

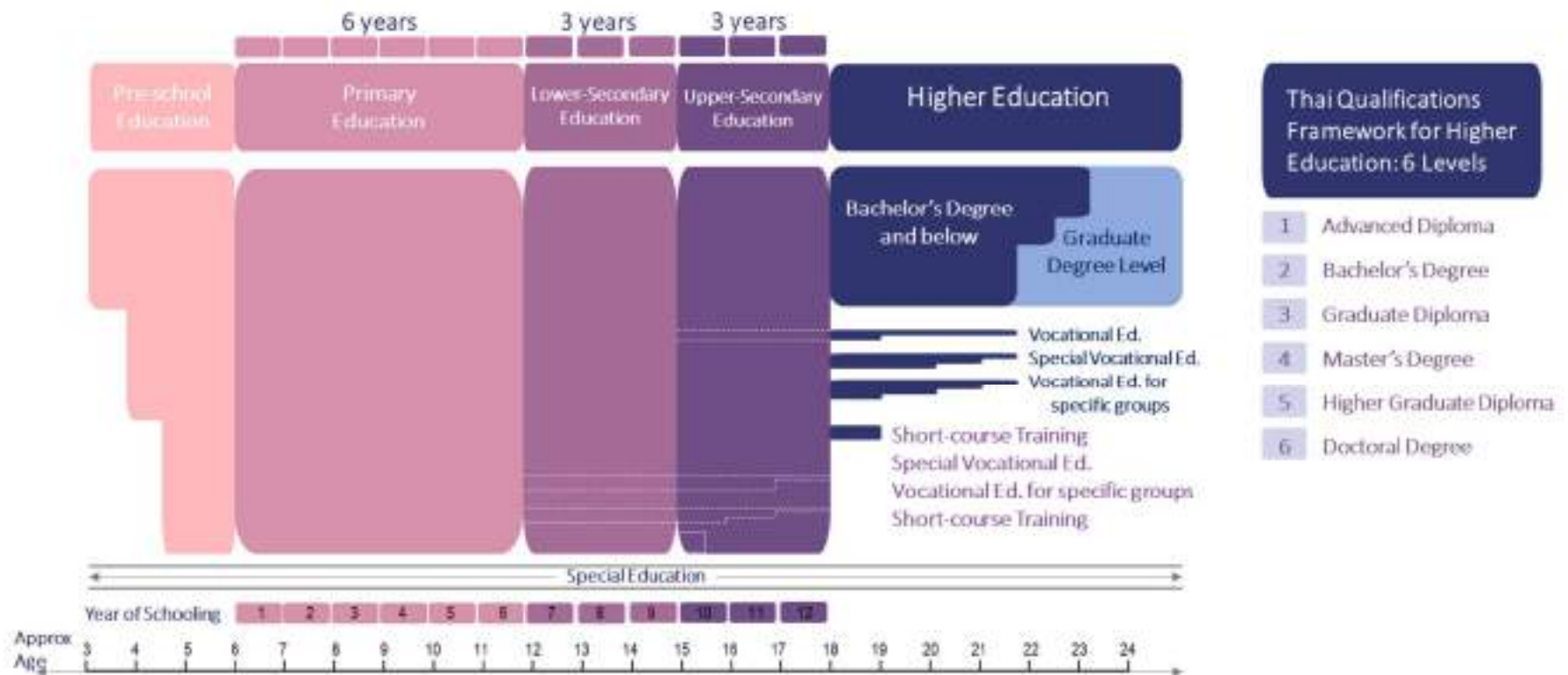


# THAILAND'S EDUCATION SYSTEM and THAI QUALIFICATIONS FRAMEWORK

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King Mongkut's University of Technology Thonburi  
National Information Centre (NIC) - Japan  
January 30, 2023



# Thai Education System



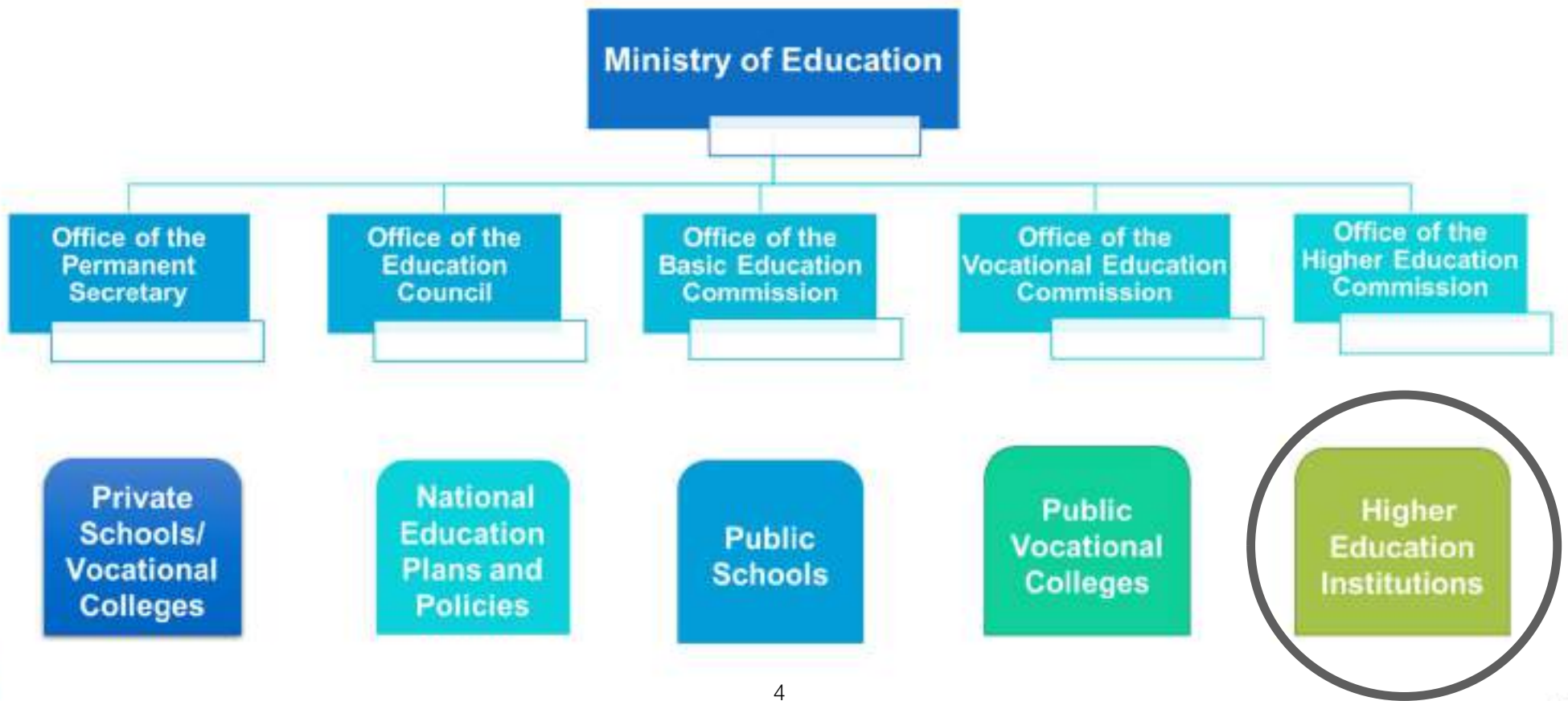
# Thailand's Higher Education Admission System

