiler in Cambodia. 15th Regional Conference in Environmental Engineering
103. Leakhena, H., Phalla, T., Srean, A., Dalin, U., Taing, C. (2021-B) Feasibility of air quality standard compliance link with perception of people : case study Phnom Penh Cambodia. Asean young scientist conference

## Annex 45. List of publication for the last 5 years from WAE Research Unit.

### List of Index publications from 2021

1. Ly, N., Muon, R., Phol, M., Ty, B., Jouquet, P., & Ket, P.(2025). Varying Trends and Characteristics in Soil Properties in Transition Ecosystems a Case Study of the Tonle Sap Riverbank to Paddy Fields. *Asian Journal of Soil Science and Plant Nutrition*, 11(4), 425-433. DOI: <https://doi.org/10.9734/ajsspn/2025/v11i4613>"
2. Albert J., Meunier J.D., Muon R., Syaokani S., Jouquet P.(2025). Influence of Termite Diversity on Soil Properties and Silicon Dynamics. A Case Study in the Angkor Forest, Cambodia. *Journal of Soil Science and Plant Nutrition*,. *Journal of Soil Science and Plant Nutrition*, 25(), 6942–6950. DOI: <https://doi.org/10.1007/s42729-025-02573-y>"
3. Martin, A., Muon, R., Ly, N., & Jouquet, P. (2025). Examining the key roles of reforestation and termite mounds on soil properties and biodiversity in an agroforestry system in Cambodia. *Agroforestry Systems*, 99(5), 112. DOI: <https://doi.org/10.1007/s10457-025-01213-9>
4. Sreypich Sinh, Quang Van Pham, Vannak Ann , Nicolas Bottinelli, Lan Anh Thi Le and Pascal Jouquet, Ruben Puga Freitas, Anne Repellin(2025). Water Levels More than Earthworms Impact Rice Growth and Productivity: A Greenhouse Study. *Agronomy*, 15(5), 1245. DOI: <https://doi.org/10.3390/agronomy15051245>"
5. Layheang Song, Olivier Ribolzi, Laurie Boithias, Khampaseuth Xayyathip, Christian Valentin, Bounsamay Soulileuth, Henri Robain, Anneke de Rouw, Phabvilay Sounyafong, Norbert Silvera, Phimmason Sisouvanh, Jean-Louis Janeau, Inpeng Saveng, Chantha Oeurng, Alain Pierret(2025). Soil erosion control in tree plantations on steep slopes: Runoff water and sediment trapping efficiency of riparian grass buffer in mountainous humid tropics. *Ecological Engineering*, 212(), . DOI: <https://doi.org/10.1016/j.ecoleng.2025.107537>
6. Song, L., Ribolzi, O., Boithias, L., Xayyathip, K., Valentin, C., Soulileuth, B., Robain, H., de Rouw, A., Sounyafong, P., Silvera, N., Sisouvanh, P., Janeau, J. L., Saveng, I., Oeurng, C., Pierret A. (2025). Soil erosion control in tree plantations on steep slopes: Runoff water and sediment trapping efficiency of riparian grass buffer in mountainous humid tropics. *Ecological Engineering*. <https://doi.org/10.1016/j.ecoleng.2025.107537>. **(IF : 3.9)**
7. Peng, C., Moniroth, S., Khy, P., Chea, S., Thanh, C., Heng, O., Sarter, S., Cheng, S., Caruso, D.(2024). Antibiotic resistance profiles of sentinel bacteria isolated from aquaculture in Cambodia. *Journal of Water and Health*. doi: <https://doi.org/10.2166/wh.2024.101>. **(IF : 2.5)**
8. Sao, S., Praise, S., Nishiyama, M. et al. Response of bacterial communities and soil chemistry to flood durations and recovery phases. *Environ Sci Pollut Res* (2024). <https://doi.org/10.1007/s11356-024-35001-2>. **(IF : 5.8)**
9. Phung, L., Sao, S., Afriani, S., Kumar, A., Watanabe, T. ZnO Nanoparticles in Composted Sewage Sludge Enhance Soil Fertility and Rice Nutrition but Elevate As and Pb Accumulation *Journal of Environmental Chemical Engineering* <https://doi.org/10.1016/j.jece.2024.113606>. **(IF : 7.4)**
10. Chhoung, Y., Tian, Z., Ma, W., Eang, K.E., Pen, S., Chhuon, K. (2024). Modeling the Underwater Operation Robot Shape and Area of Thrust Surface in Agricultural Ponds Based on CFD Simulation. *Semarak Ilmu CFD Letters*. <https://doi.org/10.37934/cfdl.17.6.151170>. **(IF : 1.2)**
11. Phoeurn, CA., Orn, C., Tho, T., Degré, A., Ket, P. (2024). Assessing the Feasibility of Alternative Wetting and Drying (AWD) Technique for Improving Water Use Efficiency in Dry-Season Rice Production. *Paddy and Water Environment*. <https://link.springer.com/article/10.1007/s10333-024-01012-5>. **(IF : 1.9)**
12. Muon, R., Zaiss, R., Lao, C., Ann, V., & Jouquet, P. (2024). Utilization of IGN historical aerial photographs and Google earth for measuring changes in land use and evolution of termite lenticular mound abundance in paddy fields in Cambodia. *Soil Use and Management*. <https://doi.org/10.1111/SUM.13128>. **(IF : 5)**
13. Ly, S., Uk, S., Theng, V., Kaing, V., & Yoshimura, C. (2024). Integration of life cycle and habitat conditions in modeling fish biomass in the floodplain of the Lower Mekong Basin. *Ecological Modelling*. **(IF: 3.1)**
14. Sao, S., Ann, V., Nishiyama, M., Praise, S., Watanabe, T. Tracing pathways by which flood duration impacts soil bacteria through soil properties and water-extractable dissolved organic matter: A soil

column experiment *Science of The Total Environment*

<https://doi.org/10.1016/j.scitotenv.2023.166524>. (IF : 8.2)

15. Sao, S., Praise, S., Watanabe, T. Effect of flood duration on water extractable dissolved organic matter in flood plain soils: A laboratory investigation *Geoderma*  
<https://doi.org/10.1016/j.geoderma.2023.116392>. (IF : 5.6)
16. Theng V., Sith T., Uk S., Yoshimura C. (2023). Phytoplankton productivity in a tropical lake floodplain system revealed by a process-based primary production model. *Ecological Modelling*. (IF: 3.1)
17. van Emmerik TH, Schreyers LJ, Mellink YA, Sok T, Arias ME. Large variation in Mekong river plastic transport between wet and dry season. *Frontiers in Environmental Science*. 2023 May 9;11:539. (IF: 4.6)
18. Mohamed CA., An, S., Pradit S., Loh, PS., Nitiratsuwan, T., Kobkeathhawin, T., Noppradit, P., Le, TP., Oeurng, C., Sok, T., Lee, CW. (2023). Depth Profiles of Microplastic in Sediment Cores in the Mangrove Area of Kuala Gula Mangrove, Malaysia. *Journal of Marine Science and Engineering*. 2023 Jun 14;11(6):1223. (IF: 2.9)
19. Hu, J., Siriporn P., Pei SL., Zengxuan C., Chuanyi G., Thi P., Oeurng, C. et al. (2023). Storage and dynamics of soil organic carbon in allochthonous-dominated and nitrogen-limited natural and planted mangrove forests in southern Thailand. *Marine Pollution Bulletin* 200: 116064. (IF: 10.1)
20. Kaing, V., Zhongyu, G., Sok, T., Dilini, K., Florian, B., Yoshimura, C. (2023). Photodegradation of biodegradable plastics in aquatic environments: Current understanding and challenges. *Science of The Total Environment* (2023): 168539. (IF: 10.75)
21. Try, S., Takahiro, S., Sophea, RP., Sok, T., Ly, S., Oeurng, C. (2023). Assessing the impacts of climate change and dam development on potential flood hazard and damages in the Cambodian floodplain of the lower mekong basin. *Journal of Hydrology: Regional Studies* 49 (2023): 101508. (IF: 4.7)
22. Lai, C., Muon, R., Touch, V., Hin, S., Podwojewski, P., Ket, P., Jouquet, P., Degré, A., Ann. V. (2023). Impact of Biochar from Rice Husk on Nutrient Distribution and Rice Growth and Yield. A Soil Column Experiment. *Soil and plant nutrition*, 2023. (IF: 3.9)
23. Phoeurn, CA., Orn, C., Tho, T., Degré, A., Ket, P. (2023). Assessing the Feasibility of Alternative Wetting and Drying (AWD) Technique for Improving Water Use Efficiency in Dry-Season Rice Production. *Paddy and Water Environment*, submitted, 2023.
24. Tha, S., Sot, C., Phol, S., Yan, S., Lai, C., Ket, P. (2023). Estimating Irrigation requirement and scheduling for major crops: Case Study in Kampong Thom, Cambodia. *IOP Conference Series: Earth and Environmental Science*, submitted, 2023
25. Pang, B., Sou, K., Kit, K., Huor, S., Chhim, S., Khorn, S., ... & Bun, S. (2023). Performance evaluation of anaerobic baffled reactor and filter for treating medium-strength wastewater using natural sludge growth and different hydraulic retention times. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1199, No. 1, p. 012040). IOP Publishing. (IF: 2.25)
26. Bou, K., Poev, S., Chan, R., Ham, P., & Bun, S. (2023). Destabilization of Emulsion Oil Separation by using Chemical Coagulation Process: Preliminary Investigation for Effective Analysis. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1199, No. 1, p. 012041). IOP Publishing. (IF: 2.25)
27. Choun, C., Bun, S., Ham, P., & Chan, R. (2023). Removal of Turbidity, Color, and Oil using Aerated Electrocoagulation-Flotation Reactor. *AIP Proceeding*, 2785 (1), 030044.
28. Ham, P., Bun, S., Wongwailikhit, K., & Painmanakul, P. (2023). Effect of Catalyst and Irradiation Characteristics on Volatile Organic Compounds Degradation in Aqueous Phase using TiO<sub>2</sub> Photocatalyst. *AIP Proceeding*, 2785 (1), 030032. (IF: 0.41)
29. Heang, B., Bun, S., Chan, R., & Ham, P. (2023). Comparative Study of Septic Tank, Anaerobic Filter, and Anaerobic Baffled Reactor for Treating Domestic Wastewater. *AIP Proceeding*, 2785 (1), 030030. (IF: 0.41)
30. Seng, P., Bun, S., Chan, R., & Ham, P. (2023). Optimize System Configuration and Operation Condition of Anaerobic Baffled Reactor (ABR) and Anaerobic Filter (AF) for Treating Domestic Wastewater. *AIP Proceeding*, 2785 (1), 030042. (IF: 0.41)
31. Pen, B., Bun, S., Fagkaew, P., & Painmanakul, P. (2023). Effect of Solid Media Addition on Mass Transfer and Bubble Dynamics in Bubble Column Reactor. *AIP Proceeding*, 2785 (1), 060006. (IF: 0.41)
32. Theam, A., & Bun, S. (2023). Optimization of Iron Co-Presence in Airlift Reactor for Arsenic (III) Removal using Respond Surface Methodology. *AIP Proceeding*, 2785 (1), 030040. (IF: 0.41)

33. Eng, K., Chan, R., Bun, S., Chan, R., Ham, P., & Sok, T. (2023). Optimization of Nitrate Production from Aquaculture Wastewater in a High-Rate Aerobic Reactor for a Hydroponic Spinach Growth. *AIP Proceeding*, 2785 (1), 030041. **(IF: 0.41)**
34. Muon, R., Ket, P., Sebag, D., Boukbida, H.A., Podwojewski, P., Hervé, V., Ann, V., Jouquet, P., 2023. Termite constructions as patches of soil fertility in Cambodian paddy fields. *Geoderma Reg.* e00640. <https://doi.org/https://doi.org/10.1016/j.geodrs.2023.e00640> **(IF = 4.2)**
35. Muon, R., Lai, C., Hervé, V., Zaiss, R., Chassagne, F., Bureau-Point, E., Marchand, S., Audibert, M., Berger, J., Wieringa, F., Saviour'e, A., Sok, K., Meunier, J., Ann, V., Jouquet, P. (2023). Abundance, perceptions and utilizations of termite mounds in Cambodia. *Soil Use Manag* 1–13. <https://doi.org/10.1111/sum.12893> **(IF: 3.8)**
36. Jouquet, P., Muon, R., Traoré, S., Harit, A. (2023). From Thai to Zai : Insects as Example of Threatened Nature-Based Solutions for Sustainable Food Production. *Biodivers. Online J.* 3(4), 1–4. <https://doi.org/BOJ.000566>. 2023. **(IF: NA)**
37. Wai, M.P., Chem, V., Ean, K.E., Chhin, R., Siev, S., Heu, R. (2022). Accessing the Impact of Floating Houses on Water Quality in Tonle Sap Lake, Cambodia. *Sustainability*, 14, 247. <https://doi.org/10.3390/su14052747> (IF: 3.25)
38. Jouquet, P., Harit, A., Hervé, V., Moger, H., Carrijo, T., Donoso, D., Eldridge, D., Cunha, H., Choosai, C., Janeau, J.L., Maeght, J.L., Thu, T.D., Briandon, A., Skali, M.D., Thuyne, J.V., Mainga, A., Florian, Q., Issa, O., Podwojewski, P., Rajot, J.L., Tureaux, T., Smaili, L., Labiadh, M., Boukbida, H., Shanbhag, R., Muon, R., Ann, V., Cheik, S., Fall, S., Traoré, S., Dupont, S., Chouvenc, T., Mullins, A.J., Syaukani, S., Zaiss, R., Tien, T., Šobotnik, J., Auclerc, A., Qiu, R., Tang, Y., Huot, H., Dussès, D., Bottinelli, N. (2022). The impact of termites on soil sheeting properties is better explained by environmental factors than by their feeding and building strategies, *Geoderma*. *Geoderma*, 412: 115706. <https://doi.org/10.1016/j.geoderma.2022.115706> **(IF: 6.1)**
39. Chan, R., Chan, R., Sok, T., Bun, S., Kaing, V., Mong, M., Oeurng, C. (2022). Relative Distribution of Pollutants from Urban Canal and Aquaculture Farm onto Natural Wetland of Phnom Penh, Cambodia. *Pollution Research*. (IF: 0.516)
40. Sang, D., Cimetiere, N., Giraudet, S., Tan, R., Wolbert, D., & Le Cloirec, P. (2022). Online SPE-UPLC-MS/MS for herbicides and pharmaceuticals compounds' determination in water environment: A case study in France and Cambodia. *Environmental Advances*, 8, 100212. <https://doi.org/10.1016/j.envadv.2022.100212> **(Citescore 1.2)**
41. Yang, H., Siev, S., Uk, S. et al. (2022). Relationship between water levels and flood pulse induced by river–lake interaction in the Tonle Sap basin, Cambodia. *Environ Earth Sci* 81, 226. <https://doi.org/10.1007/s12665-022-10353-5> **(IF: 2.784)**
42. Sok, T., Oeurng, C., Kaing, V., Sauvage, S., Lu, x., Pérez, J. (2022). Nutrient transport and exchange between the Mekong River and Tonle Sap Lake in Cambodia, *Ecological Engineering*, Volume 176, <https://doi.org/10.1016/j.ecoleng.2021.106527> **(IF: 4.05)**
43. Try, S., Sayama, T., Oeurng, C. et al. (2022). Identification of the spatio-temporal and fluvial-pluvial sources of flood inundation in the Lower Mekong Basin. *Geosci. Lett.* 9, 5 (2022). <https://doi.org/10.1186/s40562-022-00215-0> **(IF: 3.543)**
44. Chua, S. D. X., Lu, X. X., Oeurng, C., Sok, T., and Grundy-Warr, C. (2022). Drastic decline of flood pulse in the Cambodian floodplains (Mekong River and Tonle Sap system), *Hydrol. Earth Syst. Sci.*, 26, 609–625, <https://doi.org/10.5194/hess-26-609-2022>, **(IF: 6.450)**
45. Sok, T., Ich, I., Tes, D., Chan, R., Try, S., Song, L., Ket, P., et al. (2022). Change in Hydrological Regimes and Extremes from the Impact of Climate Change in the Largest Tributary of the Tonle Sap Lake Basin. *Water*, 14(9), 1426. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/w14091426> **(IF: 3.17)**
46. Phy, S. Try, S., Sok, T., Ich, I. Chan, R., Oeurng, C., (2022). Integration of hydrological and flood inundation models for assessing flood events in the lower Prek Thnot River Basin under climate change . *Journal of Hydrologic Engineering* **(IF: 2.017)**
47. Uk, S., Yang, H., Vouchlay, T., Sok T., Siev, S., Try, S., Oeurng, C., Chihiro, Y., (2022) Dynamics of phosphorus fractions and bioavailability in a large shallow tropical lake characterized by monotonal flood pulse in Southeast Asia. *Journal of Great Lakes Research* (In Press) <https://doi.org/10.1016/j.jglr.2022.04.005> **(IF: 2.55)**

