

The logo of the Asian Development Bank (ADB), featuring the letters 'ADB' in white serif font on a dark blue square background.

ASIAN DEVELOPMENT BANK

**Regional Higher Education Forum – Higher Education of the Future**

**Leading Digital and Green Transformation through Collaboration**

*10 – 12 May 2023, Bangkok, Thailand*

# **HUTECH's Ecosystem: Opportunities and Challenges for Digital Transformation and Green Transition**

*Prof. Dr. Nguyen Trung Kien & Dr. Ly Thien Trang - HUTECH Education System*



# Overview of HUTECH Education System

- ✓ Founded in 1995
- ✓ A leading private education group in Vietnam
- ✓ 50,000 students from K-12 to higher education

## Members of Our Education System

- ✓ **Ho Chi Minh City University of Technology (HUTECH)**

 [www.hutech.edu.vn](http://www.hutech.edu.vn)

 <http://www.facebook.com/hutechuniversity>

 [twitter.com/hutechvietnam](https://twitter.com/hutechvietnam)

 [www.youtube.com/c/HUTECHChannel](https://www.youtube.com/c/HUTECHChannel)

- ✓ **Ho Chi Minh City University of Economics and Finance (UEF)**

 [www.uef.edu.vn](http://www.uef.edu.vn)

 [www.facebook.com/uef.edu.vn](http://www.facebook.com/uef.edu.vn)

 [www.linkedin.com/school/university-of-economics-and-finance](https://www.linkedin.com/school/university-of-economics-and-finance)

 [www.youtube.com/daihocuef](https://www.youtube.com/daihocuef)

- ✓ **Royal International Bilingual School (Royal School)**

 [www.royal.edu.vn](http://www.royal.edu.vn)

 [www.facebook.com/Royalschool.vn](http://www.facebook.com/Royalschool.vn)

 [www.youtube.com/c/RoyalSchool1](https://www.youtube.com/c/RoyalSchool1)



## HUTECH EDUCATION SYSTEM

*A leading private educational group in Viet Nam*



- Founded in 1995 as Ho Chi Minh City University of Engineering and Technology, in 2013 its name was changed as Ho Chi Minh City University of Technology (HUTECH).
- Accredited by the Vietnam MOET, a member of ASEAN University Network, a member of ACBSP.
- Achieved QS 4 Stars Overall (UK) in Nov 2022: 5 Stars in Teaching, Employability, Facility, Academic Development and Inclusiveness Criteria.
- 30,000 students in 59 undergraduate programs in the fields of Engineering and Technology, Applied Science, IT, Business-Commerce, Accounting-Banking, Tourism-Hospitality, Health Science, Languages, Communication, Arts and Architectures, Music, Social Science, and Law.
- 1,300 postgraduate Students (Master and Doctoral).
- Academic Staff: 1,800
- 1.000+ industry partners in many sectors.
- 95% graduate employability.
- Many international pathway and study abroad university partners in the U.S., Europe and Asia.
- 4 Campuses, the main Campus located in the heart of Ho Chi Minh City, 62 labs and workshops.



**Ho Chi Minh City,  
Vietnam**



### Strategic Priorities

- Developing more Campuses in Ho Chi Minh City
- Developing more Academic Programs (especially for postgraduate)
- Internationalization, Student & Faculty Exchange, Joint-Programs



- Founded in 2007 as Ho Chi Minh City University of Economics and Finance.
- Accredited by the Vietnam MOET at Institutional level in 2019 and 14 undergraduate programs accredited at program level.
- Achieved QS 4 Stars Overall (UK) in April 2022: 5 Stars in Teaching, Employability, Facility and Inclusiveness Criteria.
- Academic Staff: 650
- 17,000 Students in 36 English and Bi-lingual programs with a focus on Business, Finance, IT, Law, Communication, Hospitality Management and Languages.
- 500+ industry partners in many sectors.
- 95% graduate employability
- 30+ international pathway and study abroad university partners in the U.S., Australia, Europe and Asia.
- 2 Campuses, the main Campus located in the heart of Ho Chi Minh City; multiple sites available for future development including a showcase campus in South Saigon.



### Strategic Priorities

- Developing more training majors
- Developing new Campuses in Ho Chi Minh City
- Ranking Top 300 Asia
- International accreditation: ACBSP, FIBAA, etc.
- Internationalization, Student & Faculty Exchange, Joint-Programs



## Overview

- Multi-level education model from Kindergarten to Primary, Secondary and High School.
- 2 campuses, 2000 students.
- Providing a world-class education in both English and Vietnamese languages with the combination of the National Education Program and Cambridge International Education Program.
- Labs of STEM, physics, chemistry, biology, music, arts, ICT of international standard.

## Vision

The Royal School's vision is to provide world-class bilingual education in both the English and Vietnamese languages, to foster high achievers who not only excel in independent thinking, but are able to cope with challenges, know how to act on their ambitions through non-stop research and contemplation, as well as being able to contribute positively to their communities in the future.



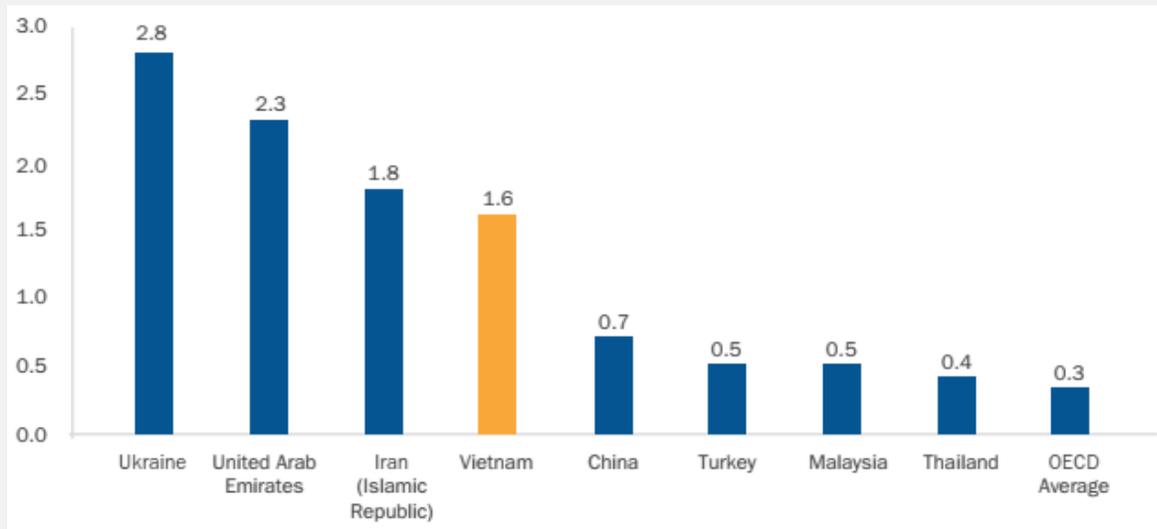
Digital transformation and green transition in Vietnam higher education institutions: a positive movement