Completion of secondary education is required for TCAS applicants. Students who have completed secondary education abroad need to pass an additional General Educational Development (GED) test of subjects: language reading and writing, social studies, mathematics, and science, with minimum 145 points for each subject, and also submit an Equivalence Certificate along with GPAX (Cumulative Grade Point Average) Equivalence Certificate.



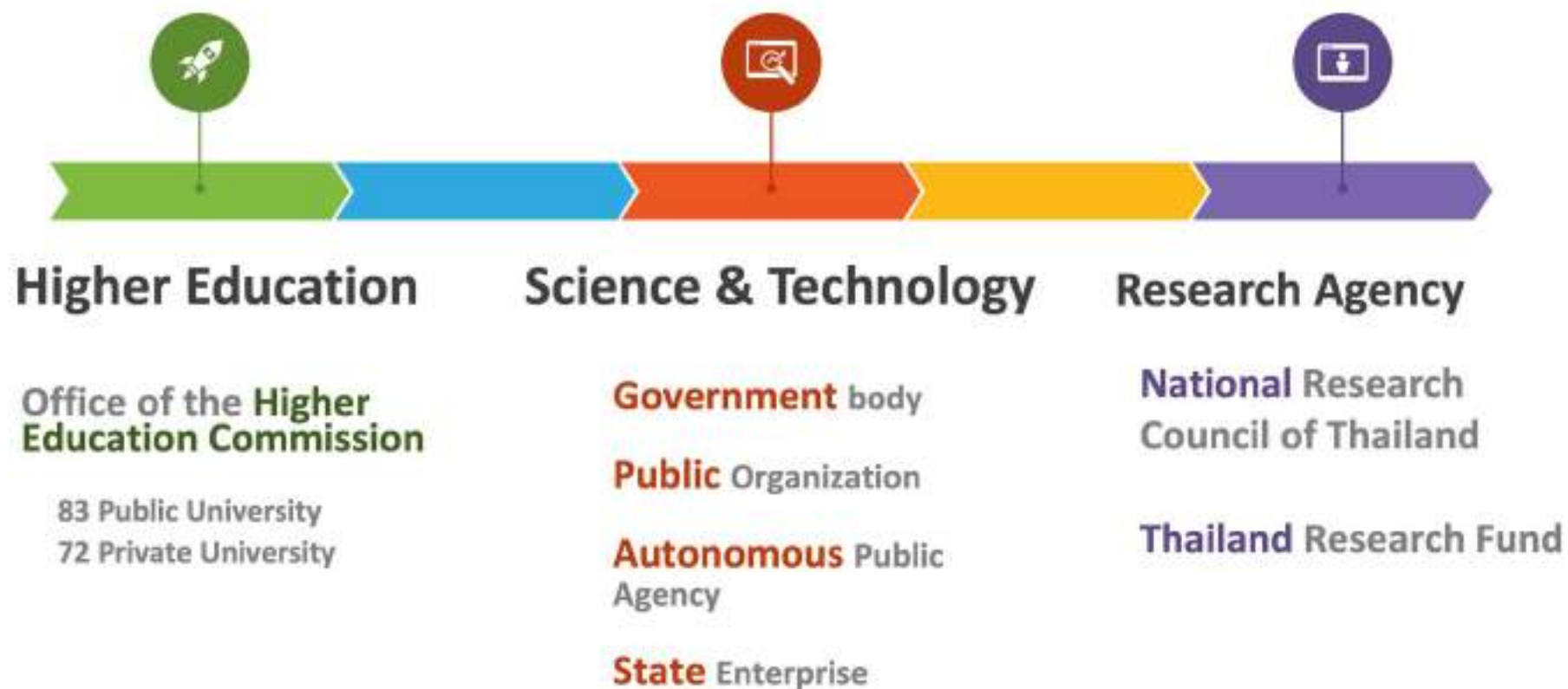
- The first round: **Portfolios**
- The second round: **Quota**
- The third round: **General Admission**
- The fourth round: **Direct Admission**

# Education in Thailand: **Before 2 May 2019**



# Education in Thailand : From OHEC to MHESI

Since 2 May 2019





# VISION

กระทรวงการอุดมศึกษา วิทยาศาสตร์ วิจัยและนวัตกรรม  
Ministry of Higher Education, Science, Research and Innovation

MHESI is a leading organization to drive the Higher Education, Science, Research and Innovation to international standard and sustainably enhance the nation's competitiveness to international level within 2037.



