



# Implementation of e-learning activities at ITC

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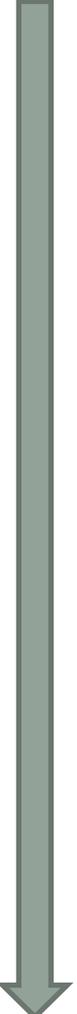
Institute of Technology of Cambodia (ITC)  
Department of Information and Communication Engineering

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With technical assistance from  
the FAO Regional Office for Asia  
and the Pacific

# Introduction to e-Learning Center of ITC

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- ASEAN Cyber University (ACU) project was proposed by **South Korea-ASEAN Summit 2009**.
  - At the first stage, the project is designed to help the **CLMV (Cambodia, Laos, Myanmar and Vietnam)**
  - ITC was mandated by the Ministry of Education, Youth and Sport (MoEYS) of Cambodia to implement the ACU Project
  - In 2011, ITC was selected by the selection committee from Korea for setting up **ASEAN Cyber University (ACU)**
  - In June 2012, ITC's e-Learning Center was established
    - ◆ **Multimedia studio room**
    - ◆ **Content development room**
    - ◆ **Operation room**

# Our story (stage 1)

*We start from scratch*

## **2012 - Start Stage 1**

Pilot the e-learning model  
2 Courses for 1 Department,  
7 Skill Persons

## **2014 - Expand to other departments**

8 Courses for 3 Departments,  
20 Skill Persons

## **2013 - Growth**

5 Courses for 2 Departments,  
14 Skill Persons

## **2015 - Expand to whole ITC**

13 Courses for 8 Departments  
40+ Skill Persons (including  
NIPTICT)

# Our story (stage 2)

*Moving forward*

## **2016 - Start Stage 2**

18 Courses

Expand to 2 public universities,  
ITC-OER Starts

## **2018 - Expand to more partners**

ITC: 27 Courses (3 partners)