# CHALLENGES IN NEW ERA 4.0

Digital transformation

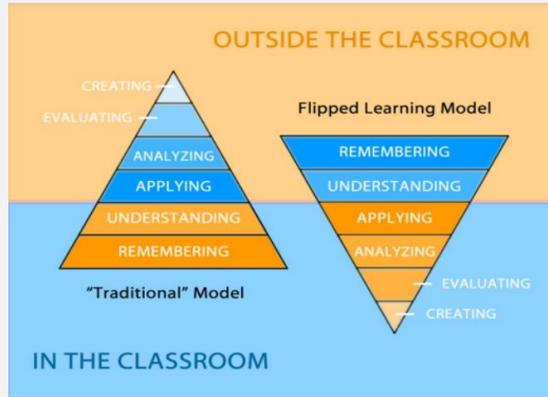


Climate change

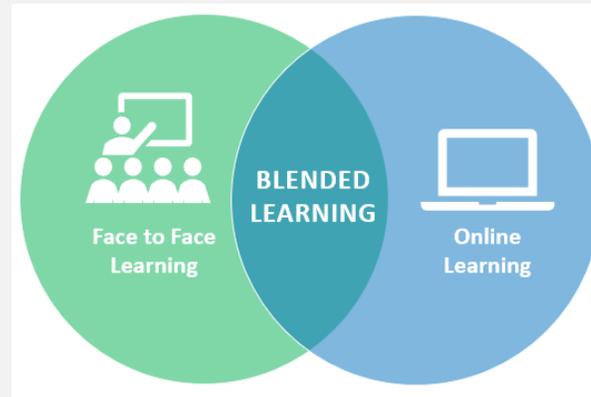


Carbon intensity of Vietnam's manufacturing exports [worldbank.com] 7

# CHALLENGES IN HIGHER EDUCATION



Flipped learning model



Blended learning model



Massive open online course

Education 4.0 ?

1



2

Education for environmental sustainability

Curricula adapted to digital transformation & green transition ?

DIFFICULTIES FOR  
VIETNAM  
UNIVERSITIES IN  
DIGITAL  
TRANSFORMATION

2020 — action plan —> 2025 / 2030

749/QĐ-TTg, 22/TT-BGDĐT, 11-CT/TW, 4740/QĐ-BGDĐT



IoT, AI, VR – AR, 5G

Digital transformation in  
higher education

Indicators and assessment of  
HEI digital transformation

academic  
affairs (8)

administration  
(6)

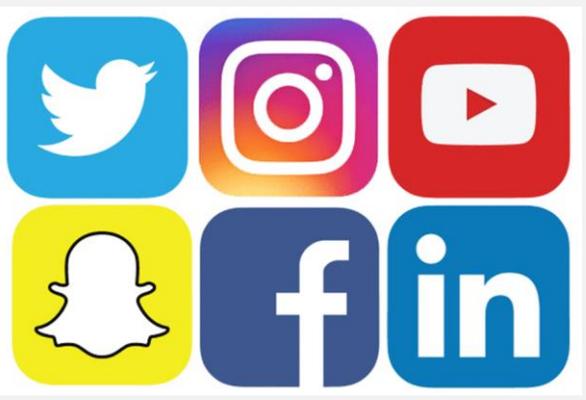
Learning society

How to do with relevant resources

3

How to  
do ?

# DIGITAL TRANSFORMATION IN VIETNAM HIGHER EDUCATION INSTITUTIONS



DIGITAL MEDIA



DIGITAL CAMPUS



DIGITAL WORKPLACE



DIGITAL LEARNING



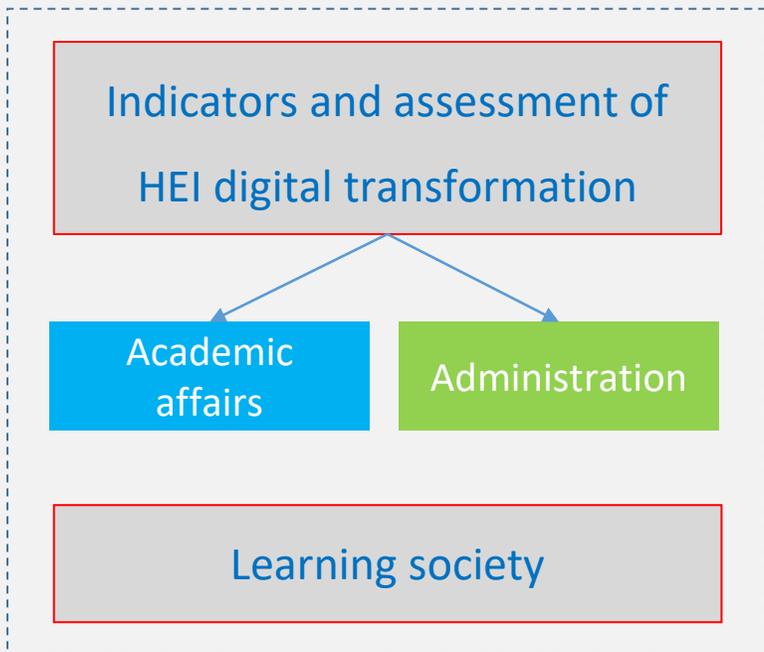
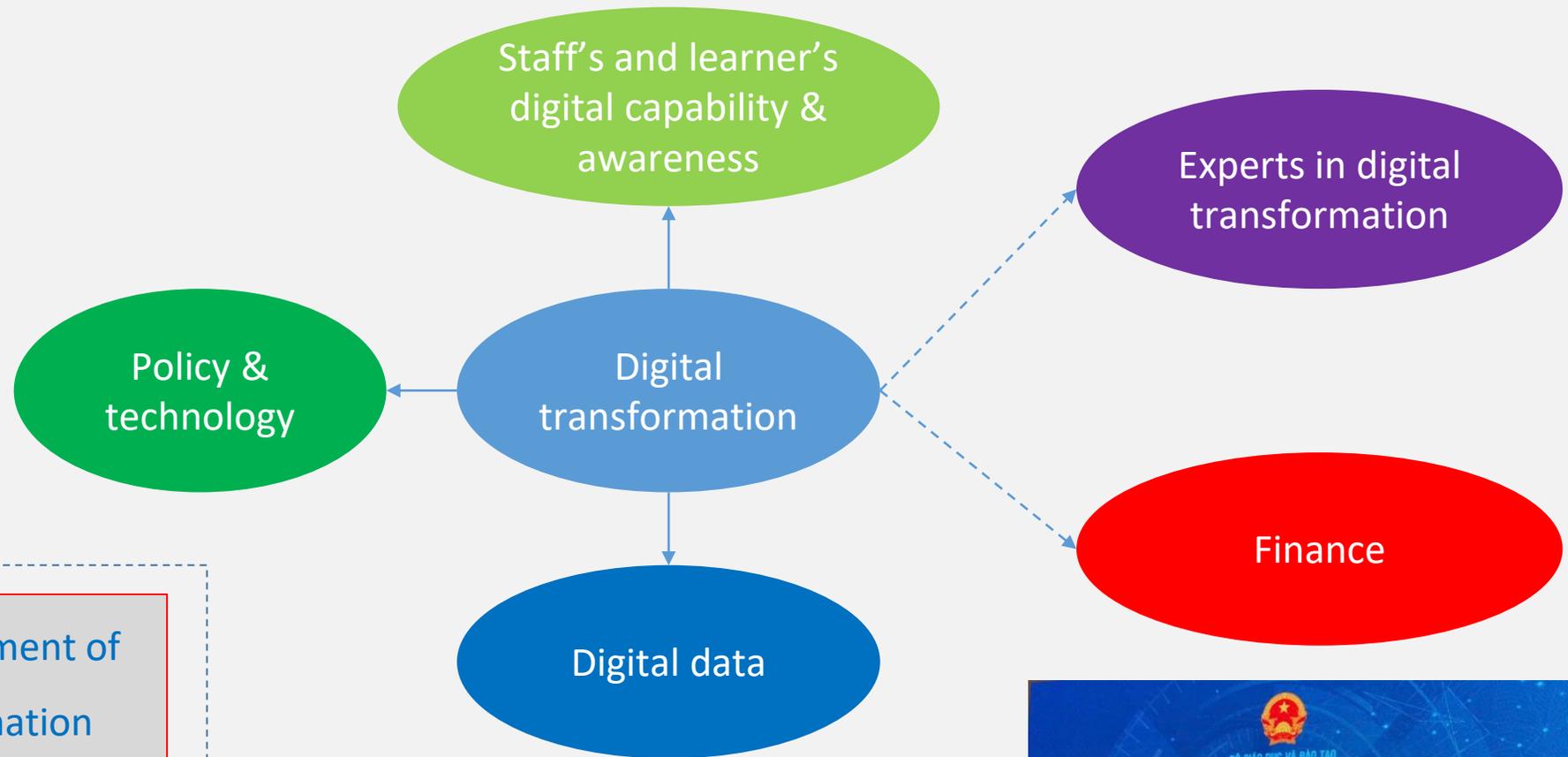
DATA CENTER