# MHESI: Organization

The Ministry of Higher Education  
Science Research and Innovation

## Government

- Office of the Minister
- Office of the Permanent Secretary
- National Research Council of Thailand
- Department of Science Service
- Office of Atoms for Peace
- Public University

## Public Organization

- Geo-Informatics and Space Technology Development Agency
- Thailand Institute of Nuclear Technology
- Thai Synchrotron National Lab
- National Astronomical Research Institute of Thailand
- Hydro-Informatics Institute
- National Innovation Agency
- Thailand Center of Excellence for Life Sciences

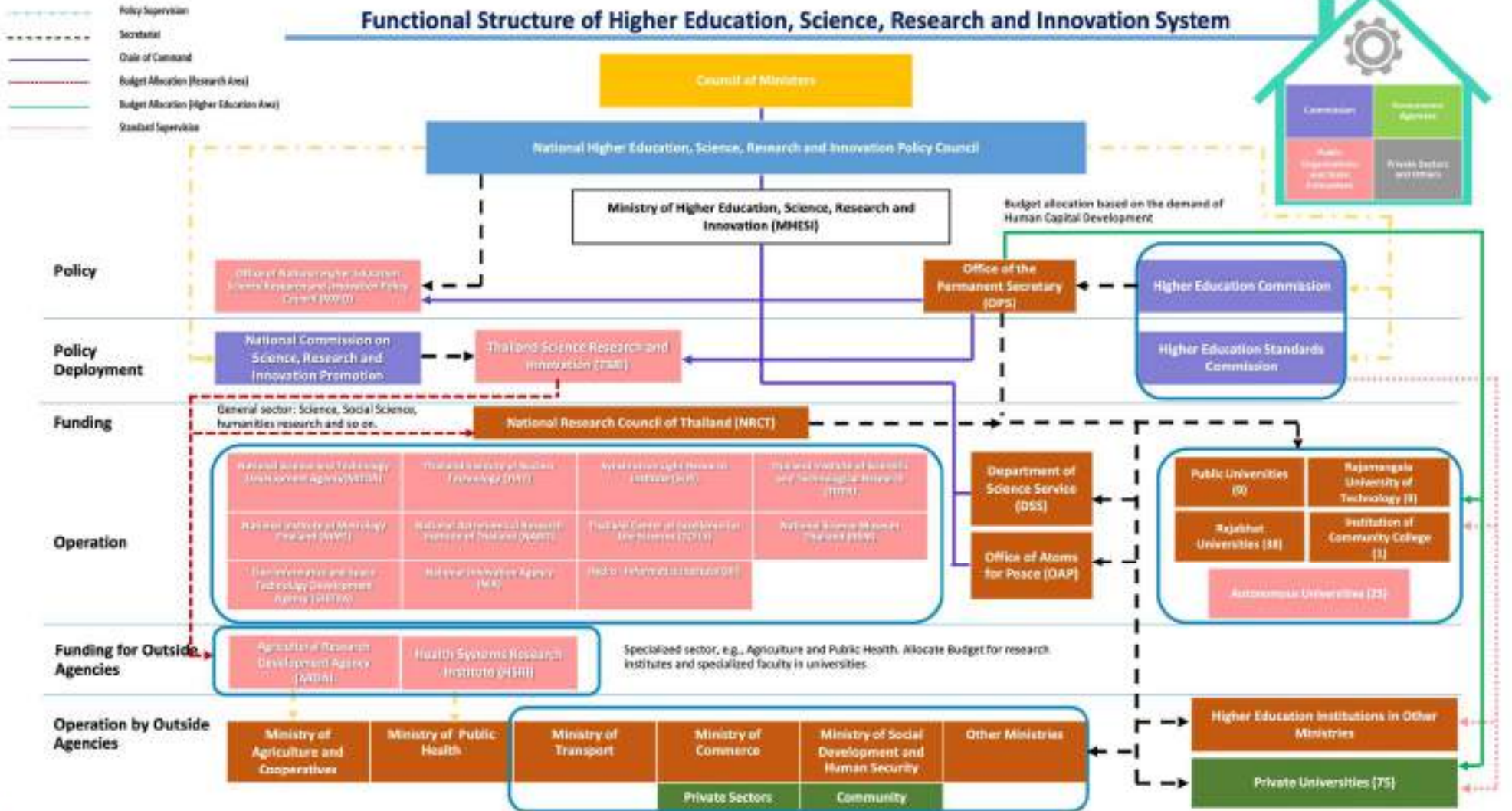
## Autonomous Public Agency

- Office of National Higher Education Science Research and Innovation Policy Council
- Thailand Science, Research and Innovation
- National Science and Technology Development Agency
- National Institute of Metrology of Thailand
- Autonomous University

## State Enterprise

- Thailand Institute of Scientific and Technological Research
- National Science Museum of Thailand

## Functional Structure of Higher Education, Science, Research and Innovation System





# Ministry of Higher Education, Science, Research and Innovation: Policies and Strategies (2020-2027)

## 1. Manpower and Knowledge Development

- P.1 National Brain Power Ecosystem
- P.2 Highly Skilled Workforce for Eastern Economic Corridor (EEC) and New Growth Engines
- P.3 Lifelong Education and Future Skills Set
- P.4 Artificial intelligence for All
- P.5 Frontier research
- P.6 Big Science