48. Orieschnig, C., Venot, J.P, Massuel, S., Eang, K., Chhuon, K., Lun, S., Siev, S., Belaud, G. (2022). A multi-method approach to flood mapping: Reconstructing inundation changes in the Cambodian upper mekong delta. *Journal of Hydrology*. <https://doi.org/10.1016/j.jhydrol.2022.127902> (IF: 5.72)
49. Sang, D., Chiemchaisri, W., Chiemchaisri, C. (2022). Purification of polluted surface water by sponge moving bed membrane bioreactor with short hydraulic retention time operation. *Water and Environment Journal*. <http://doi.org/10.1111/wej.12803> (IF: 2.07)
50. Bun, Saret, Penghour Hong, Nattawin Chawaloessphosiy, Sreynich Pang, Sreyla Vet, Phaly Ham, Rathborey Chan, and Pisut Painmanakul. (2022). Development of Integrated Electrocoagulation-Sedimentation (IECS) in Continuous Mode for Turbidity and Color Removal." *ChemEngineering* 6, no. 1: 3 (IF: 3.18)
51. Mao, Theara, Davin Sang, Rathborey Chan, and Saret Bun. (2022). Experimental and empirical investigation of commercial and local biocarriers in moving bed bioreactor for treating low-strength domestic wastewater. (IF: 0.675)
52. Eng Khun, Rathborey Chan, Saret Bun, Rathboren Chan, Phaly Ham, Ty Sok. (2022). The Optimization of Nitrate Production from Aquaculture Wastewater in a High-Rate Aerobic Reactor for a Hydroponic Spinach Growth (IF: 0.402)
53. Borin Heang, Saret Bun, Rathborey Chan, Phaly Ham. (2022). Comparative Study of Septic Tank, Anaerobic Filter, and Anaerobic Baffled Reactor for Treating Domestic Wastewater (IF: 0.403)
54. Chakriya Choun, Saret Bun, Phaly Ham, Rathborey Chan. (2022). Removal of Turbidity, Color, and Oil using Aerated Electrocoagulation-Flotation Reactor (IF: 0.404)
55. Phaya Seng, Saret Bun, Rathborey Chan, Phaly Ham. (2022). Optimize System Configuration and Operation Condition of Anaerobic Baffled Reactor (ABR) and Anaerobic Filter (AF) for Treating Domestic Wastewater (IF: 0.405)
56. Ich, I., Sok, T., Kaing, V., Try, S., Chan, R., & Oeurng, C. (2022). Climate change impact on water balance and hydrological extremes in the Lower Mekong Basin: a case study of Prek Thnot River Basin, Cambodia. *Journal of Water and Climate Change*. (IF: 2.67)
57. Ka, K., Sok, T., Lim, S., Ich, I., Chan, R., Song, L., ... & Oeurng, C. (2022). Watershed Health Assessment Using GIS and AHP Methods: Application in Stung Sen River Basin, Cambodia. *Indonesian Journal of Limnology*, 3(1), 18-33. (IF: 0.41)
58. Ann, V., A. M. Romani, A. Butturini, (2022). Estimating the hydraulic conductivity in river unconsolidated sediments. A critical analysis of several grain-size empirical approaches. *Serie Correlación Geológica*, 38 (1): 15-25. (IF: 0.50)
59. Heu, R., M.P. Wai, S. Siev, V. Chem, K. E. Eang, V. Ann, M. Ateia, C. Yoshimura, (2022). Dissolved Silicon in Lake-floodplain System: Dynamics and Role in Primary Production. *Science of The Total Environment*, 861:160696. <https://doi.org/10.1016/j.scitotenv.2022.160696> (IF: 10.753)
60. Teck, V., A. Poortinga, C. Riano, K. Dahal, R. M. B. Legaspi, V. Ann, R. Chea, (2022). Land use and land cover change implications on agriculture and natural resource management of Koah Nheak, Monduliri province, Cambodia. *Remote Sensing Applications: Society and Environment*. In Press. <https://doi.org/10.1016/j.rsase.2022.100895>. (IF: 3.371)
61. Sokles Lorn ,Pinnara Ket,Chanmoly Or ,Sela Kong,Dalin Um ,Srean Aun , (2022). Chanreaksmey Taing, Leakhena Hang .Health Impact Assessment from Rice Straw Production in Cambodia.Sci. 2022, 12(20). <https://doi.org/10.3390/app122010276>. (IF: 2.838)
62. Chanto Chea, Pinnara Ket, Long Taing, Sela Kong, Dalin Um, Chanreaksmey Taing, Chanmoly Or, Srean Aun4, Leakhena Hang. (2022). Life-Cycle Impact Assessment of Air Emissions from a Cement Production Plant in Cambodia. Vol 11(14). DOI: 10.4236/ojap.2022.114007 (IF: 0.79)
63. Chan, R., Chart, C., Wilai, C., Alongkot, B., & Phitsanu, T. (2022). Occurrence of antibiotics in typical pig farming and its wastewater treatment in Thailand. 8 21-29. <https://doi.org/10.1016/j.emcon.2021.12.003> (CiteScore: 9.7)
64. Chhin, R., Siev, S., & Yoden, S. (2021). Time-lagged correlations of pre-monsoon precipitation in the Indochina Peninsula confirmed in a large ensemble simulation dataset. *International Journal of Climatology*, 1–18. Doi: 10.1002/joc.7292. (IF:4)
65. Chan, R., Chan, R., Chiemchaisri, W., & Chiemchaisri, C. (2021). Treatment of aquaculture farm effluent containing antibiotics in high-rate membrane bioreactor. *Desalination and water treatment*, 221, 56-63. (IF:1.2)
66. Charlotte, J.H., Mauricio, E.A., Zhewen Y., Ty, S., & Michael, C. W. (2021). Plastic transport in a complex confluence of the Mekong River in Cambodia. *Environmental Research Letter*. (IF:6.7)

67. Chan, R., Chiemchaisri, C., & Chiemchaisri, W. (2021). Application of Membrane Bioreactor with Sponge Media in Aquaculture Wastewater Treatment. *Journal of Fisheries and Environment*, 45(2), 106-118. **(IF:0.42)**
68. Dai, J., Rad, S., Xu, J., Pen, S., Gan, L., Chen, X., Yu, C., & Zhang, S. (2021). Impacts of climate change versus land use change on recent Lijiang River flood regime, South China. <https://doi.org/10.24850/j-tyca-2021-03-07>. **(IF:0.29)**
69. Rajendra, K., Uk, S. Dilini, K., Siev, S., & Chihiro, Y. (2021). Impact of Water Level Fluctuation on Sediment and Phosphorous Dynamics in Tonle Sap Lake, Cambodia. *Water Air Soil Pollut* 232, 139 (2021). <https://doi.org/10.1007/s11270-021-05084-5>. **(IF:2.5)**
70. Bun, S., Sek, S., Oeurng, C., Manabu, F., Ham, P., & Pisut, P. (2021). A Survey of Household Water Use and Groundwater Quality Index Assessment in a Rural Community of Cambodia. *Sustainability* 13(18), 10071; <https://doi.org/10.3390/su131810071>. **(IF:3.2)**
71. Jain, S., Chhin, R., Ruth, M. D., Saroj K. M., & Shigeo, Y. (2021). A New Graphical Method to Diagnose the Impacts of Model Changes on Climate Sensitivity. *Journal of the Meteorological Society of Japan. Ser. II*. **(IF:2.2)**
72. Sok, T., Oeurng, C., Kaing, V., Sabine, S., Mathias, G. K., & José, M. S. P. (2021). Assessment of Suspended Sediment Load Variability in The Tonle Sap and Lower Mekong Rivers, Cambodia. *Catena*. **(IF:5.1)**
73. Wandee, S., Chan, R., Chiemchaisri, W., & Chiemchaisri, C. (2021). Alteration of antibiotic-resistant phenotypes and minimal inhibitory concentration of *Escherichia coli* in pig farming: Comparison between closed and open farming systems. *Science of The Total Environment*, 781, 146743. **(IF:7.9)**

#### **List of Non-index publications from 2021**

1. Chhenglang HENG, Makara SOY, Vincent HERBRETEAU, Vannak ANN(2025). Land Use and Land Cover Distribution across Litho-Mineral Alteration of an Irrigated Catchment of the Tonle Sap Lake, Cambodia. *Techno-Science Research Journal*, 13(3), 36-43. Link: <http://techno-srj.itc.edu.kh/>
2. Chhenglang HENG, Thibault CATRY, Renaud HOSTACHE, Christophe Révillion, Vincent HERBRETEAU, Vannak ANN(2025). Estimation of rainfall and flooding with remotely-sensed spectral indices in the Mekong Delta region. *Techno-Science Research Journal*, 13(3), 53-60. Link: <http://techno-srj.itc.edu.kh/>
3. Sithea Sath, Ratha Muon, Rainer Zaiss, Jeroen Meersmans, Vannak Ann, Pascal Jouquet(2025). Environmental Variables Determining Soil Physical Properties and Carbon Content at the Catchment Scale, Stung Chrey Bak Observatory, Cambodia. *Techno-Science Research Journal*, 13(3), 69-79. Link: 10.64702/Techno-SRJ.2025.V13.I3.09
4. Pov, K., Heng, C., Soy, M.,Herbretreau, V., Ann, V. Land Use and Land Cover Distribution across Litho-Mineral Alteration of an Irrigated Catchment of the Tonle Sap Lake, Cambodia. (2024). *Techno-Science Research Journal*.
5. Theam, A., Bun, S., Ham, P., Chan, R. Oxidative Precipitation of Arsenic (III) with Iron (II) in Synthetic Groundwater using Diffused Aerator. (2024). *Techno-Science Research Journal*
6. Ngorn, K., Bun, S., Ham, P., Chan, R. (2024). Groundwater Quality Assessment Towards Sand Filter Modification for a Rural Community of Cambodia *Techno-Science Research Journal*.
7. Chork, V., Chhuon, K., Eang, K.E., Lun, S., Doung, R., & Massuel, S. (2024). Investigating Surface Water and Groundwater Interactions Using Ground Electrical Conductivity Measurement in the Bassac River Floodplain *Techno-Science Research Journal*
8. Sath S., MuonR., Zaiss R., Meersmans J., Ann V., Jouquet P. (2024). Environmental Variables Determining Soil Physical Properties and Carbon Content at the Catchment Scale, Stung Chrey Bak Observatory, Cambodia. *Techno-Science Research Journal*.
9. Oeurng, C., Sok, T., Chan, R., Hour, H.M., Koun, P. (2023). Report on Community Fish Refuge (CFR) Pond Monitoring: Surface and Groundwater Study at Sras Ang CFR, Prey Veng Province. *Techno-Science Research Journal*. (2023).
10. Theam, A., Bun, S., Ham, P., Chan, R (2024). Oxidative Precipitation of Arsenic (III) with Iron (II) in Synthetic Groundwater using Diffused Aerator. *Techno-Science Research Journal*. (2024) [In Press]
11. Ngorn, K., Bun, S., Ham, P., Chan, R. (2024). Groundwater Quality Assessment Towards Sand Filter Modification for a Rural Community of Cambodia. *Techno-Science Research Journal*. (2024) [In Press]



12. Chork, V., Chhuon, K., Eang, K.E., Lun, S., Doung, R., & Massuel, S. (2023). Investigating Surface Water and Groundwater Interactions Using Ground Electrical Conductivity Measurement in the Bassac River Floodplain. *Techno-Science Research Journal* 11 (1), 1-6.
13. Khut, S., Heng, O., Peng, C., & Domenico, C. (2022). Preliminary Study on Physicochemical Quality and Antibiotic-Resistant *E. coli* and *Aeromonas* spp. in Aquaculture of *Pangasius* in Kampong Thom Province. *Techno-Science Research Journal* Vol 10.
14. Khen, C., Ich, I., Sok, T., Try, S., & Oeurng, C. (2022). Hydrological Components and Catchment Scale Sediment Delivery in Prek Thot River Basin, Cambodia. *Techno-Science Research Journal*.
15. Huong, O., Samrith, C., Sok, T., Ich, I., Try, S., Chan, R., & Oeurng C. (2022). Trend and Stationarity Analysis of Streamflow in Prek Thnot River Basin. *Techno-Science Research Journal*.
16. Ket, D., Sok, T., Ich, I., Chum, K., Lim, S., Chan, R., Pech, P., & Oeurng, C. (2022). Flow Alteration under Land use Impact in Sen River Basin of The Tonle Sap Lake. *Techno-Science Research Journal*.
17. Yos, C., Ich, I., Sok, T., Chan, R., Kaing, V., Khen, C., & Oeurng, C. (2022). Impact of Climate Change on Sediment and Nitrate load in Prek Thnot River basin of the Lower Mekong River. *Techno-Science Research Journal*.
18. Harn, N., Pen, S., & Heng, S. (2022). Twin Bridge Hydraulics Analysis Using HEC-RAS Model. *Techno-Science Research Journal*
19. Sang, D., Chhun, M., & LUN, S. (2022). Formulizing the design criteria for piped water supply in Cambodia: A case study in Anlong romiet Province. *Techno Science Research Journal*.
20. Khen, C., Ich, I., Sok, T., Try, S., & Oeurng, C. (2021). Hydrological Components and Catchment Scale Sediment Delivery in Prek Thnot River Basin, Cambodia. *Techno Science Journal*.
21. Heng, D., Ty, B., Hul, S. (2021). Study on Nutrients and Heavy Metals in Bottom Sediment of Tonle Sap Lake. *Techno Science Journal*.
22. Heng, S., Kheav, K., Hok, P., Chhuon, K., Ly, S., Kinouchi, T. (2021). Urban Flood Modeling in Phnom Penh Using Flo-2D: Consideration of Climate Change Effect. *Techno Science Journal*.
23. Kol, P., & Doung, R. (2021). Application of SWMM to Explore Possible Climate Change Impact on Urban Stormwater Drainage. *Techno Science Journal*.
24. Lai, C., Vorn, T., Eang, K.E., Ty, B. (2021). Evaluation of Wastewater Treatment Efficiency Utilizing Coconut Fiber as Filter Media. *Techno Science Journal*
25. Neang, P., Hul, S.H., Endo, G., Miyauchi, K. (2021). Groundwater Arsenic Contamination and Social Needs of Economical Arsenic Removal Technology in Rural Areas of Cambodian Mekong Delta. *Techno Science Journal*

#### **List of Conferences from 2021**

1. CATRY Thibault, HERBRETEAU Vincent, ANN Vannak , HOSTACHE Renaud(2025).The 2nd Regional Workshop Southeast Asia Environmental Systems (SEAES 2025).Surface Water Mapping Using RADAR Satellite Data for Flood Monitoring in Cambodia,Oral(Link conference: [https://cosav.xyz/leo/?Seaes2025\\_program](https://cosav.xyz/leo/?Seaes2025_program) ).Link Proceeding: <https://cosav.xyz/leo/?Seaes2025FinalReport>
2. CATRY Thibault, HERBRETEAU Vincent, ANN Vannak , POV Kakda, HOSTACHE Renaud(2025).Cambodia Geospatial Day 2025.Long-term flood monitoring system using Synthetic Aperture Radar (SAR) imagery in tropical climate region: Cambodia as a test case,Oral(Link conference: [khmgeoday2025.sciencesconf.org/](https://khmgeoday2025.sciencesconf.org/)).Link Proceeding: [https://khmgeoday2025.sciencesconf.org/data/Cambodia\\_GeoSpatial\\_Day\\_2025\\_Abstracts.pdf](https://khmgeoday2025.sciencesconf.org/data/Cambodia_GeoSpatial_Day_2025_Abstracts.pdf)
3. Kim Hort Ly, Khy Eam Eang, Sytharith Pen, Ratha Doung, Vuthy Chork(2025).The 14th Scientific Day of ITC.Assessment of Inundation at Prek System of Koh Thum Inducing by Bassac River and Regional Precipitation Pattern,Oral(Link conference: ).Link Proceeding:
4. Ech Chin, Khy Eam Eang, Sombath Keo, Paul Baudron(2025).The 14th Scientific Day of ITC.Hydraulic Propagation of Pesticides at the Watershed Scale ,Oral(Link conference: ).Link Proceeding: "
5. Vuthy Ruos, Khy Eam Eang, Chanvorleak Phat, Sereyvath Yoeun, Mathilde Sester, Paul Baudron(2025).The 14th Scientific Day of ITC.Pesticide Contamination in Groundwater of Agriculturally Intensive Regions of Cambodia: A Case Study of Koh Thum and Kanghot,Oral(Link conference: ).Link Proceeding:

6. Chhoeung Sivmey, Jouquet Pascal, Muon Ratha, Sinh Sreypich, Lao Chanrithy, Ly Nachy, Martin Arun, Sok Kimchhin, Bureau-Point Eve (2025). RemTech Europe 2025. Why Farmers' Soil Knowledge is Essential to the Agroecology & Soil Health, Oral (Link conference: ). Link Proceeding: "
7. Chan, S., Mao, S.V., Mol, S., Tha, S., Naeung, T., Menh, L., Heu, R. (2025). Water Quality Assessment of Groundwater in Mondolkiri Province, Cambodia: Implications for Agriculture. The 14th Scientific Day. Phnom Penh, Cambodia.
8. Chanto, M.T., Massuel, S., Hide, M., Gov, P., Sam, C., Ourn, K., Hak, S., Cheng, S., Chork, V., Peng, C., Bañuls, A.-L. (2025). Assessment of Water Quality along Bassac River and Its Tributaries in Agricultural Communities. The 14th Scientific Day. Phnom Penh, Cambodia.
9. Chea, S.N., Eng, C., Heng, M.Y., Sreng, L., Pen, C., Has, K., Hean, B., Va, P., Leng, S. (2025). Chemical Characterization of Acid Mine Drainage from Artisanal Mine Site in Chong Plash Commune, Keo Seima District, Mondolkiri Province, Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
10. Chheng, P.Y., Khen, C., Lay, L., Menghour, H., Sophearum, P., Sok, T. (2025). Review on Historical Tropical Hurricanes, Typhoons, and Cyclones Frequency, Intensity, and Trajectory. The 14th Scientific Day. Phnom Penh, Cambodia.
11. Chheng, P.Y., Theng, V., Chhoun, K., Ket, P., Sang, D., Heu, R., Menh, L.G., Sim, S. (2025). Impact of City Activities on Macroplastic Accumulation in Two Tonle Sap Lake Tributaries. The 14th Scientific Day. Phnom Penh, Cambodia.
12. China, E., Eang, K.E., Kea, S., Baudron, P. (2025). Hydraulic Propagation of Pesticides at the Watershed Scale: Tonle Sap River Case Study. The 14th Scientific Day. Phnom Penh, Cambodia.
13. Chork, V., Baudron, P., Doung, R., Lun, S., Pen, S., Eang, K., Sok, K., Massuel, S., Van Hanja, J., Balzan, M., Meerman, J., Prak, V., Chhuon, K. (2025). Dynamic Seasonal Variations in River Mixing Patterns at a Major Confluence-Diffuence Site (Chaktomuk Junction, Cambodia) Revealed by Hydrochemical Tracing. The 14th Scientific Day. Phnom Penh, Cambodia.
14. Doung, R., Baudron, P., Chork, V., Lun, S., Pen, S., Eang, K., Sok, K., Massuel, S., Van Hanja, J., Balzan, M., Meerman, J., Chhuon, K. (2025). Spatio-temporal Distribution of Electric Conductivity, Stable Isotopes of Water and Water Level along Tonle Sap River. The 14th Scientific Day. Phnom Penh, Cambodia.
15. Heng, C., Heu, R., Menh, L., Chan, S., Sim, S., Mol, S., Mao, S.V., Theng, V., Ket, P., Sang, D., Chhuon, K. (2025). Monitoring and Evaluation of Macroplastic Pollution in Siem Reap River. The 14th Scientific Day. Phnom Penh, Cambodia.
16. Hout, M.H., Hoan, K., Soy, R., Chhin, R., Sok, T., Layheang, S. (2025). Contemporary Changes in Precipitation Patterns and Extreme Rainfall Indices in Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
17. Kaing, V., Yoshimura, C. (2025). Photoinduced Reactive Intermediates Formation from Microplastics and Leachate Dissolved Organic Matter. The 14th Scientific Day. Phnom Penh, Cambodia.
18. Ket, P., Heu, R., Chhuon, K., Sang, D., Theng, V., Snekkevik, V.K., Hurley, R., Sim, S., Menh, L. (2025). Macroplastics in Rivers: Present Issues, Challenges and Solutions in Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
19. Ly, K.H., Eang, K.E., Pen, S., Doung, R., Chork, V. (2025). Assessment of Inundation at Prek System of Koh Thum Induced by Bassac River and Regional Precipitation Pattern. The 14th Scientific Day. Phnom Penh, Cambodia.
20. Menh, L., Heu, R., Ket, P., Sang, D., Theng, V., Snekkevik, V.K., Hurley, R., Chan, S., Sim, S., Heng, C., Chhuon, K. (2025). Assessing Macroplastic Pollution in Kampong Khleang River: Urban vs. Rural Pollution and Seasonal Variability. The 14th Scientific Day. Phnom Penh, Cambodia.
21. Nil, R.S., Toth, M. (2025). Investigation of Heavy Metal Adsorption Efficiency on Cambodian Soils. The 14th Scientific Day. Phnom Penh, Cambodia.
22. Pen, S., Chork, V., Lun, S., Doung, R. (2025). Daily Tidal Dynamics at Chaktomuk Confluence by a 2D Hydrodynamic Model. The 14th Scientific Day. Phnom Penh, Cambodia.
23. Pheap, P., Sang, D., Heu, R., Menh, L., Sim, S., Theng, V., Chhuon, K., Ket, P., Snekkevik, V.K., Hurley, R. (2025). Monitoring Macroplastic Accumulation in the Sangker River: Distribution Patterns and Pollution Hotspots. The 14th Scientific Day. Phnom Penh, Cambodia.
24. Phol, M., Pheun, C., Lim, V., Touch, V., Ket, P., Ma, C. (2025). Evaluating Water-Saving Irrigation Methods for Rice Cultivation: Case Study in Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.

25. Ruos, V., Eang, K.E., Phat, C., Yoeun, S., Sester, M., Baudron, P. (2025). Pesticide Contamination in Groundwater of Agriculturally Intensive Regions of Cambodia: A Case Study of Koh Thum and Kanghot. The 14th Scientific Day. Phnom Penh, Cambodia.
26. Sam, S., Theng, V., Peng, C., Doeurn, S., Heng, O., Phuong, S. (2025). Development of Coconut Filter to Remove Microplastics at Sea Salt Farm, Kampot Province, Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
27. Sambath, S., Peng, C., Phoeung, C.L., Phat, C., Chheang, C., Yamada, T., Uchii, K., Nasu, M. (2025). Characterization of Bacterial Communities in Aquatic Environments of Phnom Penh as Potential Bioaerosol Sources Using Nanopore Sequencing. The 14th Scientific Day. Phnom Penh, Cambodia.
28. Sao, S., Sambath, S., Doeurn, S., Peng, C., Ikemori, F., Hata, M., Furuuchi, M., Or, C. (2025). Variations in Particulate Matter (PM<sub>2.5</sub>) Concentration in Phnom Penh: The Role of Wind Speed and Wind Direction During Daytime and Nighttime. The 14th Scientific Day. Phnom Penh, Cambodia.
29. Sary, V., Doeurn, S., Sorn, S., Sao, S., Peng, C., Ikemori, F., Hata, M., Furuuchi, M., Or, C. (2025). Gravimetric Analysis of PM<sub>2.5</sub> Mass Concentration: Daily Behavior in Early Dry Season in Phnom Penh, Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
30. Sieng, K., Ly, V., Phat, S., Hout, M.H., Sok, T. (2025). The Dependency of the Planting Date on Rainfall in Paddy Fields in the Pursat River Basin. The 14th Scientific Day. Phnom Penh, Cambodia.
31. Sok, T., Chheng, P.Y., Huot, M.H., Ich, I., Koun, P., Chhin, R. (2025). Historical Changes in Extreme Daily Temperature Indices in the Last 3 Decades in Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
32. Soy, R., Huong, O.S., Song, L., Sok, T. (2025). Riverbank Erosion Vulnerability Index along Prek Thnot River Basin. The 14th Scientific Day. Phnom Penh, Cambodia.
33. Srong, S., Sao, S., Doeurn, S., Peng, C., Sambath, S., Amin, M., Ikemori, F., Hata, M., Furuuchi, M., Or, C. (2025). Driving Factors of Particulate Matter (PM<sub>2.5</sub> and PM<sub>10</sub>) Dynamics During Heavy Air Pollution in Phnom Penh, Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
34. Thanh, C., Sarav, B., Yoeuny, S., Khoeurn, K., Amin, M., Phat, C. (2025). Preliminary Assessment of Indoor Air Quality in Residences in Phnom Penh. The 14th Scientific Day. Phnom Penh, Cambodia.
35. Vorng, C., Doeurn, S., Sok, S., Sieng, S., Sao, S., Peng, C., Ikemori, F., Hata, M., Furuuchi, M., Or, C. (2025). Daytime and Nighttime Monitoring of Ultrafine Particulate Matter (PM<sub>0.1</sub>) During Dry Season in Phnom Penh, Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
36. You, T., Sao, S., Doeurn, S., Peng, C., Sambath, S., Ikemori, F., Hata, M., Furuuchi, M., Or, C. (2025). Variability of PM<sub>2.5</sub> Distribution in Relation to Gaseous Pollutants Concentrations in Phnom Penh, Cambodia. The 14th Scientific Day. Phnom Penh, Cambodia.
37. Yoeun, S., Ruos, V., Thanh, C., Khoeurn, K., Amin, M., Phat, C. (2025). Preliminary Assessment of Air Quality in the Workplace in Phnom Penh. The 14th Scientific Day. Phnom Penh, Cambodia.
38. Guerra, R., Lenczewski, M., Eang, K.E., Lafser, J., Tucker, K. (2025). GC-MS/MS Pesticide Analysis of Cambodian Waters. ASMS 2025 Baltimore
39. Vorng, C., Doeurn, S., Sok, S., Sieng, S., Ngoun, P., Ikemori, F., Hata, M., Sao, S., Peng, C., Or, C., Furuuchi, M. Daily Variations of Particulate Matter Mass Concentration: A Preliminary Observation at Institute of Technology of Cambodia GSGES International Symposium 2024
40. Sorn, S., Doeurn, S., Sok, S., Sieng, S., Ngoun, P., Ikemori, F., Hata, M., Sao, S., Peng, C., Or, C., Furuuchi, M. Comparison of PM<sub>2.5</sub> Mass Concentration from Two Filter Types in Low-Volume Air Samplers: One-Month Observation at Institute of Technology of Cambodia GSGES International Symposium 2024. Poster presentation
41. You, T., Sao, S., Doeurn, S., Peng, C., Sambath, S., Ikemori, F., Amin, M., Hata, M., Or, C., Furuuchi, M. Air Quality Monitoring in Phnom Penh City: A Focus on Gas Concentrations GSGES International Symposium 2024. Poster presentation
42. Srong, S., Sao, S., Doeurn, S., Peng, C., Sambath, S., Ikemori, F., Amin, M., Hata, M., Or, C., Furuuchi, M. Particulate Matter (PM<sub>2.5</sub> and PM<sub>10</sub>) Variations at Four Locations in Phnom Penh GSGES International Symposium 2024. Poster presentation
43. Phuong, S., Sao, S., Doeurn, S., Peng, C., Sambath, S., Ikemori, F., Amin, M., Hata, M., Or, C., Furuuchi, M. (2024). Effect of meteorological conditions on particulate matter concentration in Phnom Penh. GSGES International Symposium 2024. Poster presentation
44. Pov, K., Kret, K., Po, K., Seang, S., Révillion, C., Catry, T., Hostache, R., Herbreteau, V., Ann, V. (2024). Land Surface Temperature and Green Health Vegetation Variability across Lithology and Land Use and Land Cover in the Chrey Bak Catchment KHEOBS Day 2024

45. Tha, S., Sot, C., Phol, S., Yan, S., Lai, C., Ket, P. (2024). Estimating Irrigation requirement and scheduling for major crops: Case Study in Kampong Thom, Cambodia IOP Conference Series: Earth and Environmental Science
46. Eang, K.E., Massuel, S., Keo, S., Doung, R., Van Hanja, J., Yeurn, S., Phat, C., Baudron, P., Lenczewski, M. (2024). Pesticide Distribution and Evolution in Prek Systeme in Koh Thum, Kandal Province GOLDSCHMIDT 2024
47. Theng, K., Aun, S., Amin, M., Nat, Y. (2024). Measurement and Evaluation of Particle Number Concentration and Lung Deposited Surface Area Concentration in Open Public Space The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
48. Ren, R., Phairuang, W., Hata, M., Furuuchi, M., Amin, M., Meng, H., Or, C., Theng, K., Aun, S. (2024). Preliminary Study Of Diurnal And Nocturnal Size-Segregated Particulate Mass Concentration In Atmospheric Air Quality The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
49. Meng, C., Aun, S., Phairuang, W., Hata, M., Furuuchi, M., Amin, M., Ren, R., Or, C., Theng, K. (2024). Difference of Particulate Matter in Ambient Environment during Daytime and Nighttime in Phnom Penh City The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
50. Khor, S., Nhet, V., Pen, S. Rainfall Trend Anayis in Cambodia. (2024). The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
51. Brang, S., Uk, S., Pen, S., Doung, R., Theng, V., Chork, V., Sok, K. (2024). Shoreline Evolution Over the Past Four Decades in Koh Kong, Cambodia The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
52. Nuth, P., Brang, S., Ban, L., Pen, S. (2024). Extrem Rainfall Event Analysis in Cambodia The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
53. Ban, L., Pen, S. (2024). Assessment of an Ungauged Catchment of Rongea River in Koh Ker Heritage Zone, Cambodia The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
54. Chy, V., Hout, M., Ich, I., Koun, P., Sok, T. (2024). Evaluation of Naïve Bayes and Naïve Bayes Tree of Machine Learning performance for flood model for the Prek Thnot River Basin The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
55. Samai, S., Theng, V. (2024). Predictive Model of Eutrophication in Tonle Sap Lake Using Machine Learning The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
56. Krin, K., Ich, I., Meng, H., Song, L., Sok, T. (2024). Reappraisal of Modelling Streamflow in the Mekong River Basin Using the SWAT Model The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
57. Pen, S., Kuch, S., Min, T. (2024). Assessment of Flow Characteristics in Flate Terrain under Effect of Drainage Physical Property The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
58. Or, S., Hout, M., Song, L., Ich, I., Sok, T. (2024). Water Balance of Catchment Scale in Prek Thnot River of Cambodia and Setting Up for Quantify Nature-Based Solutions Efficiency The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
59. Thai, V., Vat, N., Ma, L., Menh, L., Pa, V., Noem, S., Heu, R. (2024). Assessment of Heavy Metals Pollution in Groundwater at the Rural Area of Cambodia The 13th Scientific Day of ITC Jointly held with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
60. Pa, V., Thai, V., Noem, S., Menh, L., Heu, R. (2024). Seasonal Assessment of Groundwater Quality at Tonle Sap Lake Floodplain Area in Cambodia The 13th Scientific Day of ITC Jointly held

- with International Symposium on Water Supply and Sanitation and the 1st Symposium of Food Technology, Research and Innovation
61. Chhoeung S., Lao C., Muon R., Martin A., Sinh S., Rougier J., Sok K., Seng P., Jouquet P. and Bureau-Point E. (2024). Paddy-field multifunctionality in Cambodia. A qualitative study of the ecosystem services provided by termite mounds. The 8th National Conference on Agricultural and Rural Development: Research, Technology and Innovation for Sustainable Agriculture
  62. Khan S., Sinh S., Muon R., Ly N., Nhean S., Ket P., Repellin A., Pugen Freitas R., Jouquet P. (2024). Growth of Rice Cultivated on Different Types of Growing Media in Water Limitation Condition The 8th National Conference on Agricultural and Rural Development: Research, Technology and Innovation for Sustainable Agriculture
  63. Pang, B., Sou, K., Kit, K., Huor, S., Chhim, S., Khorn, S., ... & Bun, S. (2023). Performance evaluation of anaerobic baffled reactor and filter for treating medium-strength wastewater using natural sludge growth and different hydraulic retention times IOP Conference Series: Earth and Environmental Science
  64. Bou, K., Poev, S., Chan, R., Ham, P., & Bun, S. (2023). Destabilization of Emulsion Oil Separation by using Chemical Coagulation Process: Preliminary Investigation for Effective Analysis IOP Conference Series: Earth and Environmental Science
  65. Choun, C., Bun, S., Ham, P., & Chan, R. (2023). Removal of Turbidity, Color, and Oil using Aerated Electrocoagulation-Flotation Reactor AIP Proceeding
  66. Ham, P., Bun, S., Wongwailikhit, K., & Painmanakul, P. (2023). Effect of Catalyst and Irradiation Characteristics on Volatile Organic Compounds Degradation in Aqueous Phase using TiO<sub>2</sub> Photocatalyst AIP Proceeding
  67. Heang, B., Bun, S., Chan, R., & Ham, P. (2023). Comparative Study of Septic Tank, Anaerobic Filter, and Anaerobic Baffled Reactor for Treating Domestic Wastewater AIP Proceeding
  68. Seng, P., Bun, S., Chan, R., & Ham, P. (2023). Optimize System Configuration and Operation Condition of Anaerobic Baffled Reactor (ABR) and Anaerobic Filter (AF) for Treating Domestic Wastewater AIP Proceeding
  69. Pen, B., Bun, S., Fagkaew, P., & Painmanakul, P. (2023). Effect of Solid Media Addition on Mass Transfer and Bubble Dynamics in Bubble Column Reactor AIP Proceeding
  70. Eng, K., Chan, R., Bun, S., Chan, R., Ham, P., & Sok, T. (2023). Optimization of Nitrate Production from Aquaculture Wastewater in a High-Rate Aerobic Reactor for a Hydroponic Spinach Growth. AIP Proceeding
  71. Doung, R., Koa, Ch., Pao, L., Koun, P., Heng, S., Tha, S., 2023. Urban Flood Modeling in Prek Phnov District, Phnom Penh, Cambodia. The 12th Scientific day of ITC, 08-09 June 2023, Institute of Technology of Cambodia, Phnom Penh, Cambodia
  72. Vaythouke, S., Doung, R., Sylvain, M., 2023. Seawater Intrusion Modeling in Coastal Aquifer of the Sihanoukville City by using SEAWAT-GMS Model. The 12th Scientific day of ITC, 08-09 June 2023, Institute of Technology of Cambodia, Phnom Penh, Cambodia
  73. Oeurn, S., Sorn, P., Sem, S., Eang, K.E., & Massuel, S. (2023). Hydrogeochemistry and Quality Assessment of Groundwater in Coastal Area, Sihanoukville. The 12th Scientific Day of ITC "Engineering Technology and Innovation toward the Development of Digital Economy and Society", June 08-09, 2023. Institute of Technology of Cambodia.
  74. Ly, V., Peng, C., Heng, O., Domenico, C. (2023). Antibiotic-Resistant *Escherichia coli* and *Aeromonas* spp. in Mono Cage Culture of *Channa Micropeltes*. The 14th International Conference on Environmental and Rural Development, at Angkor Paradise Hotel, Siem Reap, Cambodia, 03-05 March, 2023.
  75. Samrith, C., Sok, T., Try, S., Ich, I., Chan, R., Oeurng, C. (2022). Assessing flood risk using analytical hierarchy process (AHP) and geographical information system (GIS): application in Prek Thnot river basin, THA 2022 International Conference, January 2022.
  76. Huong, O., Try, S., Sok, T., Phy, S.R., Chan, R., Oeurng, C. (2022). Historical flood simulation and evaluation the performance of gridded precipitation dataset in Prek Thnot river basin, THA 2022 International Conference, January 2022.
  77. Phy, S.R., Try, S., Sok, T., Ich, I., Oeurng, C. (2022). Assessing Flood Inundation in the Lower Prek Thnot River Basin under Climate Change Using RRI Model Coupled with SWAT, THA 2022 International Conference, January 2022.