DIGITAL LIBRARY



DIFFICULTIES FOR  
VIETNAM  
UNIVERSITIES IN  
DIGITAL  
TRANSFORMATION



Series of digital transformation conferences in HE from 2020 till now

DIFFICULTIES FOR  
VIETNAM  
UNIVERSITIES IN  
GREEN TRANSITION

Green transition



Vietnam leading transition to clean energy in Southeast Asia

Circular economy



Indicators / framework of Education for Vietnam HEI ?

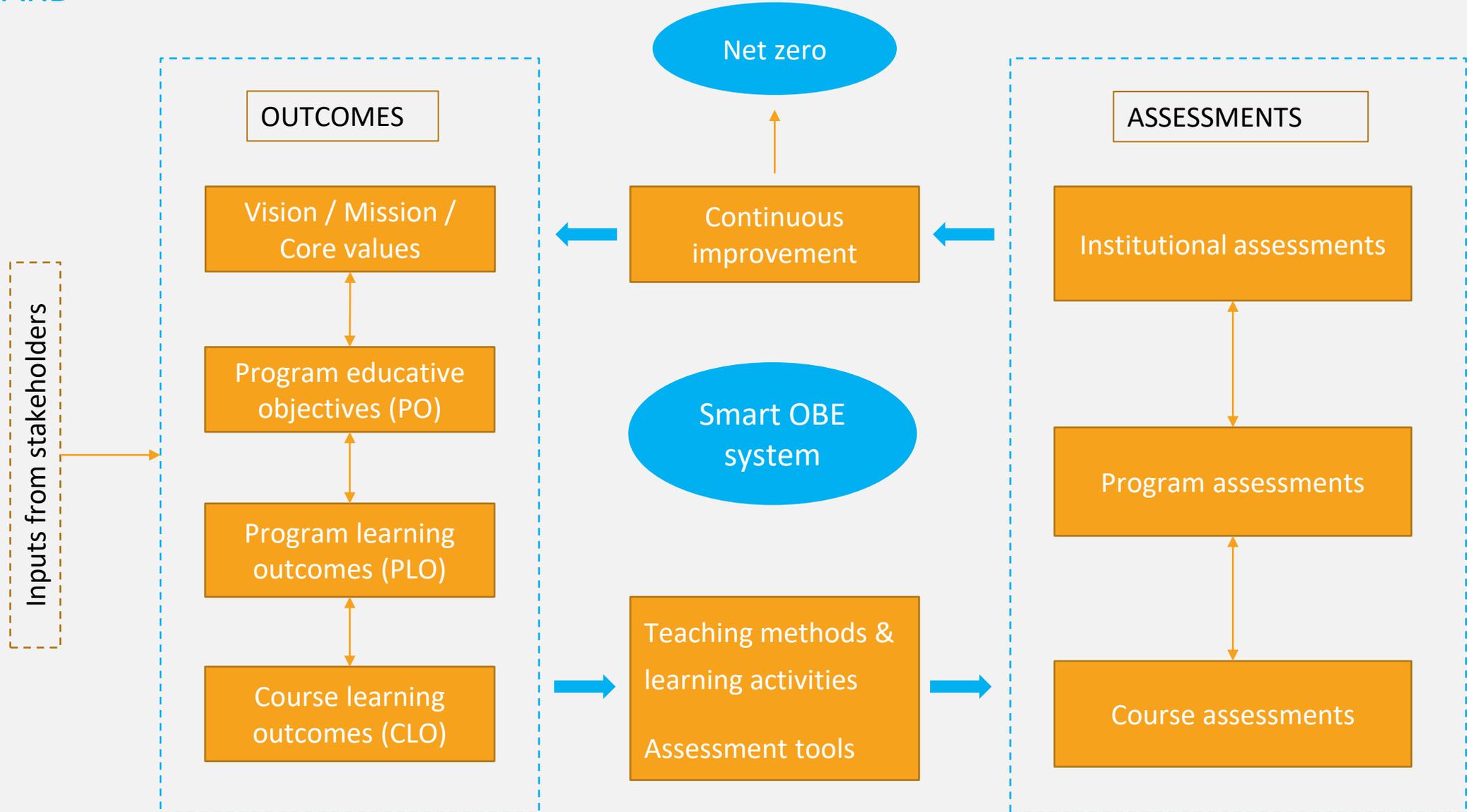
Vietnam's green agricultural transformation: moving to low-carbon rice