## 4. Research and Development for Area-Based and Inclusiveness

- P.13 Local Economy and Innovation Community
- P.14 Poverty Eradication
- P.15 Smart/Livable City



## 2. Research, Development and Innovation for Grand Challenges

- P.7 Resources, Environment, and Agriculture
- P.8 Aging Society
- P.9 Quality of Life and Security

## 3. Research, Development and Innovation for Competitiveness

- P.10 RDI for New Economy
- P.11 Startup, IDEs and Innovation Ecosystem
- P.12 National Quality Infrastructure and Services

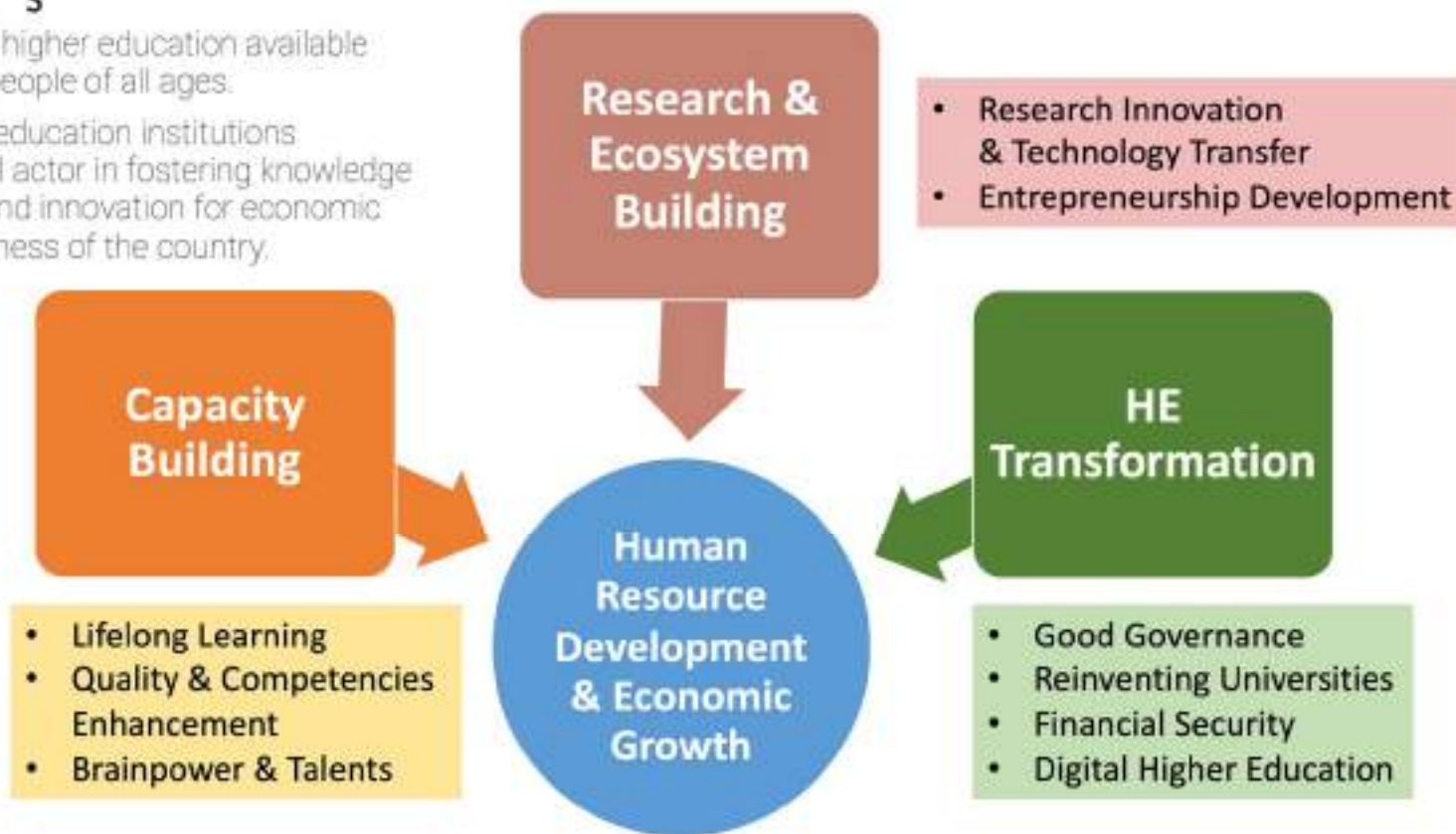
## P.16 Reinventing Universities & Research Institutes

## P. 17 Research & Innovation for National Crisis

# Higher Education Plan for Human Resource Development (2023-2027)

## GOALS

- High quality higher education available for all Thai people of all ages.
- Thai higher education institutions are essential actor in fostering knowledge, research, and innovation for economic competitiveness of the country.