78. Tes, D., Sok, T., Ich, I., Song, L., Chan, R., Oeurng, C. (2022). Improving Flood Management through Future Reservoir Development and Operation in the Tonle Sap Largest Tributary, THA 2022 International Conference, January 2022.
79. Try, S., Sayama, T., Sok, T., Phy, S.R., Oeurng, C. (2022). Real-time Flood Forecasting Using Numerical Weather Prediction System Through NICAM-LETKF Data Assimilation in the Prek Thnot River, Cambodia, EGU General Assembly, May 2022.
80. Try, S., Sayama, T., Sok, T., Ly, S., Oeurng, C. (2022). Impact of Climate Change and Dam Construction on Rice Damages in the Cambodian Floodplain of the Mekong River Basin, THA2022 International Conference, January 2022.
81. Khut, S., Peng, C., Heng, O., Domenico, C. (2022). Water Quality and Survey on Knowledge, Attitude, And Practices of Antibiotic Use and Resistance of Farmer in Aquaculture of Pangasius Specie. 1th Scientific Day Conference on "Smart Technology for Sustainable Economic Growth", May 2022, Phnom Penh.
82. Tes, D., Ich, I., Sok, T., Say, V., Chan, R., Try, S., Song, L., Oeurng, C. (2022). Extreme Flow Reduction through the Integration of Hydrological and Reservoir Operation Models: The Case Study of Sen River Basin in Cambodia, the 11th Scientific Day Conference on "Smart Technology for Sustainable Economic Growth", May 2022, Phnom Penh.
83. Koun, P., Sok, T., Ich, I., Tes, D., Try, S., Oeurng, C. (2022). Spatial distribution of groundwater recharge and trend in Cambodia Mekong Delta, the 11th Scientific Day Conference on "Smart Technology for Sustainable Economic Growth", May 2022, Phnom Penh.
84. Huong, O., Try, S., Sok, T., Phy, S.R., Chan, R., Oeurng, C. (2022). Flood Modeling and Satellite Precipitation Datasets Evaluation in the Prek Thnot River Basin of the Lower Mekong River, the 11th Scientific Day Conference on "Smart Technology for Sustainable Economic Growth", May 2022, Phnom Penh.
85. Khoeun, C., Sok, T., Hout, M., Koun, P., Ith, S., Tes, D., Ich, I., Try, S., Oeurng, C. (2022). Extreme Rainfall Indices and Trends in Stung Sen River Basin, the Largest Tributary of Tonle Sap Lake Basin, the 11th Scientific Day Conference on "Smart Technology for Sustainable Economic Growth", May 2022, Phnom Penh.
86. Chann, K., Sok, T., Oeurng, C., Khoeun, R., Visessri, S., Sor, R., Null, H.S. (2022). Assessment of Hydrological Drought Features Over the Lower Mekong's Tributaries: A Case Study in Srepok River Basin, the 11th Scientific Day Conference on "Smart Technology for Sustainable Economic Growth", May 2022, Phnom Penh.
87. Chhom, N., Chhit, S., Chhum, T., Try, S., Song, L., Chhin, R. (2022). Evaluation of observed gridded rainfall data for climate change study over Cambodia. Proceedings of the 11th Scientific Day of ITC, May, 2022, Phnom Penh
88. Wai, M.P., Chem, V., Heu, R. (2022). Assessment of Dissolved Silicon in Surface water and sediment in Tonle Sap Lake. Proceedings of the 11th Scientific Day of ITC, May, 2022, Phnom Penh
89. Muon, R., Lai, C., Bureau-Point, E., Chassagne, F., Wieringa, F., Berger, J., Sok, K., Audibert, M., Podwojewski, P., Marchand, S., Ann, V., and Jouquet, P. (2022). Termite mounds in Cambodian paddy fields. Are they always kept for improving soil quality? (No. EGU22-55). Copernicus Meetings. p. 5194 at <https://doi.org/10.5194/egusphere-egu22-55>
90. Chann, K., Sok, T., & Oeurng, C. (2022) Investigation of hydrological alteration in Sekong and Sesan River Basins of the Lower Mekong Basin, The 11th Scientific Day Conference on "Smart Technology for Sustainable Economic Growth" May 2022, oral presentation.
91. Hen, C., Sok, T., Try, S., Chan, R., Ich, I., & Oeurng, C. (2022). Association between extreme precipitation and hydrological extreme in Prek Tnot River Basin of the Lower Mekong River in Cambodia, 4th International Conference on Environment, Resources and Energy Engineering (EREE 2022), June 10-12, 2022 in Bangkok, Thailand.
92. Chan R., Sok, T., Veth, V., Phy, S., Try, S., Ich, I., Oeurng, C. (2022). Assessment of Annual Streamflow Change Under Climate Change Scenarios in Prek Thnot River of the Lower Mekong Basin, Cambodia, 4th International Conference on Environment, Resources and Energy Engineering (EREE 2022), June 10-12, 2022 in Bangkok, Thailand.
93. Lay, V., Doung, R., & Pen, S. (2022). Application of Water Quality Index in GIS Tool to Assess the Quality of Groundwater at Preah Sihanouk Province, Cambodia. Proceedings of the 11th Scientific Day Conference on ""Smart Technology for Sustainable Economic Growth"" , May 2022, Phnom Penh

94. Sang, D., Cimetiere, N., Giraudet, S., Tan, R., Wolbert, D., & Le Cloirec, P. (2022). Effect of simultaneous dosing PAC and Coagulant on Adsorption-Desorption of organic micropollutant during coagulation-flocculation-sedimentation process. JEM-3M, Rennes.
95. Leakhena Hang, Sokles Lorn, Srean Aun, Dalin Um, Chanreaskmey Taing. (2022). Assessment of People's Perception of Air Quality in Phnom Penh, the Capital City of Cambodia. Malaysia
96. Leakhena Hang, Phalla Try, Srean Aun, Dalin Um, Sela Kong, Chanreaskmey Taing and Chanmoly Or. (2022). Springer book series: Environmental Science and Engineering. Japan
97. Sopannha Chy, Srean Aun, Leakhena Hang, Muhammad Amin, Mitsuhiro Hata, Chanmoly Or, Sela Kong, Chanreaskmey Taing, Dalin Um, Masami Furuuchi. (2022). Determination of Particulate Matters and Total Suspended Particles Emit from Incense Burning. IOP Conference Series: Earth and Environmental Science. Phnom Penh
98. Pengseng Ngoun, Srean Aun, Muhammad Amin, Leakhena Hang, Mitsuhiro Hata, Chanreaskmey Taing, Sela Kong, Chanmoly Or, Dalin Um, Masami Furuuchi. (2022). Monitoring Particulate Matters and Total Suspended Particles Along the Roadside and Public Area
99. Khoeun, C., Sok, T., Try, S., Chan, R., Ich, I., Chan, K., Oeurng, C. (2021). Assessing Flood Hazard Index using Analytical Hierarchy Process (AHP) and Geographical Information System (GIS) in Stung Sen River Basin, the 9th AUN/SEED-Net Regional Conference on natural Disaster (RCND), December 2021.
100. Khun, E., Chan, R., Chan, R., Bun, S., & Chart, C. (2021). Optimization of hydraulic retention time (HRT) in high-rate aeration tank for maximum nitrate production from aquaculture wastewater. The 10th Scientific Day of ITC, May 2021.
101. Chan, R., Chan, R., Wandee, S., Manna, W., Wilai, C., Chart, C., & Chihiro, Y. (2021). Fate and transport of antibiotics from pig farm along the Bang Pakong River, Thailand. The 13th AUN/SEED-Net Regional Conference on Chemical Engineering (RCChE-2020), 04- 05 February 2021.
102. Kaing, V., Ilan, I., Lieng, T., Yos, C., Chan, R., Chan, R., Song, L., Mong, M., Oeurng, C., & Sok, T. (2021). Application of Multivariate Techniques in the Evaluation of Spatial Surface Water Quality in an Urbanized Floodplain Area in Cambodia. The 13th AUN/SEED-Net Regional Conference on Chemical Engineering (RCChE-2020), Phnom Penh, Cambodia.
103. Heang, B., Chan, R., Chuy, V., & Bun, S. (2021). Technical Review and Challenge of Various Decentralized Anaerobic Treatments for Domestic Wastewater. The 10th Scientific Day of ITC.
104. Seng, P., Chan, R., & Bun, S. (2021). Recent Research and Development of Anaerobic Baffled Reactor and Filter for Wastewater Treatment: A Review. The 10th Scientific Day of ITC.
105. Ka, K., Khe, S., Chan, R., Chan, R., Tes, D., Kaing, V., Oeurng, C., & Ty, S. (2021). Seasonal Dynamic on Occurrence and Distribution of Pollutants from Urban Canal and Aquaculture Farm to Tamouk Lake, a Floodplain Urbanized Area in Phnom Penh. The 10th Scientific Day of ITC, May 2021.
106. You, R., Hok, S., Sieng, S., Ty, B. (2021). The Preliminary of Arsenic Removal from Groundwater by utilizing Electro-Chemical Arsenic Remediation (ECAR). The 10th Scientific Day of ITC, May 2021.
107. Nhem, V., Siev, S., Chhin, R., Ung, P., Fuji, H., & Chihiro, Y. (2021). Water Quality Mapping Using High Resolution Satellite Image Sentinel-2. The 13th AUN/SEED-Net Regional Conference on Chemical Engineering 2021
108. Thoeurn, T., Tri, W. H., & Chhin, R. (2021). Application of Statistical Downscaling for Seasonal Rainfall Forecasts in Cambodia: A Application of Statistical Downscaling for Seasonal Rainfall Forecasts in Cambodia: A Comparison between Constructed Analogue and Bias Correction Methods. The 13th AUN/SEED-Net Regional Conference on Chemical Engineering
109. Sang, D., Tan, R., & Pierre, L. C. (2021). Kinetic and Equilibrium Studies of Caffeine Adsorption on Different Type of Activated Carbons. The 10th Scientific Day of ITC, May 2021.
110. Or, T., Sang, D., Chanto, M.T., Tan, R. (2021). Natural Organic Matter Removal in Drinking Water Treatment by Combination of Adsorption and Coagulation Processes: A Comprehensive Review. The 10th Scientific Day of ITC, May 2021.
111. Meng, C., Lun, S., Sith, R., & Sang, D. (2021). Formulizing the Design Criteria for the Piped Water Supply in Urban Area of Cambodia. The 10th Scientific Day of ITC, May 2021.
112. Visal, R., Sith, R., & Lun, S. (2021). Assessment of Hydraulic Performance of Water Supply System in Takhmao City, Using Modeling Approach, Proceedings of the 10th Scientific Day of ITC, May 6, 2021, Phnom Penh.

113. Sona, Y., Pen, S., & Lun, S. (2021). 2D-Fluvial Hydraulic Characteristic Assessment at Chaktomuk Junction, Phnom Penh City, Proceedings of the 10th Scientific Day of ITC, May 6, 2021, Phnom Penh.
114. Ekkawatpanit, Tien, D. N., Quang, T. N., Tran, D.N., Trong, N., Thi, L., Tatsuya, K., Rumi T., Shin, T., Tu ,B. Huu, T., Thi, N., Thi, A. (2020). Antibiotics in Surface Water of East and Southeast Asian Countries: A Focused Review on Contamination Status, Pollution Sources, Potential Risks, and Future Perspectives. *Science of the Total Environment*, 142865; doi.org/10.1016/j.scitotenv.2020.142865.



# Annex 46. List of publications in Techno-Science Research Journal in Volume 13, 2025.

| N°                        | Title of papers published in volume 13 (2025)                                                                                                                                                                                                                                                                                                                                                       | Research Field |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>Issue 1, Volume 13</b> |                                                                                                                                                                                                                                                                                                                                                                                                     |                |
| 1                         | Channtola Sot, Chenda Lai, Mengheak Phol, and Pinnara Ket (2025). Effect of Different Irrigation Methods on Water Use Efficiency in Rice Soil Column Test. <i>Techno-Science Research Journal</i> 13(1), p.1. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.01">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.01</a>                                                                   | WAE            |
| 2                         | Sochetra Sen, and Peany Houng (2025). Optimization of Extraction Condition for Oleoresin from Red Pepper Residues. <i>Techno-Science Research Journal</i> 13(1), p. 8. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.02">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.02</a>                                                                                                          | FTN            |
| 3                         | Sreyleaphy Chhunry, and Peany Houng (2025). Effect of microwave pretreatment method on essential oil extraction on key lime peel ( <i>Citrus × aurantiifolia</i> ). <i>Techno-Science Research Journal</i> 13(1), p. 15. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.03">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.03</a>                                                        | FTN            |
| 4                         | Hongheng Seng, Veng Kheang Phun, Panha Yang, and Narith Saum (2025). Reducing traffic congestion during flyover construction: A case study of flyover construction at the intersection 2004, Phnom Penh, Cambodia. <i>Techno-Science Research Journal</i> 13(1), p. 24. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.04">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.04</a>         | MIT            |
| 5                         | Chanthy Vireak, Sela Kong, Manit Say, Yukleav Nat, Chin Ping Tan, and Reasmey Tan (2025). Effects of Different Bleaching Conditions on Bleaching Efficiency and Physicochemical Characteristics of Cambodian Soybean Oil . <i>Techno-Science Research Journal</i> 13(1), p. 34. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.05">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.05</a> | FTN            |
| 6                         | Phannet Pov, Sokkhey Phauk, Dona Valy, and Narith Saum (2025). Bus Arrival Time Prediction Using Machine Learning Approaches. <i>Techno-Science Research Journal</i> 13(1). P. 43. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.06">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.06</a>                                                                                              | MIT            |
| 7                         | Kimlong Ngin , Dona Valy, and Vannaro Pin (2025). A Deep Learning Approach for Identifying Individuals Based on Their Handwriting. <i>Techno-Science Research Journal</i> 13(1). p. 52. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.07">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.07</a>                                                                                         | MIT            |
| 8                         | Chhunheng Seirey, Sokkhey Phauk, Say Ol (2025). Utilizing Data Mining And AI To Enhance Cambodian High School Student Performance And Stakeholder Success. <i>Techno-Science Research Journal</i> 13(1), p.59. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.08">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.08</a>                                                                  | MIT            |
| 9                         | Kimleang Ly, Dona Valy, and Phutphalla Kong (2025). Khmer Question-Answering Model by Fine-tuning Pre-trained Model. <i>Techno-Science Research Journal</i> 13(1), p.67. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.09">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.09</a>                                                                                                        | MIT            |
| 10                        | Both Chan, Dona Valy, and Phutphalla Kong (2025). CNN-based Reinforcement Learning with Policy Gradient for Khmer Chess. <i>Techno-Science Research Journal</i> 13(1), p.75. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.10">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.10</a>                                                                                                    | MIT            |
| <b>Issue 2, Volume 13</b> |                                                                                                                                                                                                                                                                                                                                                                                                     |                |
| 11                        | Heng Ham, Dona Valy, and Phutphalla Kong (2025). Empowering Education with Online Khmer Handwritten Text Recognition for Teaching and Learning Assistance. <i>Techno-Science Research Journal</i> 13(2), p.1. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.01">https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.01</a>                                                                   | MIT            |
| 12                        | Lyheng Sam, Sokkhey Phauk, and Dona Valy (2025). Undergraduate Student Dropout Prediction with Class Balancing Techniques. <i>Techno-Science Research Journal</i> 13(2), p.9. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.02">https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.02</a>                                                                                                   | MIT            |