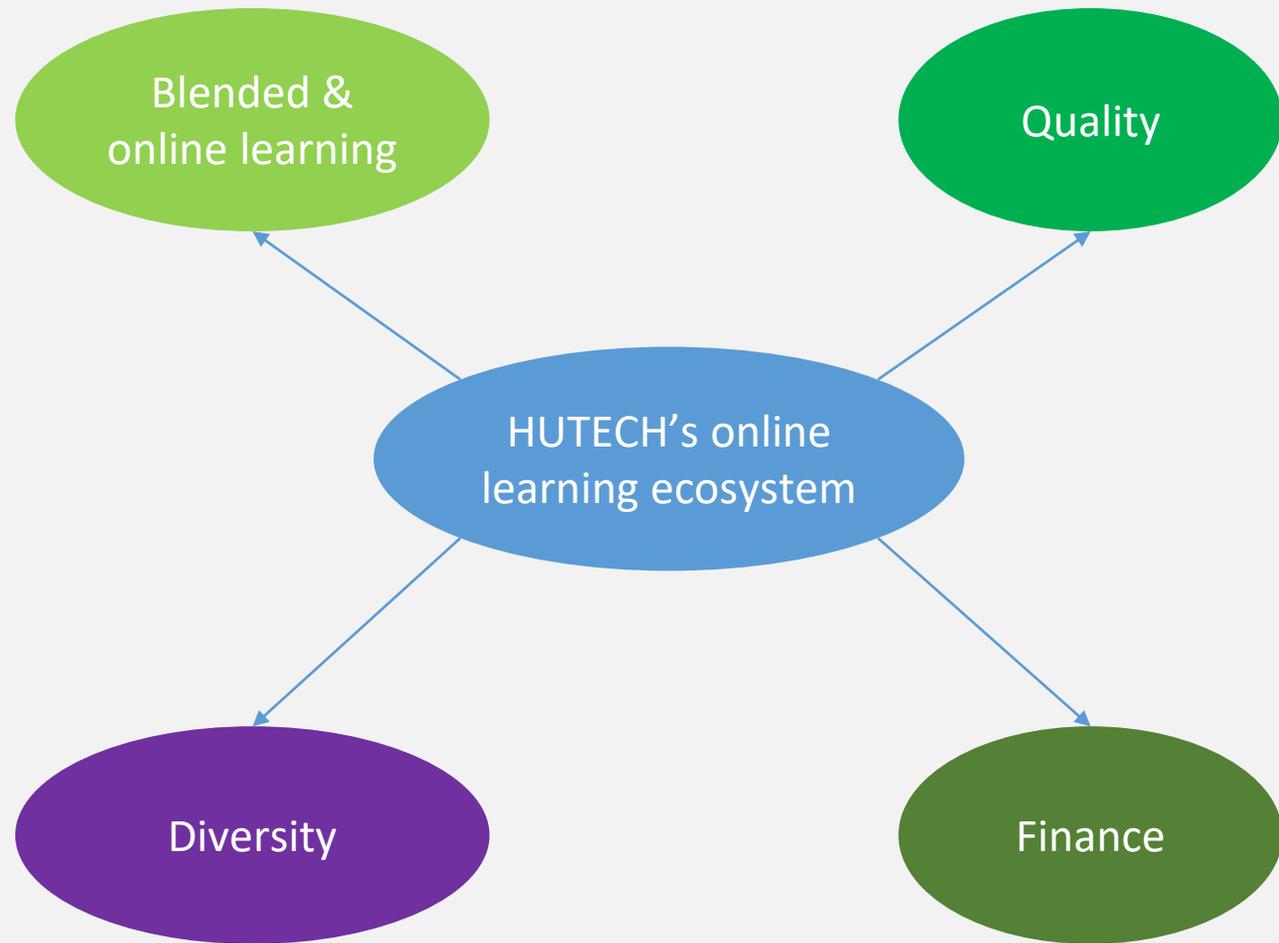
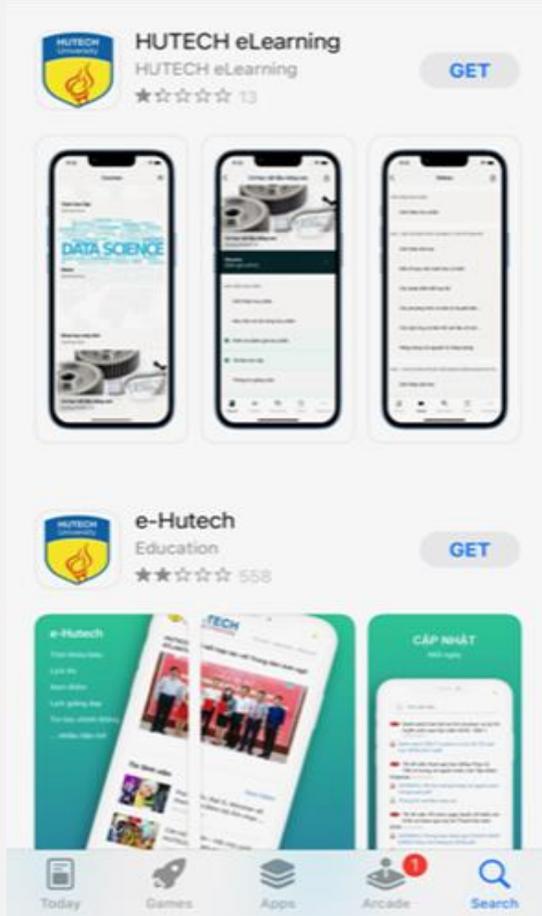
HUTECH's ecosystem: a private university model  
for digital transformation and green transition