## Strategic Direction for Post-COVID 19 Recovery

**1** Turning Poverty to Prosperity

**2** Promoting Human Values, Social Changes and Sustainability

**3** Implementing Bio-Circular-Green Economy

**4** Transforming Industry and Building Foundation for the Future

**5** Reinventing Higher Education and Human Capital

**6** Reforming HESRI System

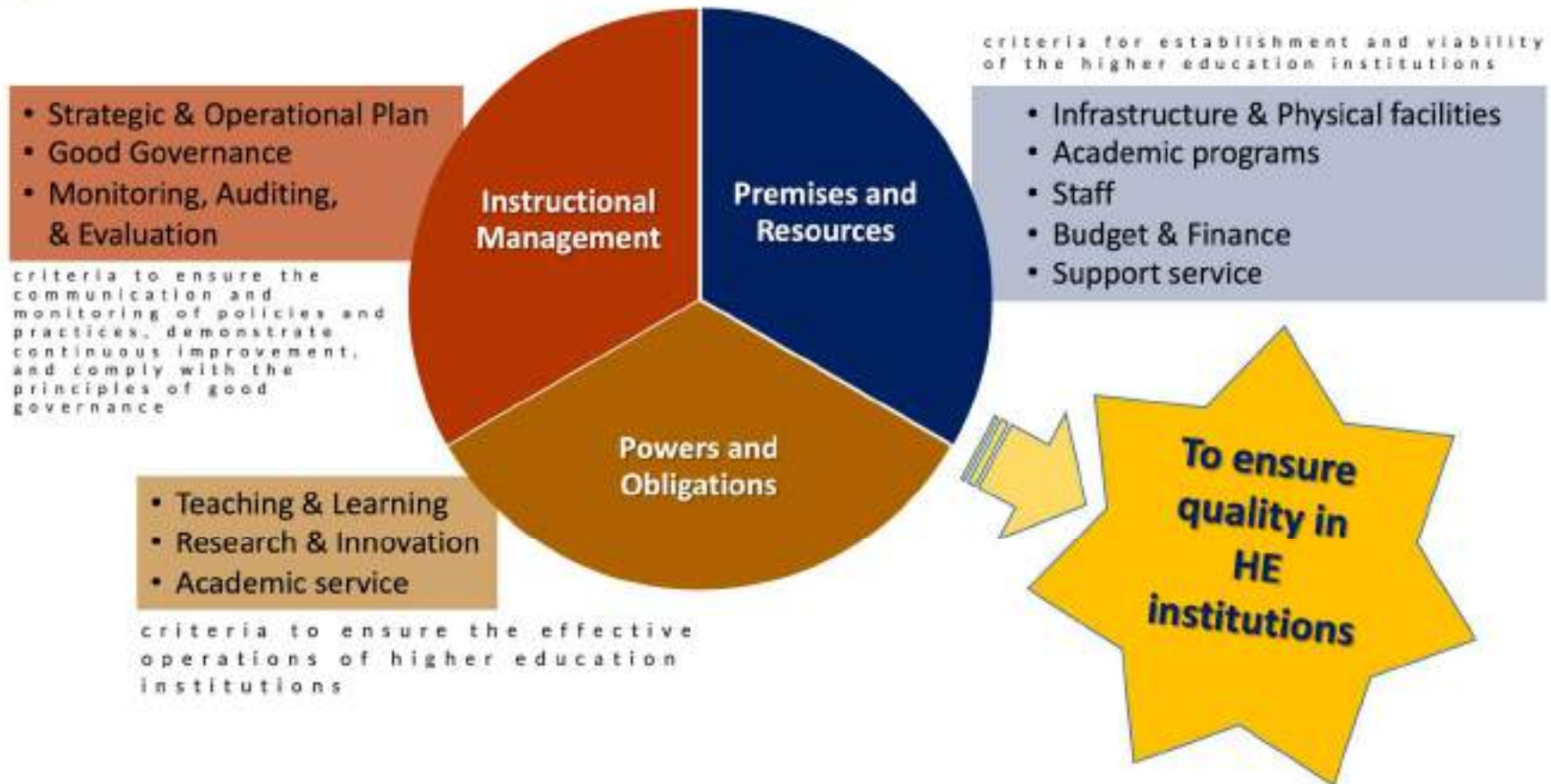
# Thai Higher Education Standards

- I. Ministerial Regulations on Standards for Higher Education Provision
- II. Ministerial Regulation on Standards for Higher Education Curriculum