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|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 13                        | Vattanakvichea Nhem, Sokly Siev, Rattana Chhin, Chanthol Peng, May Phue Wa, Rajendra Khanal, and Chihiro Yoshimura (2025). Status of Seawater Quality at Koh Rong Island, Sihanoukville, Cambodia. <i>Techno-Science Research Journal</i> 13(2), p.17. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.03">https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.03</a>                  | WAE |
| 14                        | Leakana Ouk, Rothna Pec, and Sopkeaktra Chhorn (2025). Low-Complexity Detection of Primary Synchronization Signal for 5G New Radio Terrestrial Cellular System. <i>Techno-Science Research Journal</i> 13(2), p.23. <i>Techno-Science Research Journal</i> 13(2), p.17. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.04">https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.04</a> | MIT |
| 15                        | Hengly Em, Dona Valy, Bernard Gosselin, and Phutphalla Kong (2025). Word Spotting on Khmer Printed Documents. <i>Techno-Science Research Journal</i> 13(2), p.33. <i>Techno-Science Research Journal</i> 13(2), p.23. <a href="https://doi.org/10.64702/TechnoSRJ.2025.V13.I2.05">https://doi.org/10.64702/TechnoSRJ.2025.V13.I2.05</a>                                                     | MIT |
| 16                        | Nita Chek , Rothna Pec, and Sokchenda Sreng, (2025). Tuning Hyperparameters Learning Rate and Gamma in Gym Environment Inverted Pendulum. <i>Techno-Science Research Journal</i> 13(2), p.41. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.06">https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.06</a>                                                                           | ETM |
| 17                        | Kosal Suon, Veng Kheang Phun, and Narith Saum (2025). Examining Passenger Loyalty in Phnom Penh Public Bus System: A Structural Equation Modelling Approach. <i>Techno-Science Research Journal</i> 13(2), p.50. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.07">https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.07</a>                                                        | MSS |
| 18                        | Songchhay Pet, Bunthern Kim, and Monyvathna Chheng (2025). Prediction on Load model for future load profile of Electric Vehicle charging demand in Phnom Penh. <i>Techno-Science Research Journal</i> 13(2), p.67. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.08">https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.08</a>                                                      | ETM |
| 19                        | Daravann Mel, Sokchea Am, and Phok Chrin (2025). Economic Study on Integrating PV-DG with Grid-Tie: Case Study in Cambodia. <i>Techno-Science Research Journal</i> 13(2), p.68. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.09">https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.09</a>                                                                                         | ETM |
| 20                        | Likhai Mom, Sarin Chan, and Rithymean Khoun, (2025). Techno-Economic Comparison of VRF and Water-cooled Chiller System at the Ministry of Tourism in Sihanouk Province, Cambodia. <i>Techno-Science Research Journal</i> 13(2), p.78. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.10">https://doi.org/10.64702/Techno-SRJ.2025.V13.I2.10</a>                                   | ETM |
| <b>Issue 3, Volume 13</b> |                                                                                                                                                                                                                                                                                                                                                                                             |     |
| 21                        | Chanbumey Mon, Bunthern Kim, and Monyvathna Chheng (2025). Reliability Study on the Placement of Electric Vehicle Charging Stations in the Distribution Network of Cambodia. <i>Techno-Science Research Journal</i> 13(3), p.1. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.01">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.01</a>                                         | ETM |
| 22                        | Thyra Thon, Vannak Vai, and Samphors Eng (2025). Planning For Medium Voltage Distribution Systems Considering Economic And Reliability Aspects. <i>Techno-Science Research Journal</i> 13(3), p. 11. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.02">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.02</a>                                                                    | ETM |
| 23                        | Selasak Song, Dara Tith, and Dona Valy (2025). Security Management of Reputation Records in the Self-Sovereign Identity Network for the Trust Enhancement. <i>Techno-Science Research Journal</i> 13(3), p. 19. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.03">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.03</a>                                                         | MIT |
| 24                        | Lyda Yuok, Luka Ly, Marinich Net, Parakulsuksatid Pramuk, and Reasmey Tan (2025). Effect of Enzyme on Physicochemical and Sensory Characteristics of Black Soy Sauce. <i>Techno-Science Research Journal</i> 13(3), p. 27. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.04">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.04</a>                                              | FTN |
| 25                        | Sreylin Sea, Mouylen Pey, Sopanha Sim, Chanpheng Say, Davin Sang, Sivchheng Phal, and Reasmey Tan (2025). Activated Carbon Derived from Cassava Peels ( <i>Manihot esculenta</i> ) for the Removal of Diclofenac. <i>Techno-Science Research Journal</i> 13(3), p. 36. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.05">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.05</a>  | FTN |

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|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| 26                                  | Kakda Pov, Chhenglang Hen2 , Makara Soy, Vincent Herbreteau, and Vannak Ann (2025). Land Use and Land Cover Distribution across Litho-Mineral Alteration of an Irrigated Catchment of the Tonle Sap Lake, Cambodia. <i>Techno-Science Research Journal</i> 13(3), p. 44. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.06">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.06</a>                             | WAE                                                 |
| 27                                  | Kimhouy Nou, Sereyvath Yoeun, Chanvorleak Phat, Vattana Mom, Sovannmony Lay, Caroline Douny, Marie-Louise Scippo, and Hasika Mith (2025). Impact of Smoking Materials on Smoked Fish Quality and Polycyclic Aromatic Hydrocarbon Contamination. <i>Techno-Science Research Journal</i> 13(3), p. 44. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.07">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.07</a> | FTN                                                 |
| 28                                  | Sreypich Chy, Chhenglang Heng, Thibault Catry, Renaud Hostache, Christophe Révillion, Vincent Herbreteau, and Vannak Ann (2025). Estimation of rainfall and flooding with remotely-sensed spectral indices in the Mekong Delta region. <i>Techno-Science Research Journal</i> 13(3), p. 61. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.08">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.08</a>          | WAE                                                 |
| 29                                  | Sithea Sath, Ratha Muon1, Rainer Zaiss, Jeroen Meersmans, Vannak Ann, and Pascal Jouque (2025). Environmental Variables Determining Soil Physical Properties and Carbon Content at the Catchment Scale, Stung Chrey Bak Observatory, Cambodia. <i>Techno-Science Research Journal</i> 13(3), p. 69. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.09">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.09</a>  | WAE                                                 |
| 30                                  | Khematakavid Ros, Veng Kheang Phun, and Panha Yang (2025). The Negative Experiences of Low-Income Citizen Commute and Their Intentions Toward Public Bus in Phnom Penh. <i>Techno-Science Research Journal</i> 13(3), p. 80. <a href="https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.10">https://doi.org/10.64702/Techno-SRJ.2025.V13.I3.10</a>                                                                         | MSS                                                 |
| <b>Proceeding and Special Issue</b> |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                     |
| 31                                  | The 14 <sup>th</sup> Scientific Day (Leveraging R&D for Innovation and Growth)                                                                                                                                                                                                                                                                                                                                           | ETM= 12<br>FTN= 17<br>MIT= 23<br>MSS= 19<br>WAE= 28 |
| 32                                  | Special Issue on: Earth Resources and Geo-Environment Technology (23 papers)                                                                                                                                                                                                                                                                                                                                             |                                                     |

**Annex 47. Organizing Seminars and Workshops for Lecturers and Students.**

| <b>No.</b> | <b>Date<br/>(DD-MM-YY)</b> | <b>Subject</b>                                                                                                                   | <b>Organizer<br/>(Faculty /<br/>Department /<br/>Research Unit)</b> | <b>Co-organizer<br/>(Industry)</b>                               | <b>Participants</b>                                                                                            |
|------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| 1          | 5-Mar-2025                 | Introduction to LNG                                                                                                              | GGG                                                                 | Cambodia Natural Gas Corp., Ltd.                                 | 40 students from I3-GGG and I4-GGG                                                                             |
| 2          | 26-Jun-2025                | River Floway tool: Discovering Rivers Flow Ways Through Causal Reasoning and AI Modelling                                        | GRU                                                                 | Institut de recherche pour le développement (IRD)                | GRU Lecturers, Students, IRD                                                                                   |
| 3          | 15-Jul-2025                | Knowledge Sharing and Specialization of Water Infrastructure                                                                     | GRU                                                                 | Guangxi Vocational College of Water Resources and electric power | GRU Students                                                                                                   |
| 4          | 16-Jul-2025                | Safety in Engineering and Asean Engineering Inspectors                                                                           | FGC-GCI                                                             | Board Engineering of Cambodia                                    | GCI-Lecturers and Students                                                                                     |
| 5          | 1-Aug-2025                 | Presentation on legal documents developed by BUN Association                                                                     | UIL                                                                 | PI-ARES-CCD R2 & BUN Association                                 | Dr. IN Sokneang, PI of R2 and Dean of GCA<br>Dr. YIN Molika, Head of UIL<br>Dr. SANG Davin, Deputy Head of UIL |
| 6          | 10-Aug-2025                | Special Colloquium on Statistical Analysis with SPSS                                                                             | AMS                                                                 | Universite Libre de Bruxelles                                    | AMS students and Lecturer                                                                                      |
| 7          | 29-Sep-2025                | Seminar on MARINE MEDITERRANEAN SAPROPEL                                                                                         | GRU                                                                 | Università Politecnica delle Marche, Ancona, Italy               | GRU students, lecturers and Master Students, TSA,                                                              |
| 8          | 29-Sep-2025                | Marine Mediterranean Sapropel                                                                                                    | GRU                                                                 | Università Politecnica Delle Marche                              | GRU Lecturers, GRU Students, MoE                                                                               |
| 9          | 30-Oct-2025                | Microplastic and Microplastic Assessment in Rivers                                                                               | GRU                                                                 | Norwegian Institute for Water Research (NIVA)                    | GRU Lecturers, GRU Students                                                                                    |
| 10         | 12-Nov-2025                | Advanced Innovation Technology on Structural Rehabilitation and Strengthening for our Modern-Day Structural Challenge since 1985 | FGC-GCI                                                             | Fyfe Asia                                                        | FGC-Lecturers and Students                                                                                     |
| 11         | 17-Nov-2025                | Seminar on Roca drinking water filtration for safe and comfortable water and life                                                | GRU                                                                 | University of Yamanashi                                          | GRU Lecturers, GRU Students and Students of                                                                    |

|    |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                    |                                                                                |                                                                                                          |
|----|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
|    |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                    |                                                                                | University of Yamanashi (25 persons)                                                                     |
| 12 | 18-Nov-2025 | Cambodia Geospatial Day 2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | GRU                | Institut de recherche pour le développement (IRD)                              | GRU Lecturers, Students and IRD                                                                          |
| 13 | 28-Nov-2025 | Conducting Need Analysis Survey to Benchmark the Academic Program with Market Needs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | GRU                | N/A                                                                            | GRU Lecturers, Relevant Ministries, Development Partners, NGOs, and the Private Sector (60 participants) |
| 14 | 2-Dec-2025  | Electrical Safety Initiatives and Technologies of Japanese Companies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | GEE                | HASEGAWA Electric Co., Ltd., Fujii Denko Co., Ltd., and Maxell Izumi Co., Ltd. | GEE Lecturers and Students                                                                               |
| 15 | 4-Dec-2025  | Seminar on From Phnom Penh to the World: Build a Global Career with Actuarial Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | AMS                | Decent Actuarial Consultants Co., Ltd                                          | AMS students and Lecturer                                                                                |
| 16 | 5-Dec-2025  | World Soil Day 2025: Healthy Soils for Healthy Cities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | GRU                | Institut de recherche pour le développement (IRD)                              | GRU Lecturers, Students, MAFF, NGOs...                                                                   |
| 17 | 8-Dec-2025  | Monozukuri workshop                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | GIM                | Denso Cambodia (Co. Ltd)                                                       | I5-Ind and lecturer                                                                                      |
| 18 | 8-Dec-2025  | Waterproof Product (FOSROC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | FGC-GCI            | Eversafe Solution                                                              | GCI-Lecturers and Students                                                                               |
| 19 | 11-Dec-2025 | Dissemination Workshop on “Legal Frameworks for Advancing University–Industry Engagement”<br>- Session A: Internal Research and Academic Agreements (Consulting Service Contract; Non-Disclosure Agreement (Internal & External); Copyright Assignment Agreement; Trademark License Agreement)<br>- Session B: Intellectual Property Transfer (Patent Assignment Agreement (Inventor ↔ ITC)Patent Assignment Agreement (ITC ↔ Business Partner)<br>- Session C: Entrepreneurship & Technology Deployment (Spin-Off Agreement; Software Evaluation Agreement)<br>(11 – 12 December 2025) | UIL                | PI-ARES-CCD R2 & BUN Association                                               | 70 lecturers, teachers, and research students                                                            |
| 20 | 24-Dec-2025 | Seminar on Recruitment for Internship and Job Opportunities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | UIL, GCA, GIM, GGG | Intex Industries (Cambodia) Co., Ltd.                                          | Head and Assistant of UIL, 54 students                                                                   |
| 21 | 27-Dec-2025 | CMU -KU Leuven -WHO-Téchné Summer School Application of Systems Thinking and Systemic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | FGC-GAR            | KU Leuven Faculty of Architecture                                              | GAR lecturers and I5GAR Students                                                                         |

|    |             |                                                                               |         |                                                                                               |                                                                                                                                                                                                                                                               |
|----|-------------|-------------------------------------------------------------------------------|---------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 22 | 7-Jan-2026  | Panasonic training at ITC                                                     | GIM     | Panasonic Cambodia                                                                            | I5-Mec, T2-MSB                                                                                                                                                                                                                                                |
| 23 | 12-Jan-2026 | Green building practice in Cambodia                                           | FGC/GAR | Green building consultant-BEE incorporation Cambodia                                          | I5GAR student and Lecturer                                                                                                                                                                                                                                    |
| 24 | 16-Jan-2026 | Staung River 21" Exchange Program and Symposium                               | GRU     | Tonle Sap Authority, Rotterdam University of Applied Sciences (RUAS), Mekong River Commission | GRU Lecturers, GRU Students and Student of RUAS (60 persons)                                                                                                                                                                                                  |
| 25 | 16-Jan-2026 | Thnot d'Or Award Competition 2026                                             | GCA     | Confirel Co., Ltd                                                                             | GCA Student                                                                                                                                                                                                                                                   |
| 26 | 20-Jan-2026 | Acoustic Doppler Discharge Measurement Training Workshop (20-22 January 2026) | GRU     | Xylem Water Solutions & Technology                                                            | GRU Lecturers, MOWRAM, MPWT, MOE, MAFF, MME), Cambodia National Mekong Committee, the Tonle Sap Authority, Electricité du Cambodge, Phnom Penh Water Supply Authority, ITC, RUPP, Phnom Penh Autonomous Port, and various water consulting firms (30 persons) |
| 27 | 21-Jan-2026 | Empowering the students' personal and professional growth                     | GRU     | K&K Pipe Cambodia and Husk Ventures Cambodia, and She Runs Club                               | GRU Lecturers and students (60 persons)                                                                                                                                                                                                                       |
| 28 | 28-Jan-2026 | Presentation and health check-up for ITC staff by SS Pharm Healthcare         | UIL     | SS Pharm Healthcare                                                                           | 25 ITC Staff                                                                                                                                                                                                                                                  |
| 29 | 29-Jan-2026 | Technical Training from Daikin Airconditioning (Cambodia) Co., Ltd.           | GIM     | Daikin Airconditioning (Cambodia) Co., Ltd.                                                   | T2-MSB, 2 lecturers                                                                                                                                                                                                                                           |
| 30 | 5-Feb-2026  | Biomass Originated Nanomaterials: Applications in Wastewater Detoxification   | GRU     | Manipal University, India                                                                     | GRU students, lecturers (44 persons)                                                                                                                                                                                                                          |
| 31 | 6-Feb-2026  | Construction Project Management & FIDIC                                       | FGC-GCI | China Construction Engineering                                                                | GCI-Lecturers and Students                                                                                                                                                                                                                                    |
| 32 | 6-Feb-2026  | Construction project management & FIDIC                                       | GCI     | China Construction Fourth Engineering Division Corp., Ltd.                                    | GCI-Lecturers and Students                                                                                                                                                                                                                                    |