# SMART OBE SYSTEM TOWARD TO NET ZERO

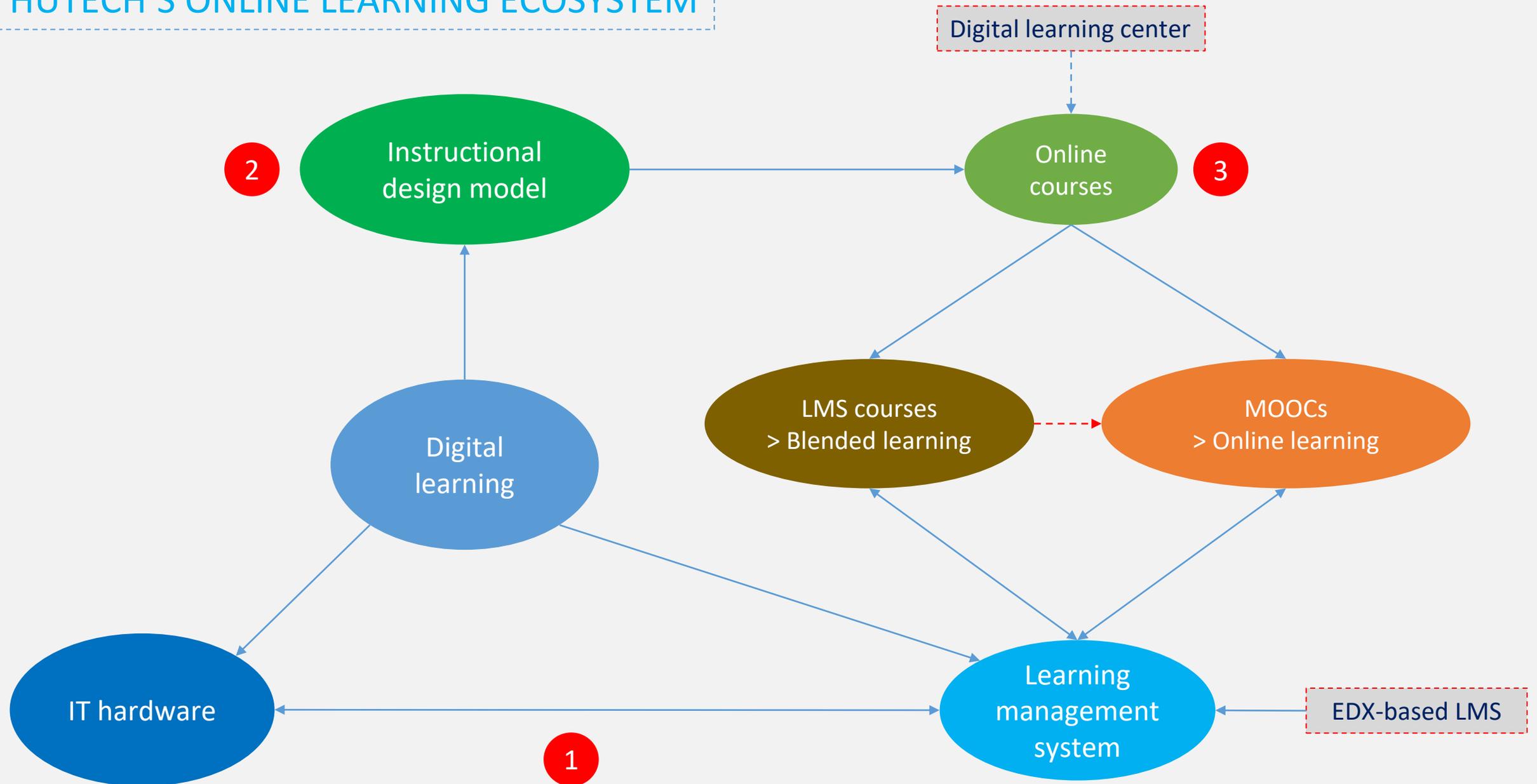
Minimize waste, reduce resource dependency, generate increased income, reduce environmental footprint