# Ministerial Regulations on Standards for HE Provision



## Ministerial Regulations on Standards for HE Qualifications



### Level of study

- Associate Degree
- Bachelor Degree
- Graduate Degree

### Learning outcome

- Knowledge
- Skills
- Ethic and Character

### Qualified programs

- Publicized by MHESI

### Monitoring & Evaluation

- By the Commission on HE Standards to ensure the quality of HE

Improve the level of competences, skills and employability potential

Promote a culture of lifelong learning

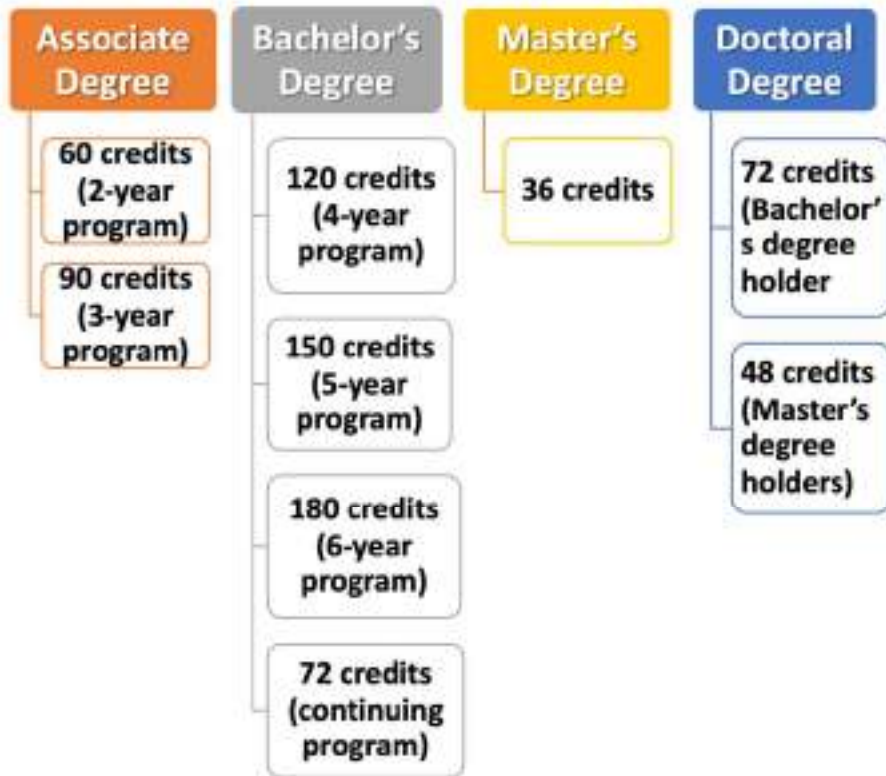
Enhance flexible learning pathways

Emphasize institutional academic freedom

# HE Curriculum Standards



## Ministerial Regulations on Standards for HE Curriculum



### Standards of a Program include



- Degree title, philosophy and objectives of the program, standards of learning outcomes
- Structure, credit system, learning management
- Administration & management
- Learning outcome assessment & Graduation requirements
- Quality assurance
- Curriculum development & improvement





**SHAPING** our **FUTURE** into a  
**TRANSFORMING** **WORLD**

FUTURE  
FOCUS

what that HE will be like  
ten years from now.

# What if ...

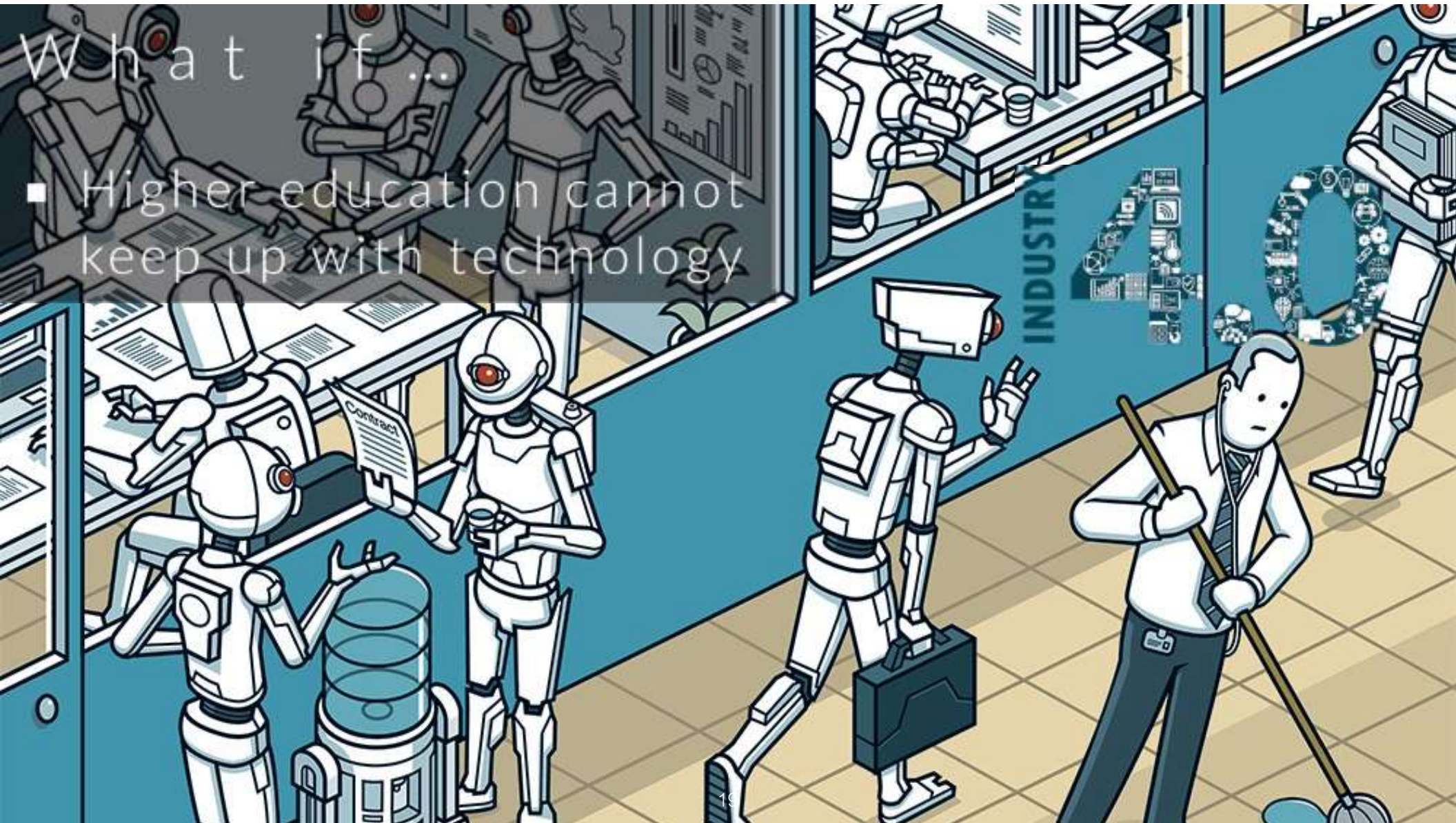
- Work constantly changes every two years
- 70 is a new 51 year old younger for longer...
- Technology could solve the global supply-demand mismatch