UNESCO: 11 Courses

CIRAD & RUA: 9 Courses

PIC: 2 Courses

HUB Center of Course Operation

Expand to UBB and MCU

## **2017 - Expand to more universities**

Increase to 23 courses,

Expand to 3 public universities

ITC-OER Policy to MoEYS

## **2019 - Sustainability**

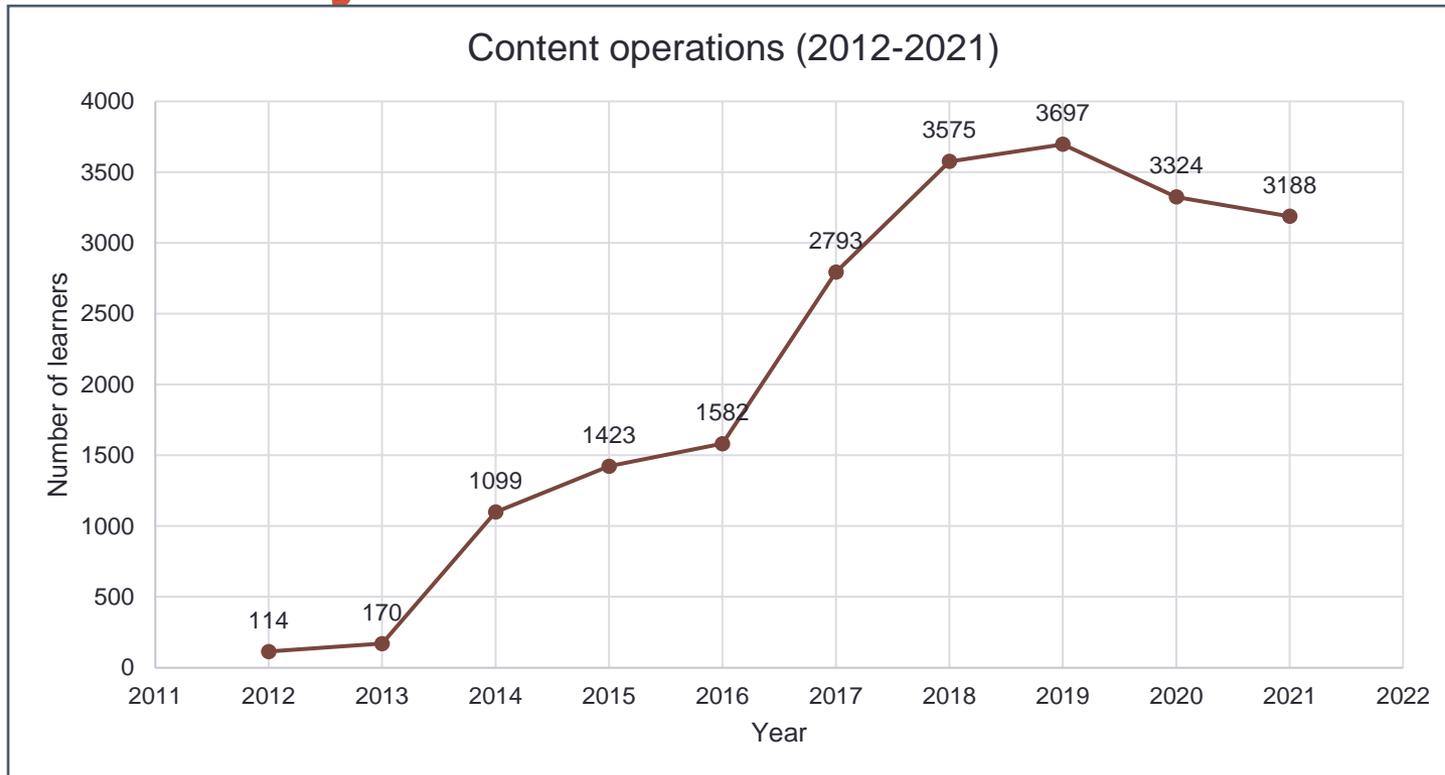
Continue development WB

Digital Education Center

STEM Teacher Training Center

UNESCO-BEEP Phase II

# Our story



**3188** Learners  
**/5264** **60.56%** of ITC students

**28** Courses operation

**27** Instructors

Not including partners contents

# HOW WE OPERATE E-LEARNING?

How do we operate e-learning at ITC?

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How Do We  
**Operate**  
e-learning  
at ITC?



## E-Learning Course Session

- E-learning *completion* = attendance + score
- **Flipped classroom method**
  - Theory in e-learning Course
  - Learning activities and toolkits
- *Some computer lab is reserved for e-learning*
  - ↳ You can learn anywhere by yourself

(\*\*\* Practice Session stays the same.)

## Final exam

E-Learning course lesson + **TP** lesson  
↳ **Offline final exam** with the school

# HOW WE SUPPORT STUDENTS?

Our human resources involved in e-learning operation

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Our team  
are waiting to  
help.

1

## Instructor

- Wrap Up session (summary + Q&A)
- Learning activities **every 2 or 3 week**
- Assignment online

2

## Teacher Assistant

- Guide you about e-learning
- Answer your questions
- Consult your problems

3

## LMS Administrator and technical support

- Explain the usage of LMS system
- Solve problems

(Mon-Fri 7am – 5pm) **B220**

# Support policy of e-learning model at ITC

*A policy set is a key success for driving e-Learning model in HE*

## School Support Policy

1

Support flipped and blended learning,  
Encourage online course operation

## Policy from Department

2

All departments are encouraged their  
lecturers / professors to develop online  
courses

## Support policy from eLearning Center, ITC

3

Support development and technical skills  
Incentive for course development and  
operation

# Development partners

*Partners are welcome*



교육부  
Ministry of  
Education



KOICA  
Korea International  
Cooperation Agency



KERIS  
KOREA EDUCATION & RESEARCH INFORMATION SERVICE



Soongsil University



건양대학교  
KONYANG UNIVERSITY



# Learning Management System (LMS)

*Based on Moodle*

moodle.itc.edu.kh

The screenshot displays the Moodle LMS interface for the Institute of Technology of Cambodia. The browser address bar shows the URL `moodle.itc.edu.kh`. The page header includes the ITC logo and the text "Institute of Technology of Cambodia". A search bar is located below the header, with the text "Search Courses" and a "Go" button. The main content area is titled "Available courses" and features six course cards, each with a thumbnail image, a title, and a "Course >" button. The courses are:

- UHST TestCourse (with ITC logo)
- Soil Mechanics (01. Introduction by Dr. PIM Sopheary)
- Geodesy and Topography (Introduction by Dr. HANG Sopheary)
- Environmental Geology (1. Human, Geology and the Environment)
- Basic Programming 101 (REAN Basic Programming 101)
- Algorithm and Programming I (1 Introduction Algorithm)

On the right side of the page, there is a "Navigation" section with links for "Home" and "Courses", and an "Online users" section showing "7 online users (last 5 minutes)".