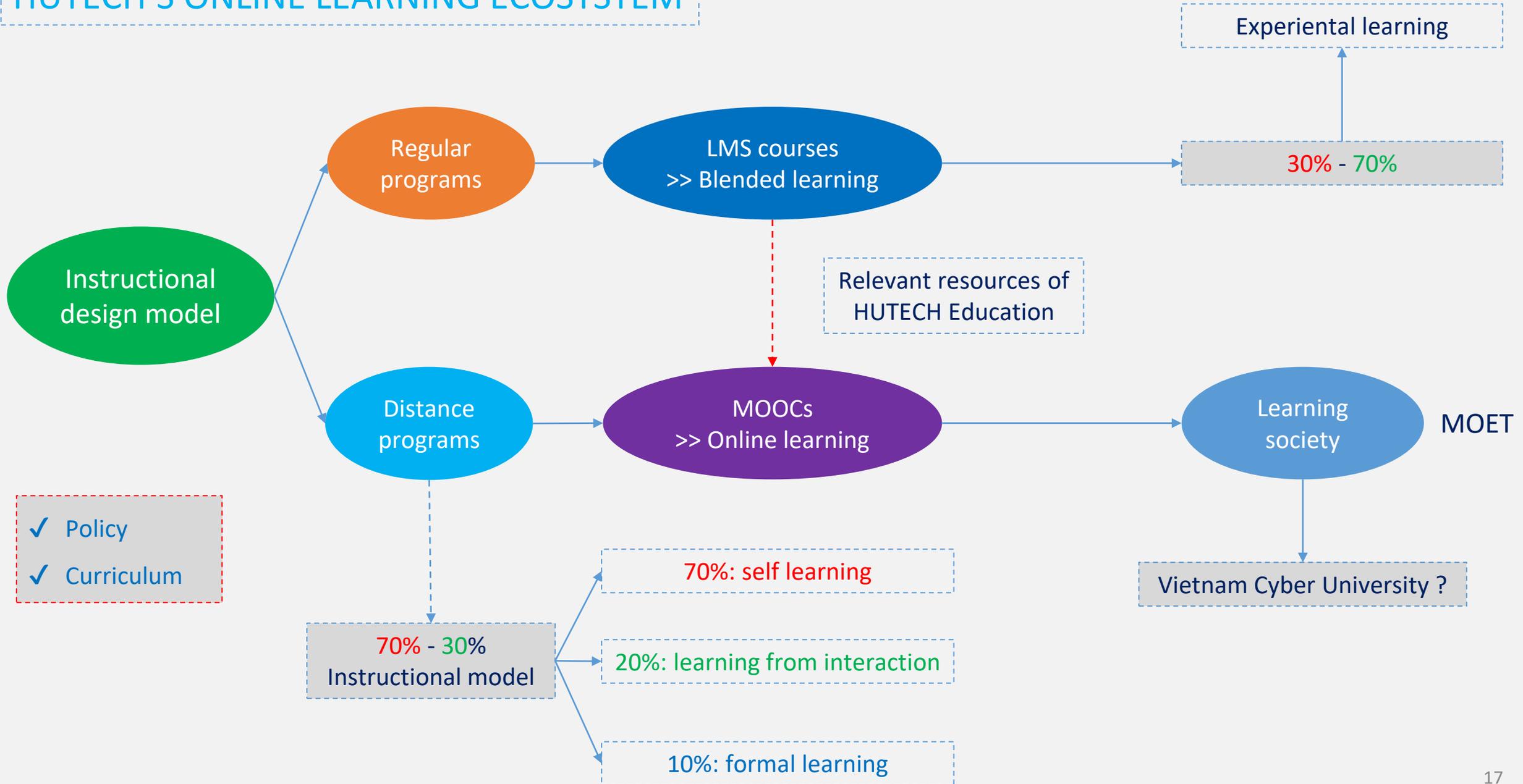
# DIGITAL TRANSFORMATION IN LEARNING AND TEACHING



# HUTECH'S ONLINE LEARNING ECOSYSTEM

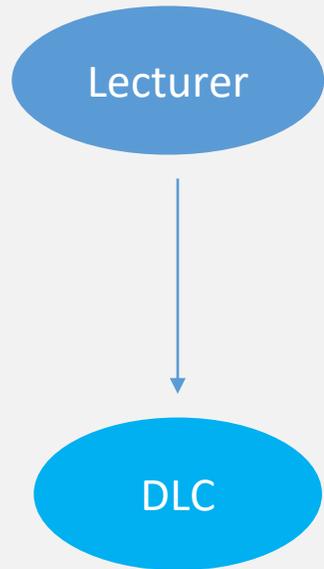


# HUTECH'S ONLINE LEARNING ECOSYSTEM



# HUTECH'S ONLINE LEARNING ECOSYSTEM

## ❖ Construction of digital materials



- Graphic design
- Editing
- Education



# HUTECH'S ONLINE LEARNING ECOSYSTEM

## ❖ Instructional design script

Required materials		Learning outcomes	Learning activities		Assessments	
Video, readings, presentation, codes,...	<input checked="" type="checkbox"/>	Apply (Apply knowledge to different situations)	Watching video, reading documents of practical examples, problem-solving process, application, programming codes,...., >> case studies	<input checked="" type="checkbox"/>	Essay by using the acquired knowledges to solve similar problems in new circumstances	<input checked="" type="checkbox"/>
Description of problems/projects, rubric of assessments, guides, procedure,...	<input checked="" type="checkbox"/>		Raise problems, provide procedure to solve problems >> Problem-solving task	<input checked="" type="checkbox"/>	Quiz	<input checked="" type="checkbox"/>
Assignments	<input checked="" type="checkbox"/>		Ask students to apply the acquired knowledges to solve similar problems in new circumstances	<input checked="" type="checkbox"/>	Assignment of problem-solving task	<input checked="" type="checkbox"/>
Question, survey, Quiz	<input checked="" type="checkbox"/>		Ask questions, do survey, quiz, assignments to assess the learning outcomes of learning. Use Bloom's taxonomy verb fitted to the learning outcomes such as calculate, realize, use, apply, solve,...	<input checked="" type="checkbox"/>		

# HUTECH'S ONLINE LEARNING ECOSYSTEM

## ❖ LMS-course standards and evaluation

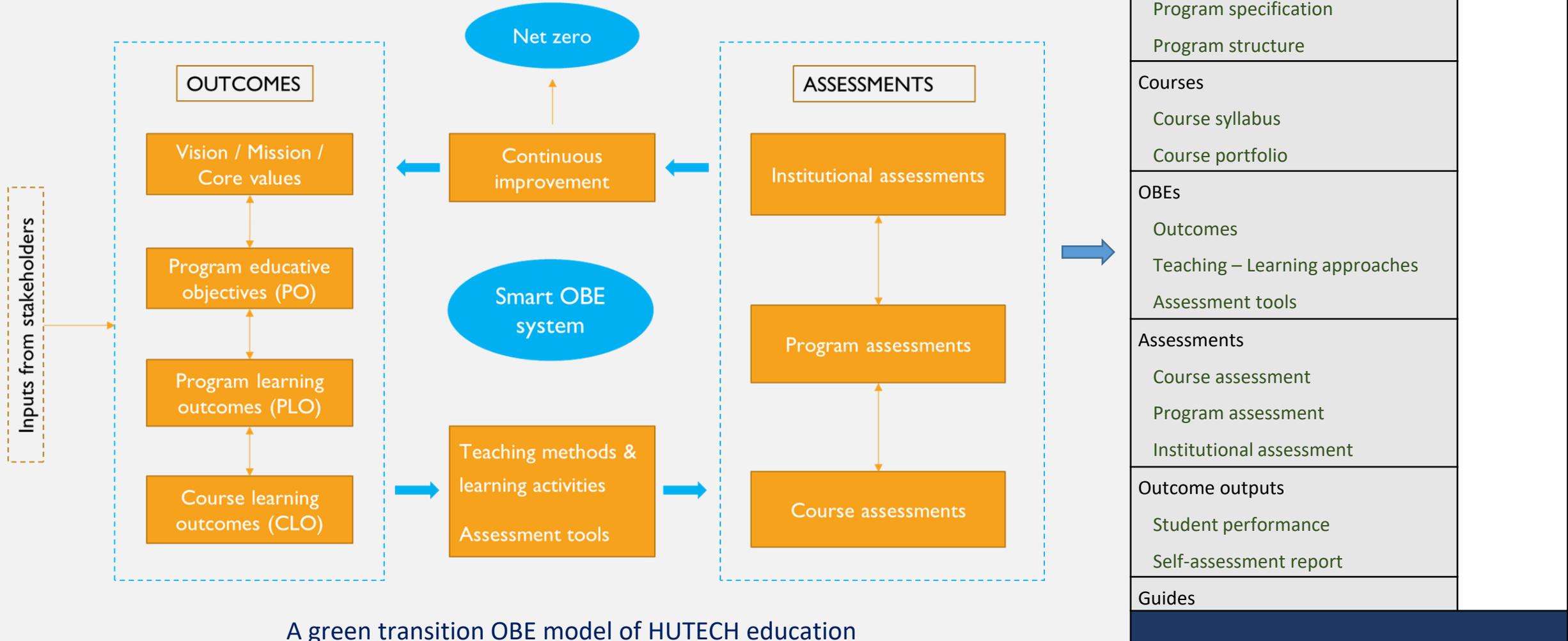
5 criteria

20  
indicator

- ✓ Objectives, learning activities and assessments aligned to course syllabus
- ✓ Course information, learner instruction, feedback, instructor-learner interaction well established
- ✓ Learning materials well constructed for self-pace learning
- ✓ Learning activities and assessments designed for online learning and aligned with learning outcomes
- ✓ Instructional design appropriately structured