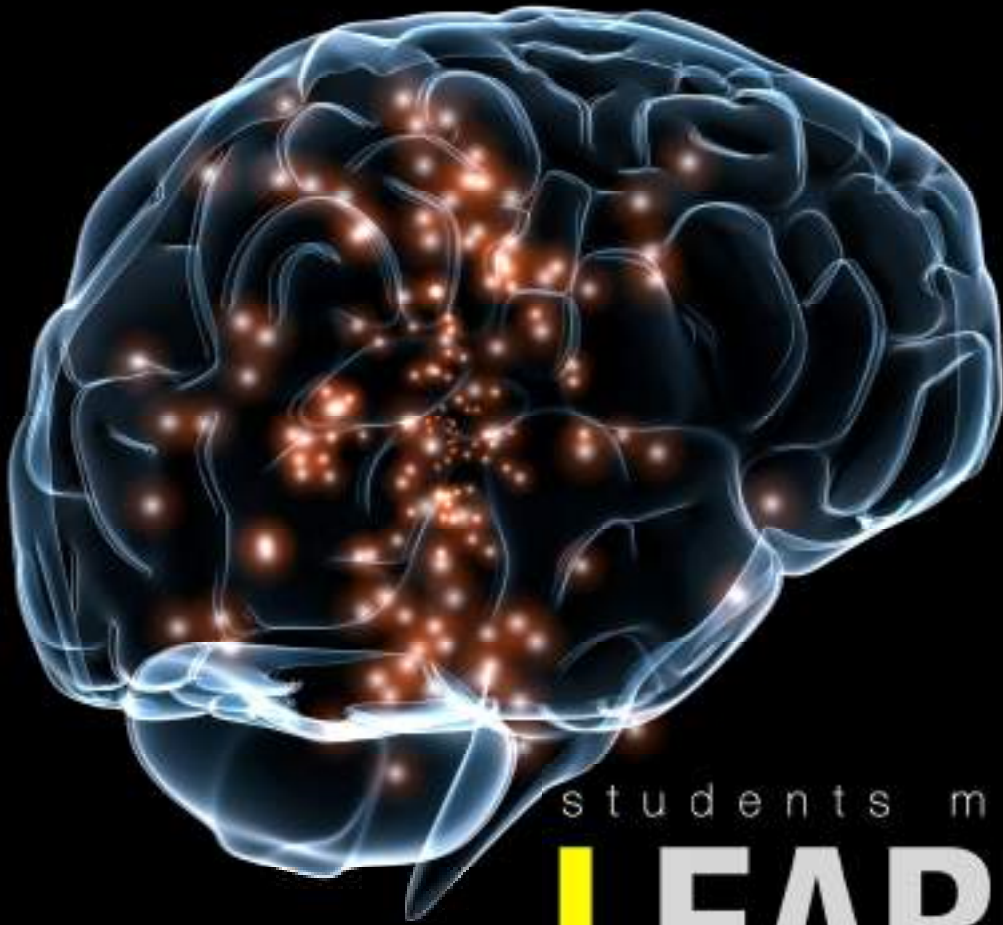




What if...

- Higher education cannot keep up with technology





and **WE** must focus more on

**LEARNING**  
**ENVIRONMENT**

students must

**L**EARN



# **Q**UANTITY OF THE **EF**FECT

Quality Facet of HE Curriculum Standard



**Quantity**

**LEARNING**

Paradigm

**OUT** **C**OME

**SUCCESS** Beyond  
**COMPLETION**

**NEW  
NORMAL**  
system

**LEGACY**  
system

LEARN TO LEARN  
**LEARNING**  
Paradigm

TEACH TO LEARN  
**INSTRUCTION**  
Paradigm

“**OUT  
COMES**  
based **EDUCATION**”

**HAP  
SHIFT  
PENS**

“**IN-  
OUT  
PUT**  
based **EDUCATION**”

## NEW NORMAL system

## LEGACY system

- Autonomy and Diversity
  - Produce "LEARNING"
  - learn to "BE" ... CHARACTER ...
  - Develop "COMPETENCE" by creating learning environment
  - Learning and student success outcomes
  - Improve quality of learning
  - curriculum as a "process"
- Regulated and One sided fit all
  - Provide "INSTRUCTION"
  - learn to "KNOW"
  - Offer "COURSES" (learning environment is hidden)
  - Input and resources
  - Improve quality of instruction
  - curriculum as a "product"



# SUCCESS Beyond COMPLETION

- Do our students achieve their goals?
- How well our students thrive in the changing world?
- Do we achieve the purpose of our programme?
- Do all stakeholders benefit from our product?

“ be the RIGHT PERSON



development RESULTS

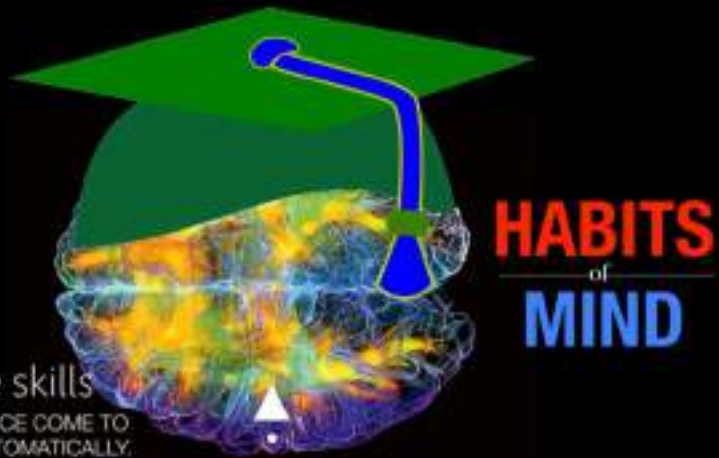
GOAL  
of the programme

where we FOCUS

OUTCOME

QUALITY OF THE EFFECT





# T Q F

Thailand Qualification Framework

## “PATTERNS OF INTELLECTUAL BEHAVIOUR ...”

a disposition toward behaving intelligently when confronted with problems ...