## 3 types of eLearning contents:

- SCORM content
- HTML5 content
- Video content

## Sample contents of ITC

Engineering



Food Biotechnology



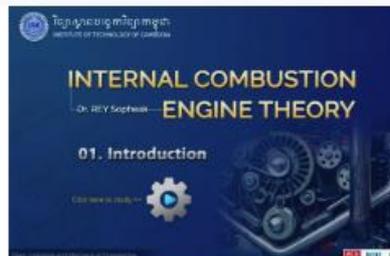
Environmental Science



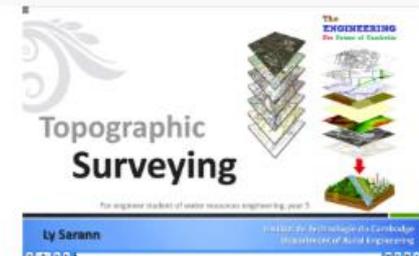
The Plumbing



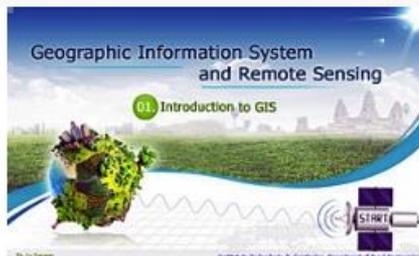
Soil Mechanics



Internal Combustion Engine The...



Topographic Surveying



Geographic Information System... 👤



Image Processing



Food Microbiology

# Host Agroecological contents from RUA partner



Cover crops

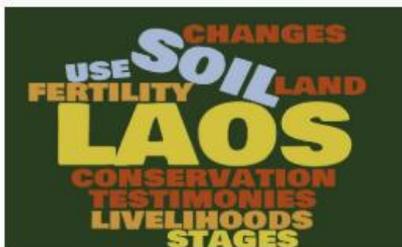
Cover Crop



Building A Healthy Soil



Conservation Agriculture And D...



Agrarian Transition And Opport...



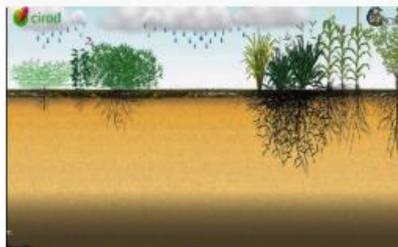
Agrarian System Analysis And D...



Land Use And Land Cover Chan...



Soil Aggregates



Soil Organic Matter



POWER TILLER, A VERSATILE MACHINE



A Versatile Machine



# Local capacity building training

## *Content development*

Basic Training on Content Development  
2015 - 2019



September 9th - 10th, 2019

**26** Trainees

**14** Institutions (including DIT/MoEYS)

# e-Learning workshop and working group meeting (2015 - 2018)

*Promote e-learning in Higher Education in Cambodia*

November 16th, 2018

**30** Participants **20** Organization



## Objective

- To share experiences of keys organizations involved in the operation and development of e-learning
- To figure out the challenge and possible solutions to the co-operation and operation of e-learning

## Challenges

- Infrastructure
- Human habit (instructor and student)

# UNESCO-BEEP (2018 – 2019)

Implementation of UNESCO Basic Education Equivalency Programme (BEEP)



- Develop online contents (11) for BEEP
- Operate BEEP contents
- Operate of Learning Center for out of school youth in BEEP
- Support training to other Learning Center (13)
- Transfer content operation to DIT/MoEYS in the future

Launching of first BEEP's Learning Center at ITC,  
February 17<sup>th</sup>, 2019

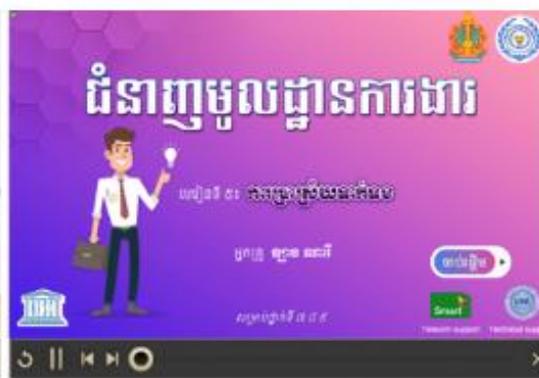
# BEEP operation

2000+ Online registration (including not targeted)

344 Official registration at LC (13) (pilot)



Entrepreneurship



Basic Employability



Physic



Math 1



Tourism



Chemistry

# Support to MoEYS during COVID-19 pandemic

- Secondary school content development for grade 12



- Consultancy on e-learning development

# The way forward

- World Bank, 2019 - 2023
  - ◆ Convert all ITC courses to online content
  - ◆ Improve T&L approach, and improve R&D
  - ◆ Support other Higher Education Institute to develop and apply e-learning
- STEM Teacher Training Center, 2020 - 2022
  - ◆ Work with EMCASST to develop STEM Teacher Training online learning material
  - ◆ Work with WBF to operate STEM Teacher Training Center
  - ◆ To be STEM Teacher Training in the future
- Collaboration with RUA and CIRAD to develop agriculture content: host regional content on agriculture



# Contact Us

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