# HUTECH'S ECOSYSTEM FOR GREEN TRANSITION

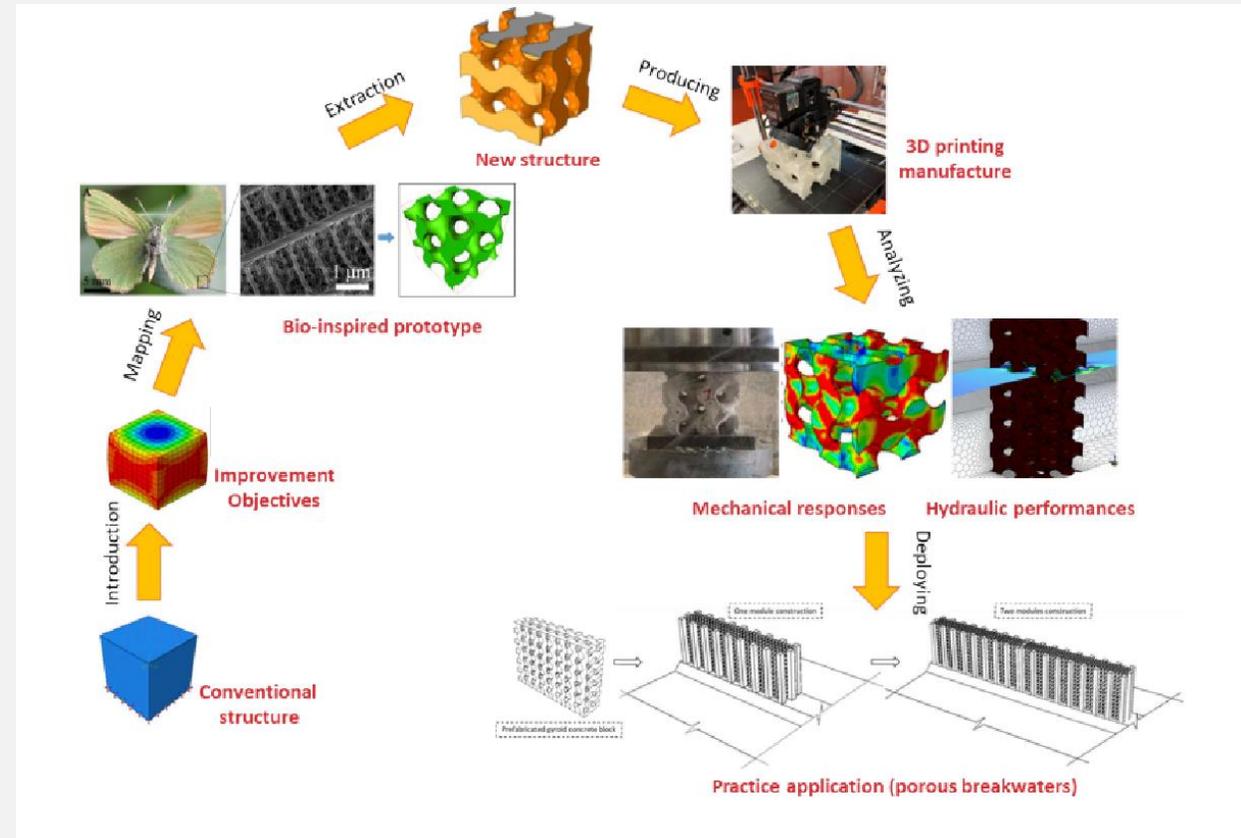
Minimize waste, reduce resource dependency, generate increased income, reduce environmental footprint



A green transition OBE model of HUTECH education

HUTECH University	
OBES	
Institution	
Programs	Program specification Program structure
Courses	Course syllabus Course portfolio
OBES	Outcomes Teaching – Learning approaches Assessment tools
Assessments	Course assessment Program assessment Institutional assessment
Outcome outputs	Student performance Self-assessment report
Guides	

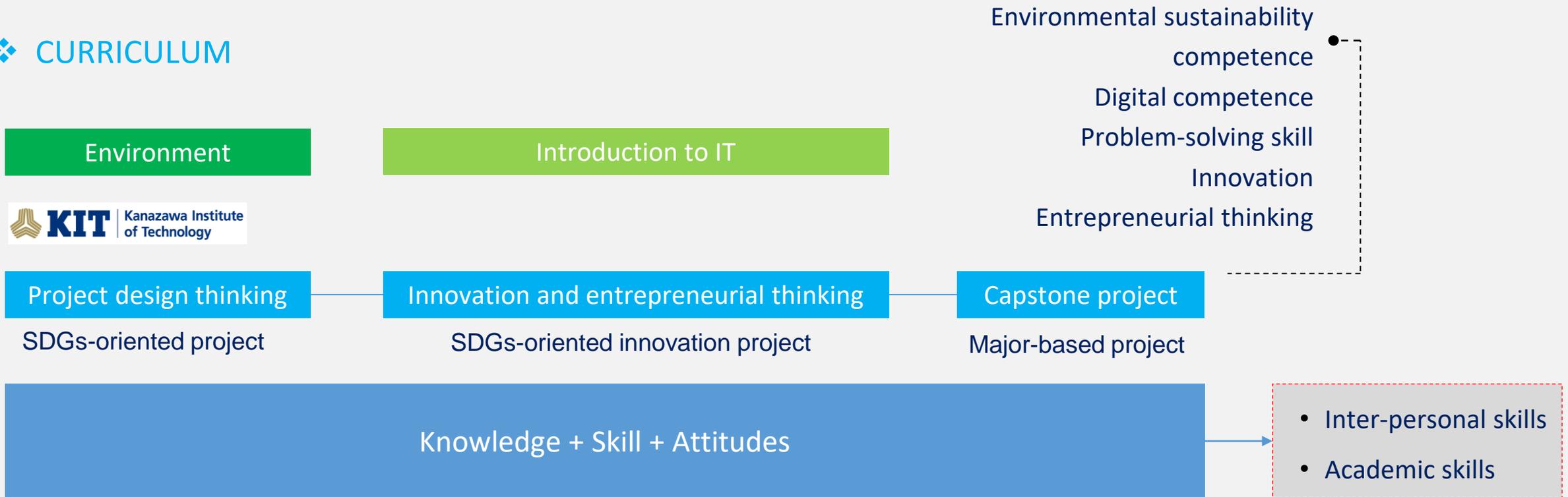
# HUTECH'S ECOSYSTEM FOR GREEN TRANSITION



A green transition research model of HUTECH education

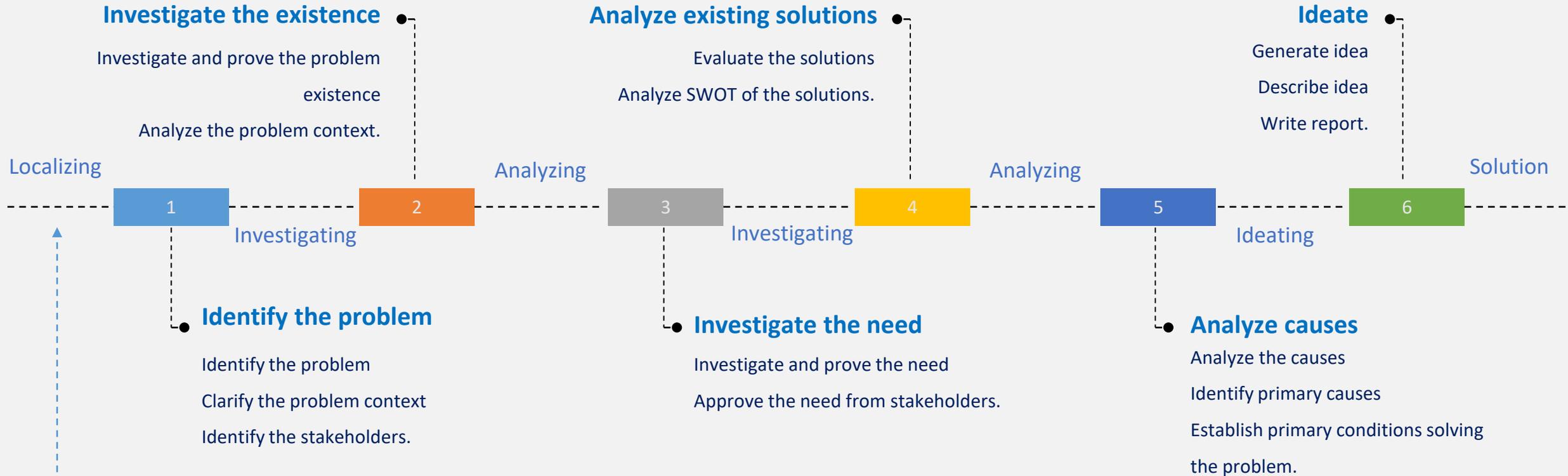
# HUTECH'S ECOSYSTEM FOR GREEN TRANSITION