**Annex 48. Joining Seminars and Workshops Organized by External Entities.**

| <b>No.</b> | <b>Date<br/>(DD-MM-YY)</b> | <b>Subject</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Organizer</b>                                     | <b>Participate</b>                                                           | <b>Faculty /<br/>Department /<br/>Research Unit</b> |
|------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------|
| 1          | 24-Jan-2025                | Agri-Food Processing: Strengthening the Market Competitiveness and Access                                                                                                                                                                                                                                                                                                                                                                                                           | EuroCham Cambodia                                    | Dr. MITH Hasika,<br>Lecturer and Research of<br>GCA                          | GCA                                                 |
| 2          | 27-Feb-2025                | Workshop on fossil identification and stratigraphy to study the paleoenvironment of western Cambodia                                                                                                                                                                                                                                                                                                                                                                                | Ministry of<br>Environment                           | Dr. Sio Sreymean and 3<br>GGG students                                       | GGG                                                 |
| 3          | 26-May-2025                | 3rd Stakeholder Engagement (SE-3) Workshop on the Development of the ASEAN Minerals Development Vision (AMDV) and ASEAN Minerals Cooperation Action Plan (AMCAP-IV)                                                                                                                                                                                                                                                                                                                 | ASEAN/USAID                                          | Dr. Mao Pisith                                                               | GGG                                                 |
| 4          | 22-May-2025                | The Meeting of Review, Discussion, and Feedback on IEC Standards for Electrical and Electronic Products                                                                                                                                                                                                                                                                                                                                                                             | MISTI                                                | Dr. VAI Vannak                                                               | GEE                                                 |
| 5          | 7-Jun-2025                 | AI-ITC: Développement de compétences transversales pour les services relatifs à la valorisation de la recherche à l'ITC : Mission de Formation en Communication – R2 Sud-Nord<br>- Discussed a step-by-step approach for implementing a Technology & Knowledge Transfer Office (TKTO).<br>- Reviewed and planned the structure and content for the TKTO website.<br>- Developed a communication plan, including communication processes and tools for the TKTO.<br>(7-22 June 2025) | Université Libre de Bruxelles (ULB) & PI-ARES-CCD R1 | Dr. YIN Molika, Head of<br>UIL<br>Dr. TAN Reasmey,<br>Deputy Director of RIC | UIL, RIC                                            |
| 6          | 8-Jul-2025                 | Capacity Building Program in Support of the Cambodia's Nationally Determined Contributions Update Process (NDC 3.0) (8-9 July 2025)                                                                                                                                                                                                                                                                                                                                                 | ADB                                                  | Mr. YOU Lyhour                                                               | GEE                                                 |
| 7          | 17-Jul-2025                | Climate Resilient Water Resources Governance Program in Cambodia                                                                                                                                                                                                                                                                                                                                                                                                                    | Ministry of Water Resources and Meteorology          | Dr. CHHUON Kong                                                              | GRU                                                 |

|    |             |                                                                                                                                                                                                                     |                                                             |                                                                   |         |
|----|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|---------|
| 8  | 18-Aug-2025 | JPO/IPR training course for practitioners specializing in patents via online Training (August 18, 2025 – September 3, 2025) and in Japan (September 25, 2025 – October 2, 2025)                                     | Japan Patent Office (JPO)                                   | Dr. YIN Molika, Head of UIL<br>Dr. SANG Davin, Deputy-Head of UIL | UIL     |
| 9  | 27-Aug-2025 | Workshop on UN Joint SDG Seed Fund project                                                                                                                                                                          | Office of the Council of Prime minister                     | Mr. SOK Kimhuy and GRU Students                                   | GRU     |
| 10 | 27-Aug-2025 | The Meeting of Review, Discussion, and Feedback on IEC Standards for Electrical and Electronic Products                                                                                                             | MISTI                                                       | Dr. VAI Vannak                                                    | GEE     |
| 11 | 1-Sep-2025  | Pump Fundamentals and Characteristics                                                                                                                                                                               | KSB SE & Co. KGaA                                           | Mr. YOU Lyhour                                                    | GEE     |
| 12 | 17-Sep-2025 | Workshop on IP                                                                                                                                                                                                      | AUF                                                         | Dr. YIN Molika, Head of UIL                                       | UIL     |
| 13 | 1-Oct-2025  | Project Steering Committee Meeting for the Review of Project Progress “Establishing an Evidence-Based National Adaptation Plan (NAP) Process at National and Subnational Scales in Cambodia – Phase 1 (NAP-Phase 1) | Ministry of Environment                                     | Dr. CHHUON Kong, Dean of GRU                                      | GRU     |
| 14 | 2-Oct-2025  | Pump Operation, Maintenance & Troubleshooting                                                                                                                                                                       | KSB SE & Co. KGaA                                           | Mr. YOU Lyhour                                                    | GEE     |
| 15 | 4-Oct-2025  | Pump Advanced Concepts & Specific Applications                                                                                                                                                                      | KSB SE & Co. KGaA                                           | Mr. YOU Lyhour                                                    | GEE     |
| 16 | 13-Oct-2025 | Our life, our society                                                                                                                                                                                               | Radio National of Kampuchea                                 | Dr. KET Pinnara                                                   | GRU     |
| 17 | 15-Oct-2025 | Benefit of Engineering Registration                                                                                                                                                                                 | Board Engineering of Cambodia                               | GCI-Lecturers and Students                                        | FGC-GCI |
| 18 | 24-Oct-2025 | Sustainably Sika                                                                                                                                                                                                    | Sika Cambodia                                               | GCI-Lecturers and Students                                        | FGC-GCI |
| 19 | 30-Oct-2025 | Effective Use of Construction Material: Benefit and Welfare                                                                                                                                                         | Ministry of Land Management Urban Planning and Construction | GCI-Lecturers and Students                                        | FGC-GCI |
| 20 | 12-Nov-2025 | Launch of the 1st European Global Gateway Scholarship Call on water professions                                                                                                                                     | European Union                                              | GRU Lecturer                                                      | GRU     |
| 21 | 12-Nov-2025 | Cambodia Entrepreneurship Day 2025                                                                                                                                                                                  | AUF                                                         | Dr. YIN Molika, Head of UIL                                       | UIL     |
| 22 | 14-Nov-2025 | IoT of Air Conditioning Systems                                                                                                                                                                                     | GS ElecTech                                                 | Mr. SAN Sophak                                                    | GIM     |



|    |             |                                                                                                                                                                                                                      |                                                                   |                                                                      |                |
|----|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------|----------------|
| 23 | 21-Nov-2025 | Innovation Construction Solution Through Prestressed-Concrete, System Formwork, and Bridge Launching Technologies.                                                                                                   | Board Engineering of Cambodia                                     | GCI-Lecturers and Students                                           | FGC-GCI        |
| 24 | 26-Nov-2025 | Orchid Forum 2025                                                                                                                                                                                                    | Ministry of Environment                                           | GRU Lecturer and students                                            | GRU            |
| 25 | 3-Dec-2025  | ASEAN NEXT 2025: Role of Infrastructure Technology and Innovation in Successful Manufacturing (3-4 December 2025)                                                                                                    | Ministry of Industry, Science, Technology, and Innovation (MISTI) | Dr. Bun Long, Deputy Director General<br>Dr. YIN Molika, Head of UIL | Direction, UIL |
| 26 | 06-Dec-2025 | Sika Solution for Industrial Manufacturing                                                                                                                                                                           | Sika Cambodia                                                     | GCI-Lecturers and Students                                           | FGC-GCI        |
| 27 | 8-Dec-2025  | Stakeholder Meeting for the Clean water Sector                                                                                                                                                                       | MISTI                                                             | Dr. CHHUON KONG                                                      | GRU            |
| 28 | 18-Dec-2025 | National Technical Regulation                                                                                                                                                                                        | Ministry of Land Management Urban Planning and Construction       | GCI-Lecturers                                                        | FGC-GCI        |
| 29 | 18-Dec-2025 | The Meeting of the Cambodia-Russia Joint Working Group on Cooperation in the Use of Atomic Energy for Peaceful Purposes                                                                                              | Ministry of Environment                                           | Dr. VAI Vannak, Deputy Head of GEE                                   | GEE            |
| 30 | 19-Jan-2026 | Transboundary Diagnostic Analysis and Land Based Pollution                                                                                                                                                           | Ministry of Environment                                           | Dr. CHHUON Kong, Dean of GRU                                         | GRU            |
| 31 | 20-Jan-2026 | Project Steering Committee Meeting for the Review of Project Progress “Establishing an Evidence-Based National Adaptation Plan (NAP) Process at National and Subnational Scales in Cambodia – Phase 1 (NAP-Phase 1)” | Ministry of Environment                                           | Dr. CHHUON Kong, Dean of GRU                                         | GRU            |
| 32 | 6-Feb-2026  | Observer-Training on Promotion of Circular Economy in the Garments Value Chain in Cambodia (6-7 February 2026)                                                                                                       | Cambodian Garment Training Institute                              | Dr. Phoeurn Chan Arun                                                | GRU            |

### Annex 49. Industry Visit to ITC.

| No. | Date<br>(DD-MM-YY) | Industries                                           | Subject                                                                                                                                                                                                                                                                                                                                          | Participant (ITC)                                                                                                                                                                                                                                                                                            | Faculty /<br>Department /<br>Research<br>Unit |
|-----|--------------------|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| 1   | 27-Feb-2025        | Society of Petroleum Engineering                     | Discuss about possible collaborations.                                                                                                                                                                                                                                                                                                           | H.E. Prof. Dr. PO Kimtho (Director)<br>Dr. Bun Kimngun (Deputy-Director)<br>Dr. Or Channmoly (Director of RIC)<br>Dr. Eng Chandoeun (Dean of GGG)<br>Dr. Pech Sopheap (Vice-dean of GGG)<br>Dr. Yos Phanny (Deputy-Director of RIC)<br>Dr. Chea Samneang<br>Mr. Khoun Sokunthea (GDP)<br>All Relevant Person | GGG                                           |
| 2   | 20-May-2025        | CQU                                                  | To discuss on cultivating students through University-Enterprise collaboration with CQU                                                                                                                                                                                                                                                          | H.E. Prof. PO Kimtho, Director General<br>Asst. Prof. Dr. YIN Molika, Head of UIL<br>Other colleagues                                                                                                                                                                                                        | Direction,<br>UIL                             |
| 3   | 03-Jun-2025        | German Chamber of Commerce                           | Meeting with German delegates from companies, training provider and German Chamber of Commerce                                                                                                                                                                                                                                                   | H.E. Prof. PO Kimtho, Director General<br>Asst. Prof. Dr. YIN Molika, Head of UIL<br>Other colleagues                                                                                                                                                                                                        | Direction,<br>UIL                             |
| 4   | 26-Jun-2025        | BYD Auto Co., Ltd. and Skills Development Fund (SDF) | Purpose of meeting:<br>1. Seek further collaboration for BYD Academy<br>2. Area support from SDF in Skill Development in EV Sector 3. Short school visit<br><br>Guests:<br>1. Ms. Chan Carroll, Training Specialist, BYD Asia Pacific<br>2. Mr. Han Ratanak, Senior Officer, SDF<br>3. Mr. Lay Chantheara, Industry Partnership Coordinator, SDF | Dr. BUN Long, Deputy-Director<br>Dr. CHAN Sarin, Head of GIM<br>Dr. CHHITH Saosometh, Deputy-Head of GIM<br>Asst. Prof. Dr. YIN Molika, Head of UIL                                                                                                                                                          | Direction,<br>UIL, GIM                        |

|    |             |                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                           |                                     |
|----|-------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 5  | 8-Jul-2025  | Huawei (Cambodia)                                        | Meeting with Huawei and Supplier (Agency) to check the room for opening event preparation (decoration) and discuss about the ICT preparation                                                                                                                                                                                                                                                                                                                        | Asst. Prof. Dr. YIN Molika, Head of UIL                                                                                                                                                                                                                                                                                                                   | UIL                                 |
| 6  | 15-Jul-2025 | SnB Foods                                                | Meet with SnB Foods to discuss about the R&D of food products (mainly focusing on sauces)                                                                                                                                                                                                                                                                                                                                                                           | Asst. Prof. Dr. YIN Molika, Head of UIL<br>Dr. CHIN Lyda, Lecturer and Research of GCA/FTN                                                                                                                                                                                                                                                                | UIL, GCA, FTN                       |
| 7  | 22-Jul-2025 | FAO (Cambodia)                                           | Meeting with FAO to discuss possible collaboration                                                                                                                                                                                                                                                                                                                                                                                                                  | Asst. Prof. Dr. YIN Molika, Head of UIL                                                                                                                                                                                                                                                                                                                   | UIL                                 |
| 8  | 29-Jul-2025 | Japan-Cambodia Association (JCA)                         | <p>Agenda:</p> <ul style="list-style-type: none"> <li>• Presentation of JCA Strategy 2025</li> <li>• Proposal for establishing a CAD School for Architects</li> </ul> <p>Participants from JCA:</p> <ul style="list-style-type: none"> <li>• Mr. Kato Kazunori, Secretary General</li> <li>• Mr. Kubota Mitsuhiro, Director</li> <li>• Mr. Ogata Yuki, Representative from SHO SEKKEI Co., Ltd.</li> <li>• Mr. Nop Visal, Assistant to Secretary General</li> </ul> | <p>H.E Prof. Dr. Po Kimtho, Director General of ITC</p> <p>Dr. Bun Long, Deputy-Director General of ITC</p> <p>Dr. Han Virak, Dean Faculty of Civil Engineering</p> <p>Mr. Hash Chanly, Head Department of Architecture</p> <p>Dr. OR Chanmoly, Director of RIC</p> <p>Dr. YIN Molika, Head of UIL Office</p> <p>Ms. Chikako Sasaki, JICA Coordinator</p> | Direction, UIL, GCI, GAR, RIC, JICA |
| 9  | 07-Aug-2025 | Phnom Penh International University (PPIU) and Investors | Meeting with PPIU on entrepreneurship program                                                                                                                                                                                                                                                                                                                                                                                                                       | H.E. Prof. PO Kimtho, Director General<br>Asst. Prof. Dr. YIN Molika, Head of UIL<br>Other colleagues                                                                                                                                                                                                                                                     | Direction, UIL                      |
| 10 | 11 Aug 2025 | Cambodia Chamber of Commerce (CCC)                       | Meeting with CCC to revise training proposal (Manufacturing Sector) for Skills Development Fund (SDF)                                                                                                                                                                                                                                                                                                                                                               | Asst. Prof. Dr. YIN Molika, Head of UIL                                                                                                                                                                                                                                                                                                                   | UIL                                 |
| 11 | 25 Aug 2025 | Xiyuan Education                                         | Discussion on exploring the institution's higher education programs in water-related fields                                                                                                                                                                                                                                                                                                                                                                         | Asst. Prof. Dr. CHHUON Kong, Dean of GRU                                                                                                                                                                                                                                                                                                                  | GRU                                 |
| 12 | 28-Aug-2025 | Nippon KOEI Co., Ltd                                     | Discussion on collaboration research on problematic soil in Cambodia and installed the Pin Hole Testing Device for GGG Lab                                                                                                                                                                                                                                                                                                                                          | Asst. Prof. Dr. ENG Chandoeun, Dean of GGG                                                                                                                                                                                                                                                                                                                | GGG                                 |

|    |             |                                                  |                                                                                           |                                                                                                                        |                      |
|----|-------------|--------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------|
| 13 | 6-Oct-2025  | Mr. PUTH Chandarith                              | To discuss R&D on the dried fruits and CO2 production                                     | Asst. Prof. Dr. YIN Molika, Head of UIL<br>Asst. Prof. Dr. PHAT Chanvorleak, Head of FTN                               | UIL                  |
| 14 | 08-Oct-2025 | SNKRP Co., Ltd                                   | SNKRP first visits H.E. Prof. PO Kimtho to discuss possible collaboration                 | H.E. Prof. PO Kimtho, Director General<br>Asst. Prof. Dr. YIN Molika, Head of UIL                                      | Direction, UIL       |
| 15 | 10-Oct-2025 | EU and AFD                                       | Discussion on procedures for the implementation of the Bak Kheng III Water supply project | Prof. Dr. PO Kimtho, Dr. CHHUON Kong, Dr. BUN Long, Dr. SIM Tepmony, Dr. THENG Vouchlay                                | Direction, GRU, GS   |
| 16 | 10-Oct-2025 | Japanese Business Association of Cambodia (JBAC) | To discuss the internship opportunity and process for ITC students                        | Mr. SOY Ty, Deputy Director General<br>Asst. Prof. Dr. YIN Molika, Head of UIL<br>Ms. Chikako Sasaki, JICA Coordinator | Direction, UIL, JICA |
| 17 | 21-Oct-2025 | Mr. Wattanak                                     | Meeting with Mr. Wattanak to discuss R&D and ASLT Crab Product                            | Asst. Prof. Dr. YIN Molika, Head of UIL<br>Dr. CHIN Lyda, Lecturer and Research of GCA/FTN                             | UIL, GCA, FTN        |
| 18 | 28-Oct-2025 | Minebea Co., Ltd. (Cambodia)                     | To recruit ITC students to train in Japan                                                 | Mr. SOY Ty, Deputy Director General<br>Asst. Prof. Dr. YIN Molika, Head of UIL                                         | Direction, UIL       |
| 19 | 10 Nov 2025 | KCC Kampot                                       | Discuss on job opportunity and student internship                                         | Dr. Phauk Sockhey, Mr. Pen Chentra, Dr. Vally Dona, Dr. Nou Sotheany                                                   | AMS, GIC             |
| 20 | 13-Nov-2025 | Startec Dynamics Cambodia                        | Assembly of motorcycle (Calypso brand)                                                    | Dr. SIV Easeng, Mr. Ly Leangchheng                                                                                     | GIM                  |
| 21 | 14-Nov-2025 | DMQ Workshop                                     | Manufacturing of MEP products                                                             | Dr. SIV Easeng, Dr. SAM Sopheap                                                                                        | GIM                  |
| 22 | 14-Nov-2025 | CTI Engineering International Co., Ltd           | Discuss on collaboration work on water testing                                            | Dr. ENG Chandoeun, Mr. PHANN Panhaneath, Ms. PEN Linda                                                                 | GGG                  |
| 23 | 14 Nov 2025 | GS Electech Inc.                                 | To visit and recruit students to internship (Electric and Automation)                     | Mr. SOY Ty, Deputy Director General<br>Asst. Prof. Dr. YIN Molika, Head of UIL                                         | Direction, UIL       |
| 24 | 18-Nov-2025 | Mrs. LY Linda                                    | Meeting with Mrs. LY Linda to discuss R&D and shelf-life study of bird nest product       | Asst. Prof. Dr. YIN Molika, Head of UIL<br>Dr. CHIN Lyda, Lecturer and Research of GCA/FTN                             | UIL, GCA, FTN        |
| 25 | 19-Nov-2025 | K-Geo                                            | Discussion on collaboration research on geotechnical engineering project                  | Dr. ENG Chandoeun, Mr. PHANN Panhaneath, Ms. PEN Linda, Mr. SENG Mengly                                                | GGG                  |
| 26 | 12-Dec-2025 | ADITI CamMob Codingate                           | Discuss about the market need analysis and company feedback of the graduates from GIC     | Mr. Lay Heng (Dean) and GIC Lecturers                                                                                  | GIC                  |

|    |             |                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                             |                                                                                                                                     |               |
|----|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------|
|    |             | Elite Vigour<br>Biplan Global<br>Digital Government Committee<br>ProXy Solutions Co., LTD<br>FinTech Center of Non-bank<br>Financial Services Authority<br>Proseth Solutions Co., Ltd.<br>General Department of Customs<br>and Excise of Cambodia<br>UDAYA TECHNOLOGY Co.,<br>Ltd.<br>AMK Microfinance Institution<br>PLC (AMK MFI)<br>PassApp<br>One Fraternity Co., Ltd |                                                                                                             |                                                                                                                                     |               |
| 27 | 25-Dec-2025 | Mega First Plantation (Cambodia) Co., Ltd                                                                                                                                                                                                                                                                                                                                 | Meeting with Mega First Plantation (Cambodia) Co., Ltd to discuss about R&D on coconut sap products         | Asst. Prof. Dr. YIN Molika, Head of UIL<br>Asst. Prof. Dr. PHAT Chanvorleak, Head of FTN<br>Asst. Prof. Dr. CHAN Sarin, Head of GIM | UIL, FTN, GIM |
| 28 | 2-Jan-2026  | KSB (CAMBODIA) PUMPS & VALVES CO., LTD                                                                                                                                                                                                                                                                                                                                    | Discuss on organizing the training session about pump                                                       | Asst. Prof. Dr. CHHUON Kong, Dean of GRU                                                                                            | GRU           |
| 29 | 17-Jan-2026 | Angkor Resources Corp.                                                                                                                                                                                                                                                                                                                                                    | Discuss on job opportunity and student internship                                                           | Dr. ENG Chandoeun, Dr. PECH Sopheap;<br>Dr. SIO Sreymean, Dr. MAO Pisith                                                            | GGG           |
| 30 | 20-Jan-2026 | University of Melbourne                                                                                                                                                                                                                                                                                                                                                   | Discuss on possible future collaboration                                                                    | Asst. Prof. Dr. CHHUON Kong, Dean of GRU                                                                                            | GRU           |
| 31 | 27-Jan-2026 | GSCS International                                                                                                                                                                                                                                                                                                                                                        | Discuss on job opportunity and student internship                                                           | Dr. CHHUON Kong, Dr. Sang Davin, Mr. Tang Eangthay, Dr. PHOEURN Chan Arun                                                           | GRU           |
| 32 | 29-Jan-2026 | AFD and EU                                                                                                                                                                                                                                                                                                                                                                | PWSSP Showcase at ITC and Celebrating Achievements                                                          | Prof. Dr. PO Kimtho, Dr. CHHUON Kong, Dr. BUN Saret, Dr. THENG Vouchlay, Dr. PENG Chanthol, Mr. SIEANG Phen, and students           | GRU           |
| 33 | 3-Feb-2026  | Skills Development Fund (SDF)                                                                                                                                                                                                                                                                                                                                             | Know Your Customer (KYC) by Skills Development Fund (SDF) for Training Proposal (Manufacturing Sector) with | Asst. Prof. Dr. YIN Molika, Head of UIL                                                                                             | UIL           |

|    |             |                                            |                                                                                                                                                   |                                                                                                                                        |                         |
|----|-------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
|    |             |                                            | Cambodia Chamber of Commerce (CCC) via Zoom                                                                                                       |                                                                                                                                        |                         |
| 34 | 11 Feb 2026 | Hybrid Learning Ocean Co., Ltd (iBlooming) | Meeting with iBlooming to discuss possible collaboration (Knowledge sharing content by ITC students and staff)                                    | Asst. Prof. Dr. YIN Molika, Head of UIL<br>Asst. Prof. Dr. VALY Dona, Head of MIT                                                      | UIL, MIT                |
| 35 | 11-Feb-2026 | Skills Development Fund (SDF)              | Pitching Interview by Skills Development Fund (SDF) for Training Proposal (Manufacturing Sector) with Cambodia Chamber of Commerce (CCC) via Zoom | Asst. Prof. Dr. YIN Molika, Head of UIL                                                                                                | UIL                     |
| 36 | 23-Feb-2026 | SV.CY (Cambodia) IM-EX Co., Ltd            | Meeting with Ms. Sinan from SV.CY (Cambodia) IM-EX Co., Ltd to discuss the internship opportunities for ITC students (food sector)                | Asst. Prof. Dr. YIN Molika, Head of UIL<br>Mrs. RD Chanreaksmey, Head of Career Center<br>Asst. Prof. Dr. HOR Sivmey, Vice Dean of GCA | UIL, Career Center, GCA |
| 37 | 26-Feb-2026 | Bamnang                                    | Meeting with Bamnang Company to discuss internship, job, join event and housing service for ITC students                                          | Asst. Prof. Dr. YIN Molika, Head of UIL<br>Dr. PHAUK Sokkey, Head of AMS<br>Mrs. RD Chanreaksmey, Head of Career Center                | UIL, Career Center, AMS |

**Annex 50. ITC Lecturers and Students Visit to Industries.**

| <b>No.</b> | <b>Date<br/>(DD-MM-YY)</b> | <b>Industries</b>                             | <b>Subject</b>                                                                                                          | <b>Participant</b>                                                                                                                                                                                                          | <b>Faculty /<br/>Department /<br/>Research Unit</b> |
|------------|----------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| 1          | 17-Feb-2025                | TotalEnergies Depot Khsom                     | Educational Field visit to oil and gas depot storage facilities.                                                        | Dr. Pech Sopheap, Dr. Mao Pisith, and I4-GGG and I5-GGG students                                                                                                                                                            | GGG                                                 |
| 2          | 21-Jun-2025                | De Heus TMH Cambodia                          | Factory tour to De Heus TMH Cambodia to study the feed production                                                       | 9 I4-FST students                                                                                                                                                                                                           | UIL, GCA                                            |
| 3          | 23-Jun-2025                | Chip Mong Industries                          | Site visit Chip Mong Factory                                                                                            | GCI-Lecturers and Students                                                                                                                                                                                                  | FGC-GCI                                             |
| 4          | 24-Jun-2025                | Skills Development Fund (SDF)                 | Meeting with SDF for collaboration                                                                                      | Dr. Bun Kimngun, Deputy Director General<br>Asst. Prof. Dr. YIN Molika, Head of UIL<br>Dr. MORM Elen, Lecturer of GCA                                                                                                       | Direction, UIL, GCA                                 |
| 5          | 30-Jun-2025                | Korea Eximbank                                | Promote the program and discussing on human resources needed for the Korean Investment in Cambodian project development | Dr. CHHUON Kong, Dr. KET Pinnara, Dr. HENG Sokchhay                                                                                                                                                                         | GRU                                                 |
| 6          | 16-Jul-2025                | Long Sreng International Co., Ltd.            | To observe the production line of rubber, banana packing and fertilizer for possible collaboration                      | Assoc. Prof. Dr. OR Chanmoly, Director of RIC<br>Asst. Prof. Dr. YOS Phanny, Deputy Director of RIC<br>Asst. Prof. Dr. YIN Molika, Head of UIL<br>Ms. CHOEUN Chakrya, Business Developer<br>Ms. SRENG Laymey, Lab Assistant | RIC, UIL                                            |
| 7          | 6-Oct-2025                 | Nippon Koei Co., Ltd                          | Visit laboratory and discussion for collaboration                                                                       | Dr. ENG Chandoeun, Dr. MAO Pisith                                                                                                                                                                                           | GGG                                                 |
| 8          | 2-Nov-2025                 | SERE Farm                                     | Site visite SERE farm for collaboration                                                                                 | Dr. PHAT Chanvorleak, Dr. MITH Hasika, Dr. CHIN Lyda, Dr. LY Luka                                                                                                                                                           | GCA / FTN                                           |
| 9          | 18-Nov-2025                | China Railway Construction Corporation (CRCC) | Meeting with CRCC to discuss possible collaboration on Civil                                                            | H.E. Prof. PO Kimtho, Director General                                                                                                                                                                                      | Direction, UIL, GCI                                 |

|    |             |                                            |                                                                                                                                                                           |                                                                                                                                                                                                                               |               |
|----|-------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
|    |             |                                            | Engineering, internship and job offering to ITC students                                                                                                                  | Asst. Prof. Dr. YIN Molika, Head of UIL<br>Dr. SANG Davin, Deputy Head of UIL<br>Mr. LY Hav, Vice Dean of GCI                                                                                                                 |               |
| 10 | 5-Dec-2025  | Innotality Co., Ltd.                       | Mission to Siem Reap for INACON Project to observe the Ketchup production line (December 5, 2025 – December 7, 2025)                                                      | Asst. Prof. Dr. YIN Molika, Head of UIL<br>Dr. CHIN Lyda, Lecturer and Research of GCA/FTN                                                                                                                                    | UIL, GCA, FTN |
| 11 | 19-Dec-2025 | Kirirom Food Production (K.F.P) Co., Ltd.  | Site visite KFP for collaboration                                                                                                                                         | Dr. PHAT Chanvorleak, Dr. MITH Hasika, Dr. CHIN Lyda, Dr. LY Luka                                                                                                                                                             | GCA / FTN     |
| 12 | 21-Dec-2025 | Mega First Plantation (Cambodia) Co., Ltd. | Mission to Mondulkiri to visit Mega First Plantation (Cambodia) Co., Ltd. to visit production line and discuss about R&D on coconut sap products (December 21 – 23, 2025) | Asst. Prof. Dr. YIN Molika, Head of UIL<br>Asst. Prof. Dr. PHAT Chanvorleak, Head of FTN<br>Dr. CHIN Lyda, Lecturer and Researcher, GCA/FTN<br>Dr. SANG Davin, Deputy Head of UIL<br>Ms. KHMAO Sormsievmeay, Assistant of UIL | UIL, GCA, FTN |
| 13 | 8-Jan-2026  | K&K Pipe Cambodia                          | Visit to the Factory of K&K Pipe Cambodia                                                                                                                                 | Mr. LUN Sambo, Dr. THENG Vouchlay, Mr. CHORK Vuthy                                                                                                                                                                            | GRU           |
| 14 | 8-Jan-2026  | Phnom Penh Water Supply Authority          | Visiting to the Bakheng III Water Treatment Plant                                                                                                                         | Mr. LUN Sambo, Dr. THENG Vouchlay, Mr. CHORK Vuthy                                                                                                                                                                            | GRU           |



**Annex 51. Projects, Training and Consulting Services for Private Sectors.**

| <b>No.</b> | <b>Date</b>               | <b>Type of service</b> | <b>Subject</b>                                                                                                            | <b>Industries</b>                        | <b>Coordinator and Trainers</b>  | <b>Department</b> |
|------------|---------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------|-------------------|
| 1          | December- April 2025      | Training               | Minerals, Rocks, and Soils                                                                                                | MME                                      | Dr. Sio Sreymean                 | GGG               |
| 2          | May - June 2025           | Training               | Granite, Marble, and Gemstone                                                                                             | Marble Company                           | Dr. Sio Sreymean                 | GGG               |
| 3          | 5-May-2025                | Training               | Training on “Wastewater Treatment and Regulation”                                                                         | Mr. Khut Hak                             | Dr. SANG Davin                   | UIL, GRU          |
| 4          | 5-Jun-2025                | Project                | Organizing Training Workshop                                                                                              | Nathasha Munasinghe                      | Asst. Prof. HANG Leakhena        | IQA               |
| 5          | 1-Jul-2025                | Training               | PLC Training                                                                                                              | RMA Automotive Assembly Plant            | Asst. Prof. Dr. CHHITH Saosometh | GIM               |
| 6          | March 2025 - May 2025     | Project Contract       | Production and development of food products (Kimchi and Garlic-Ginger Pickle in Honey)                                    | Aliment                                  | Asst. Prof. Dr. MITH Hasika      | GCA, FTN          |
| 7          | July 2025 - October 2025  | Project                | Energy Efficiency in Cambodia's Building                                                                                  | UNDP                                     | Asst. Prof. Dr. CHAN Sarin       | GIM               |
| 8          | September 2025 - May 2025 | Project                | Analysis of pesticide content in water in Kanghot and Rovieng irrigation chemes                                           | CIRAD                                    | Asst. Prof. Dr. PHAT Chanvorleak | GCA, FTN          |
| 9          | 1-Oct-2025                | Training               | SPC Training Course                                                                                                       | RMA Automotive Assembly Plant            | Asst. Prof. Dr. CHHITH Saosometh | GIM               |
| 10         | May - Oct 2025            | Project                | Development of Sauce from Cambodian Green Mussels for Commercialization (CAPfish Project Round III)                       | Phnom Pich Bunkhea Fish Sauce Enterprise | Asst. Prof. Dr. TAN Reasmey      | GCA, FTN          |
| 11         | May - Oct 2025            | Project                | Development of Instant Fish Soups for Commercialization (CAPfish Project Round III)                                       | Heng Channy Angkor Meas Co., Ltd         | Ms. NET Marinich                 | GCA, FTN          |
| 12         | May - Oct 2025            | Project                | Development of Nutrient-dense Wafer Roll for Children by Incorporating Freshwater Fish Powder (CAPfish Project Round III) | DCF Danish Care Foods Co., Ltd           | Dr. EK Pichmony                  | GCA, FTN          |

**Annex 52. Memoranda of Understanding and Memoranda of Agreement with Industry.**

| No. | Name of partner                            | Sector      | Agreement type      | Effective Date | Expiration Date | Outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Country  |
|-----|--------------------------------------------|-------------|---------------------|----------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 1   | Wing Bank (Cambodia) Plc.                  | Industry    | MoU                 | 4-Jul-2025     | 4-Jul-2030      | a. Promote employer branding between Parties;<br>b. Provide internship program to undergraduates or fresh graduates student of ITC;<br>c. Provide special training program or special discount rate on training fees by ITC to Wing's staff.                                                                                                                                                                                                                                                              | Cambodia |
| 2   | Hybrid Learning Ocean Co., Ltd (iBlooming) | Industry    | MoU                 | 7-Jul-2025     | 7-Jul-2027      | <ul style="list-style-type: none"> <li>• Explore potential collaboration in technology development and education.</li> <li>• Support innovative initiatives focused on the Khmer language and enhancing digital learning.</li> <li>• Seek opportunities to facilitate investment support for promising technological projects.</li> <li>• Establish an initial framework for future discussions and cooperation in areas of mutual interest.</li> </ul>                                                   | Korea    |
| 3   | China Road and Bridge Corporation          | Industry    | AC                  | 10-Aug-2025    | 30-Dec-2027     | <p><b>Cooperative Research Agreement for the China-Cambodia Intergovernmental Joint Research Project:</b> National Key R&amp;D Program Project "Intergovernmental International Science and Technology Innovation Cooperation"</p> <p>The research supports Cambodia's Funan Techo Comprehensive Water Conservancy Project by developing an AI-based aquatic Electronic Toll Collection (ETC) system to ensure efficient waterway operation, improved navigation, and sustainable project management.</p> | China    |
| 4   | Sumitomo Corporation                       | Industry    | MoA (Addendum No.1) | 13-Aug-2025    | 31-Dec-2026     | Amendments to the Agreement: The amount of Annual Grant stipulated in the first sentence of Section 5.1 of the Agreement                                                                                                                                                                                                                                                                                                                                                                                  | Japan    |
| 5   | Cambodia Chamber of Commerce (CCC)         | Association | MoA                 | 22-Aug-2025    | 22-Aug-2026     | Joint Training Proposal (Manufacturing Sector) for Skills Development Fund (SDF)                                                                                                                                                                                                                                                                                                                                                                                                                          | Cambodia |

|    |                                                  |              |             |             |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |
|----|--------------------------------------------------|--------------|-------------|-------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 6  | Japanese Business Association of Cambodia (JBAC) | Industry     | MoU         | 1-Oct-2025  | 30-Sep-2028 | To support technical and engineering training                                                                                                                                                                                                                                                                                                                                                                                                                              | Japan          |
| 7  | NPLUS S.r.l                                      | Industry     | MoU         | 23-Oct-2025 | 23-Oct-2030 | a) Academic and research collaboration;<br>b) Talent development programs;<br>c) Exchange of scholarly information and resources;<br>d) Any other areas of cooperation to be mutually agreed upon by the Parties.                                                                                                                                                                                                                                                          | Italy          |
| 8  | Nippon Koei Co., Ltd.                            | Industry     | MoU (Renew) | 8-Dec-2025  | 7-Dec-2030  | The parties agree to collaborate in engineering-related research to address global challenges and technological developments. Key cooperation areas include geo-resources and geotechnical engineering; infrastructure construction (buildings, roads, and dams); hydraulic engineering and groundwater environment; water resources management and disaster mitigation; and the application of information technology, including GIS, for academic and research purposes. | Japan          |
| 9  | Wildfowl and Wetlands Trust (WWT)                | Organization | MoA         | 10-Dec-2025 | 10-Dec-2028 | Pesticide residue analysis in water quality and soil within the project                                                                                                                                                                                                                                                                                                                                                                                                    | United Kingdom |
| 10 | SNP-PT International Co., Ltd.                   | Industry     | MoU         | 12-Jan-2026 | 11-Jan-2029 | - Engagement in Technical Consultation<br>- Promoting Cooperation (research collaboration), Exchange of academic and industry (Seminars, workshops, and faculty professional development)<br>- Facilitation in internships and practical training opportunities for ITC students                                                                                                                                                                                           | Cambodia       |
| 11 | Hayashi Construction Co, Ltd                     | Industry     | MoU         | 29-Jan-2026 | 28-Jan-2031 | Scope of Activity:<br>- Research and development: joint research projects, technology transfer, and innovation<br>- Education and training: internships, exchange of knowledge, workshops, seminars, and training programs<br>- Infrastructure development<br>- Community engagement                                                                                                                                                                                       | Japan          |