## ❖ CURRICULUM

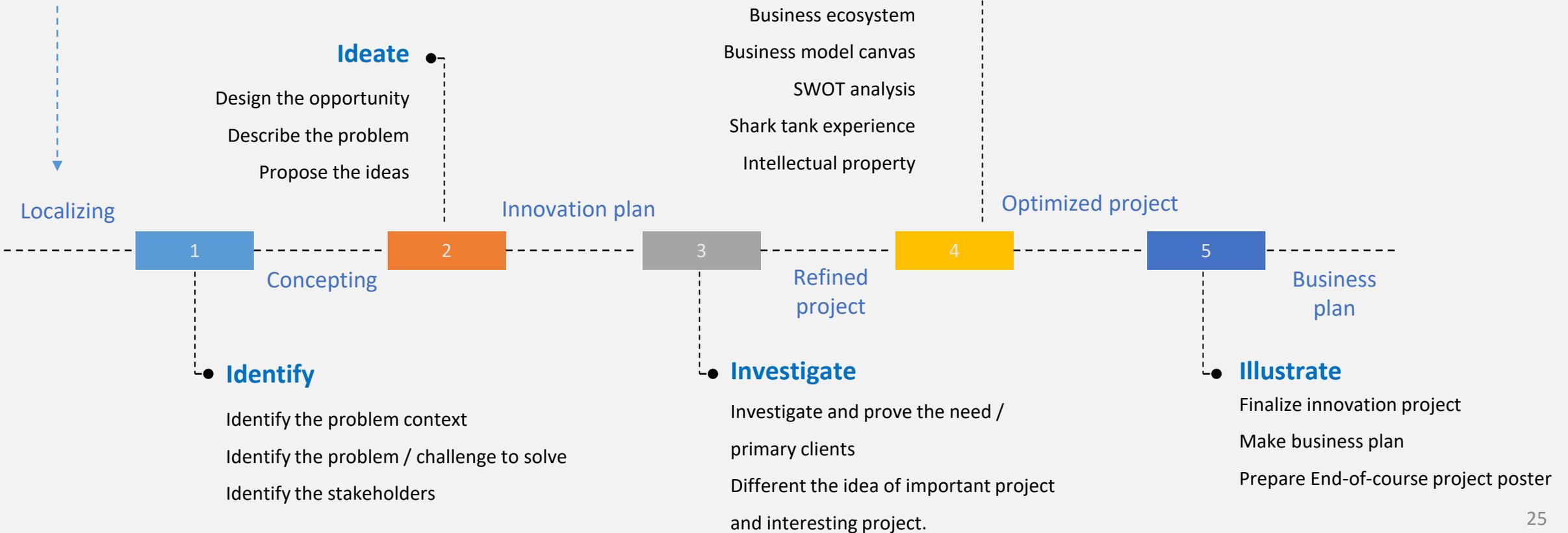


Syllabus	Year 1		Year 2		Year 3		Year 4	
Project design thinking	Course							
Innovation and entrepreneurial thinking	Course							
Environment	Course							
Introduction to information technology	Course							

# PROJECT DESIGN THINKING

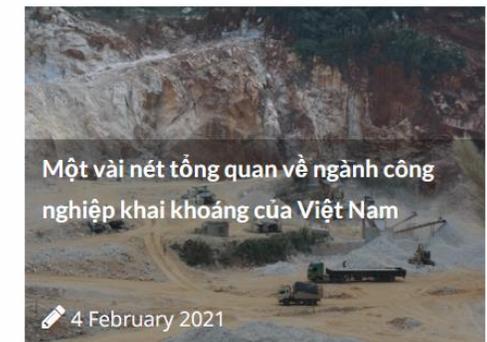


# INNOVATION AND ENTREPRENEURIAL THINKING



# SUBJECTS

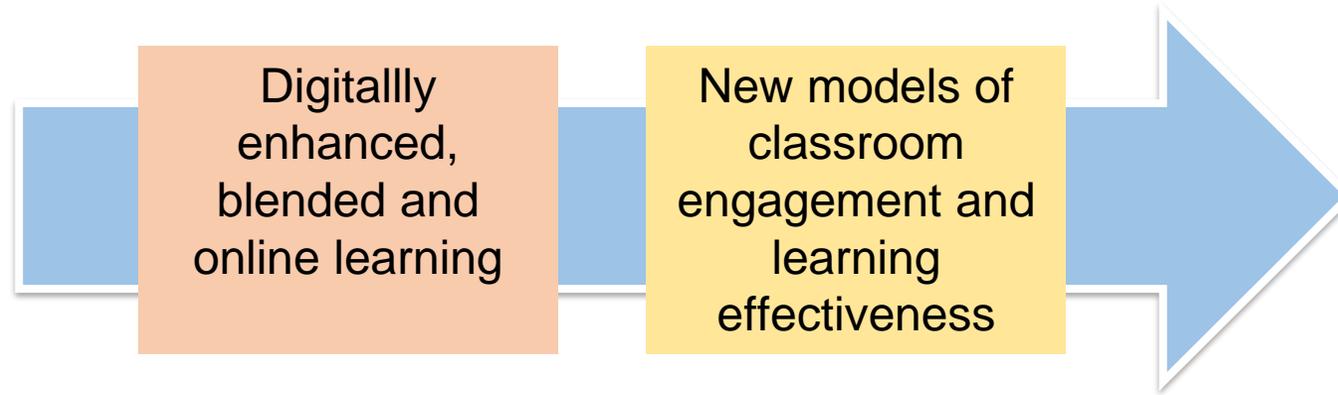
(Land, water,  
environment  
and climate  
change)



HUTECH & UEF  
PROJECT  
DESIGN SHOW



# HUTECH & UEF FACULTY DEVELOPMENT



1. Train the trainers
  - Train the trainers approach through 25 faculty mentors
  - Faculty dedication: 25 hours
  - Online, independent work (hours)
  - 3 workshops (6 hours)
  - 2 peers interaction (3 hours)
  - Application to own teaching practice (1 hours)
2. Expand the training to more faculty members: each program provided a training to more about 60 faculty members

## OUTCOMES OF DIGITAL TRANSFORMATION AND GREEN TRANSITION

- Enhance student engagement and learning outcomes
- Improve accessibility, diversity and inclusion
- Foster innovation and creativity
- Enhance awareness and encourage good practices about green transition among students and staff toward sustainable development and address global challenges.

Q&A

The image features the text "Q&A" rendered in a bold, three-dimensional, blue font. The characters are thick and blocky, with a slight shadow cast beneath them, giving them a sense of depth. The "Q" is on the left, followed by the ampersand "&" in the middle, and the "A" on the right. The entire graphic is set against a plain white background.