**Annex 53. List of Foreign Students at ITC.**

| No | Nom et prénom/<br>First and Last Name |                        | Dept | Arrivée/<br>Arrival |      |      | Départ/<br>Departure |      |      | Université d'origine/<br>From the University | Pays/<br>Country | Objectif/Objective    | Financement/<br>Funding   |
|----|---------------------------------------|------------------------|------|---------------------|------|------|----------------------|------|------|----------------------------------------------|------------------|-----------------------|---------------------------|
|    |                                       |                        |      | J                   | M    | A    | J                    | M    | A    |                                              |                  |                       |                           |
|    |                                       |                        |      | D                   | M    | Y    | D                    | M    | Y    |                                              |                  |                       |                           |
| 1  | Mlle                                  | DANJOIE Audrey         | AMS  | 16                  | 2    | 2026 | 10                   | 7    | 2026 | INSA Rennes                                  | France           | Exchange Semester II  | Self-funding              |
| 2  | Mlle                                  | CHANAUD Elina          | ECAM | 29                  | 8    | 2025 | 9                    | 1    | 2026 | ECAM LaSalle                                 | France           | Exchange semester I   | Self-funding              |
| 3  | Mlle                                  | FLECHET Anna           | ECAM | 29                  | 8    | 2025 | 9                    | 1    | 2026 | ECAM LaSalle                                 | France           | Exchange semester I   | Self-funding              |
| 4  | M.                                    | GIRAUD Julien          | ECAM | 29                  | 8    | 2025 | 9                    | 1    | 2026 | ECAM LaSalle                                 | France           | Exchange semester I   | Self-funding              |
| 5  | Mlle                                  | LOCHEN Juliette        | ECAM | 18                  | 1    | 2026 | 10                   | 5    | 2026 | ECAM LaSalle                                 | France           | Exchange semester I   | Self-funding              |
| 6  | M.                                    | MANIPOUD Hugo          | ECAM | 18                  | 1    | 2026 | 10                   | 5    | 2026 | ECAM LaSalle                                 | France           | Exchange semester I   | Self-funding              |
| 7  | M.                                    | VALLEE Eliott          | ECAM | 18                  | 1    | 2026 | 10                   | 5    | 2026 | ECAM LaSalle                                 | France           | Exchange semester I   | Self-funding              |
| 8  | M.                                    | PIERRON Jules          | GCI  | 16                  | 2    | 2026 | 10                   | 7    | 2026 | INSA Rennes                                  | France           | Exchange Semester II  | Self-funding              |
| 9  | Mlle                                  | RINNERT Maelann        | GCI  | 16                  | 2    | 2026 | 10                   | 7    | 2026 | INSA Rennes                                  | France           | Exchange Semester II  | Self-funding              |
| 10 | M.                                    | GRECO Titouan          | GEE  | 16                  | 2    | 2026 | 10                   | 7    | 2026 | INSA Toulouse                                | France           | Exchange Semester II  | Self-funding              |
| 11 | Mlle                                  | LECHANOINE Romane      | GEE  | 16                  | 2    | 2026 | 10                   | 7    | 2026 | INSA Rennes                                  | France           | Exchange Semester II  | Self-funding              |
| 12 | Ms.                                   | Alizee Corvione        | GGG  | 20                  | Oct  | 2025 | 02                   | Feb  | 2026 | INSA RENNES                                  | France           | One Semester Exchange | INSA RENNES               |
| 13 | M.                                    | Amin Hakim             | GGG  | 10                  | 12   | 2025 | 23                   | 12   | 2025 | Universiti Sains Malaysia                    | Malaysia         | Short-term Exchange   | Universiti Sains Malaysia |
| 14 | Mlle                                  | Arah Divina Talingting | GGG  | 10                  | 12   | 2025 | 23                   | 12   | 2025 | Caraga State University                      | Philippines      | Short-term Exchange   | Caraga State University   |
| 15 | M.                                    | Baptiste Lobut         | GGG  | 20                  | 10   | 2025 | 02                   | 2    | 2026 | INSA RENNES                                  | France           | One Semester Exchange | INSA RENNES               |
| 16 | M.                                    | Charles Lan Apolinaria | GGG  | 10                  | 12   | 2025 | 23                   | 12   | 2025 | Caraga State University                      | Philippines      | Short-term Exchange   | Caraga State University   |
| 17 | Mr.                                   | Dai Ueumera            | GGG  | 3                   | Sept | 2025 | 19                   | Sept | 2025 | Kyushu University                            | Japan            | Short-term Exchange   | NEXUS Project             |
| 18 | Ms.                                   | Giselle Jane Dayanan   | GGG  | 10                  | Dec  | 2025 | 23                   | Dec  | 2025 | Caraga State University                      | Philippines      | Short-term Exchange   | Caraga State University   |
| 19 | Mr.                                   | Iver Jay Yana          | GGG  | 10                  | Dec  | 2025 | 23                   | Dec  | 2025 | Caraga State University                      | Philippines      | Short-term Exchange   | Caraga State University   |

|    |      |                            |     |    |     |      |    |     |      |                                          |             |                                                               |                           |
|----|------|----------------------------|-----|----|-----|------|----|-----|------|------------------------------------------|-------------|---------------------------------------------------------------|---------------------------|
| 20 | M.   | John David Ebona           | GGG | 10 | 12  | 2025 | 23 | 12  | 2025 | Caraga State University                  | Philippines | Short-term Exchange                                           | Caraga State University   |
| 21 | Mlle | Kaoutar Id El Mouden       | GGG | 2  | 6   | 2025 | 15 | 8   | 2025 | IMT NORD EUROPE/ISPA                     | France      | Internship                                                    | IMT NORD EUROPE/ISPA      |
| 22 | Mr.  | Muhammad Hairul Bin Mahmud | GGG | 10 | Dec | 2025 | 23 | Dec | 2025 | Universiti Sains Malaysia                | Malaysia    | Short-term Exchange                                           | Universiti Sains Malaysia |
| 23 | Ms.  | Nurul Sabrina Baidrulhisam | GGG | 10 | Dec | 2025 | 23 | Dec | 2025 | Universiti Sains Malaysia                | Malaysia    | Short-term Exchange                                           | Universiti Sains Malaysia |
| 24 | Mlle | Siti Sarah Azmi            | GGG | 10 | 12  | 2025 | 23 | 12  | 2025 | Universiti Sains Malaysia                | Malaysia    | Short-term Exchange                                           | Universiti Sains Malaysia |
| 25 | Mr.  | Wazif Akmal                | GGG | 10 | Dec | 2025 | 23 | 12  | 2025 | Universiti Sains Malaysia                | Malaysia    | Short-term Exchange                                           | Universiti Sains Malaysia |
| 26 | M.   | LAVANDIER Augustin         | GIC | 13 | 10  | 2025 | 13 | 02  | 2026 | INSA Rennes                              | France      | Computer Science                                              | Personal + Grant          |
| 27 | Mlle | BEAUREPAIRES Suzanne       | GIM | 16 | 2   | 2026 | 10 | 7   | 2026 | INSA Rennes                              | France      | Exchange Semester II                                          | Self-funding              |
| 28 | M.   | Dachy Titouan              | GIM | 20 | 10  | 2025 | 06 | 02  | 2026 | INSA de Rennes                           | France      | Exchange semester I                                           | Self-funding              |
| 29 | M.   | Perusek Matthieu           | GIM | 13 | 10  | 2025 | 06 | 02  | 2026 | IMT Mines Alès                           | France      | Exchange Semester 1                                           | Self-Funding              |
| 30 | M.   | Sanna Gabriel              | GIM | 10 | 10  | 2025 | 1  | 03  | 2026 | ENSIM                                    | France      | Exchange Semester 1                                           | Self-Funding              |
| 31 | M.   | Baars Niels                | GRU | 11 | 1   | 2026 | 17 | 1   | 2026 | Rotterdam University of Applied Sciences | Netherland  | Staung River21: ITC & RUAS Delta research project in Cambodia | Self-support              |
| 32 | M.   | Bal Jeroen                 | GRU | 11 | 1   | 2026 | 17 | 1   | 2026 | Rotterdam University of Applied Sciences | Netherland  | Staung River21: ITC & RUAS Delta research project in Cambodia | ERASMUS Plus              |
| 33 | Mlle | Bandsma Yara               | GRU | 11 | 1   | 2026 | 17 | 1   | 2026 | Rotterdam University of Applied Sciences | Netherland  | Staung River21: ITC & RUAS Delta research project in Cambodia | Self-support              |
| 34 | Mlle | Bon Annabel                | GRU | 11 | 1   | 2026 | 17 | 1   | 2026 | Rotterdam University of Applied Sciences | Netherland  | Staung River21: ITC & RUAS Delta research project in Cambodia | Self-support              |
| 35 | M.   | Boot Jochem                | GRU | 11 | 1   | 2026 | 17 | 1   | 2026 | Rotterdam University of Applied Sciences | Netherland  | Staung River21: ITC & RUAS Delta research project in Cambodia | Self-support              |

|    |      |                  |     |    |    |      |    |    |      |                                                                                                                |             |                                                                                      |              |
|----|------|------------------|-----|----|----|------|----|----|------|----------------------------------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------|--------------|
| 36 | M.   | CALY Eliott      | GRU | 2  | 3  | 2026 | 26 | 6  | 2026 | Université Clermont Auvergne                                                                                   | France      | Physicochemical biotransformations and farmer's perceptions of soil quality          | Self-support |
| 37 | Mlle | Célia RAULT      | GRU | 6  | 6  | 2025 | 10 | 10 | 2025 | Centre des Études Supérieures Industrielles (CESI), CESI Graduate School of Engineering                        | France      | Coastal and Wetland Environment Research                                             | Self-support |
| 38 | M.   | COURTHALIAC Jean | GRU | 2  | 3  | 2026 | 26 | 6  | 2026 | Université Clermont Auvergne                                                                                   | France      | Modeling Water Flow in Soils : Consequences of Soil Contribution from Termite Mounds | Self-support |
| 39 | M.   | de Vries Jasper  | GRU | 11 | 1  | 2026 | 17 | 1  | 2026 | Rotterdam University of Applied Sciences                                                                       | Netherlands | Staung River21: ITC & RUAS Delta research project in Cambodia                        | ERASMUS Plus |
| 40 | Mlle | King Fanny       | GRU | 7  | 7  | 2025 | 9  | 8  | 2025 | CFA de l'Enseignement Supérieur Languedoc-Roussillon - Sud de France (CFA EnSup-LR), University de Montpellier | France      | Coastal and Wetland Environment Laboratory                                           | Self-support |
| 41 | Mlle | Lilou Quadrio    | GRU | 6  | 10 | 2025 | 28 | 10 | 2025 | INSA Toulouse                                                                                                  | France      | Fluid Mechanics                                                                      | Self-support |
| 42 | Mlle | Pier Goia        | GRU | 11 | 1  | 2026 | 17 | 1  | 2026 | Rotterdam University of Applied Sciences                                                                       | Netherlands | Staung River21: ITC & RUAS Delta research project in Cambodia                        | Self-support |
| 43 | M.   | Raphaël LEMOINE  | GRU | 6  | 6  | 2025 | 10 | 10 | 2025 | Centre des Études Supérieures Industrielles (CESI), CESI Graduate School of Engineering                        | France      | Coastal and Wetland Environment Research                                             | Self-support |
| 44 | Mlle | Roodzant Anouk   | GRU | 11 | 1  | 2026 | 17 | 1  | 2026 | Rotterdam University of Applied Sciences                                                                       | Netherlands | Staung River21: ITC & RUAS Delta research project in Cambodia                        | Self-support |
| 45 | M.   | Sansaar Quinn    | GRU | 11 | 1  | 2026 | 17 | 1  | 2026 | Rotterdam University of Applied Sciences                                                                       | Netherlands | Staung River21: ITC & RUAS Delta research project in Cambodia                        | ERASMUS Plus |

|    |    |                     |     |    |    |      |    |    |      |                                          |            |                                                               |              |
|----|----|---------------------|-----|----|----|------|----|----|------|------------------------------------------|------------|---------------------------------------------------------------|--------------|
| 46 | M. | Van der Pols Quincy | GRU | 11 | 1  | 2026 | 17 | 1  | 2026 | Rotterdam University of Applied Sciences | Netherland | Staung River21: ITC & RUAS Delta research project in Cambodia | ERASMUS Plus |
| 47 | M. | Van Dijk Nils       | GRU | 11 | 1  | 2026 | 17 | 1  | 2026 | Rotterdam University of Applied Sciences | Netherland | Staung River21: ITC & RUAS Delta research project in Cambodia | Self-support |
| 48 | M. | Van Duuren Chris    | GRU | 11 | 1  | 2026 | 17 | 1  | 2026 | Rotterdam University of Applied Sciences | Netherland | Staung River21: ITC & RUAS Delta research project in Cambodia | ERASMUS Plus |
| 49 | M. | Van Gils Quintijn   | GRU | 11 | 1  | 2026 | 17 | 1  | 2026 | Rotterdam University of Applied Sciences | Netherland | Staung River21: ITC & RUAS Delta research project in Cambodia | ERASMUS Plus |
| 50 | M. | Voskamp Mels        | GRU | 11 | 1  | 2026 | 17 | 1  | 2026 | Rotterdam University of Applied Sciences | Netherland | Staung River21: ITC & RUAS Delta research project in Cambodia | ERASMUS Plus |
| 51 | M. | Drie Baptiste       |     | 10 | 11 | 2025 | 15 | 11 | 2025 | Université Toulon                        | France     | International mobility                                        | CFA funding  |
| 52 | M. | Falessi Giuseppe    |     | 10 | 11 | 2025 | 15 | 11 | 2025 | Université Toulon                        | France     | International mobility                                        | CFA funding  |
| 53 | M. | Leveque Ugo         |     | 10 | 11 | 2025 | 15 | 11 | 2025 | Université Toulon                        | France     | International mobility                                        | CFA funding  |
| 54 | M. | Maschio Enzo        |     | 10 | 11 | 2025 | 15 | 11 | 2025 | Université Toulon                        | France     | International mobility                                        | CFA funding  |
| 55 | M. | Melve Eliott        |     | 10 | 11 | 2025 | 15 | 11 | 2025 | Université Toulon                        | France     | International mobility                                        | CFA funding  |
| 56 | M. | Philips Nathan      |     | 10 | 11 | 2025 | 15 | 11 | 2025 | Université Toulon                        | France     | International mobility                                        | CFA funding  |
| 57 | M. | Sol Matheo          |     | 10 | 11 | 2025 | 15 | 11 | 2025 | Université Toulon                        | France     | International mobility                                        | CFA funding  |
| 58 | M. | Soucheleau Charles  |     | 10 | 11 | 2025 | 15 | 11 | 2025 | Université Toulon                        | France     | International mobility                                        | CFA funding  |
| 59 | M. | Thevenin Hugo       |     | 10 | 11 | 2025 | 15 | 11 | 2025 | Université Toulon                        | France     | International mobility                                        | CFA funding  |
| 60 | M. | Thomasy Tristan     |     | 10 | 11 | 2025 | 15 | 11 | 2025 | Université Toulon                        | France     | International mobility                                        | CFA funding  |