# T Q F

Thailand Qualification Framework

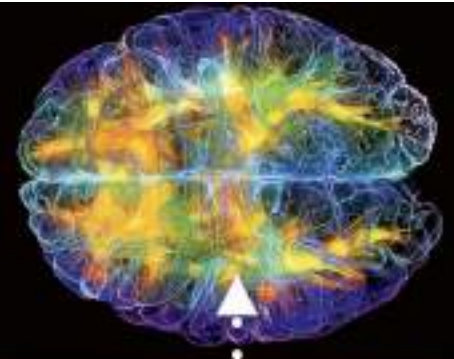
1

## TRANSFORMING KNOWLEDGE

2

## SKILLS

do for doing  
ability  
to make out



3

## ETHICS

4

your inner moral values, and your  
personality reflects what you're like as  
an individual

## CHARACTER

sum of qualities that define a person or  
thing and distinguish it from another



1



TRANSFORMING  
**K**NOWLEDGE

**T Q F**

Thailand Qualification Framework

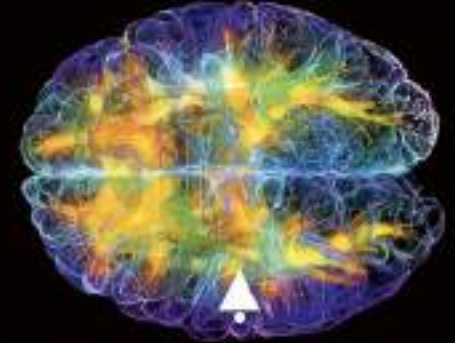
2



**S**KILLS  
do for doing

ability  
to make out

4



your inner moral values, and your  
personality reflects what you're like as  
an individual

**C**HARACTER

sum of qualities that define a person or  
thing and distinguish it from another

3

**E**THICS

CUSTOMER &  
STAKEHOLDER

**F** ● **O** ● **C** ● **U** ● **S**



**PROGRAM** LEARNING OUTCOMES

Are we going to deliver the **RIGHT GRADUATES**





# Standard for higher education curriculum

the minimum requirements of curriculums, characteristics, quality, and other requirements which serve as criteria for promotion, supervision, inspection, monitoring and evaluation, as well as quality assurance of higher education

- Process Approach
- Evidence Based Decision Making
- Continuous Improvement

the education platform that

## ENSURING LEARNING

happened by

## DESIGN

PERFORMANCE based ACCOUNTABILITY



are we making it  
**RIGHT?**







**QUALITY**  
of **CURRICULUM**  
**DESIGN**

**NOT** an **END**  
in **ITSELF**

Assoc. Prof. Bundit Thipakorn  
Vice President for Educational Development  
King Mongkut's University of Technology Thonburi

## Policy Initiatives

-  **Experiential Learning: Co-operative, WiL, CWIE, etc.**
-  **Higher Education Sandbox : Curriculum Development**
-  **Learning Outcomes Constant, Time Variable**
-  **National Credit Bank**



- Recognition Credits Among Thai Higher Education Institutes** 
- New Generation Graduates** 
- Reinventing University** 



KMUTT for Lifelong Learning:



# Micro Credentials

[www.4lifelonglearning.org](http://www.4lifelonglearning.org)

Show us what you can. Move on when ready.



# EDUCATION

Discrete & Destination

↑ EDUCATION ↑

nursery education

elementary education

secor

tertiary education

**DISRUPTED**

— DÉVELOPPEMENT / SOCIÉTÉ — →



# Lockstep

three - stage life

EDUCATION

↓ 6 - 21 year old

EMPLOYMENT

22 - 60 year old ↓

RETIREMENT

LONG TERM  
**CAREER**  
STORE KNOWLEDGE

*formally and inside the classroom*

EFFICIENCY  
and  
PRODUCTIVITY  
↑  
KNOWN  
↓  
INFORMATION



**CONSTRUCTING  
KNOWLEDGE**



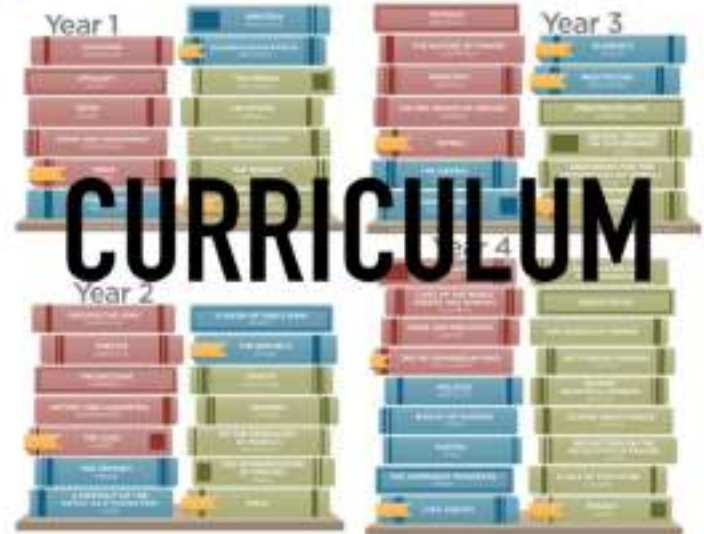
**OLD  
PARADIGM**  
INDUSTRIAL WORLD

Intellectual  
Courses



LEARN  
to KNOW

**DISRUPTED**





# FUTURE OF WORK IS LEARNING

Learn - Work - Learn - Work ...

The core functions of a curriculum will likely become the **transmission and appropriation of transferable skills and competences** that can be widely used and applied.



A STRUCTURE OF  
**COMPETENCES**  
 to SUCCESSFULLY  
**THRIVE**  
 in the world in flux ...

Transforming  
**KNOWLEDGE**



**CONSTRUCTING COMPETENCE**

**JOB READINESS CREDIBILITY**



**STREAM KNOWLEDGE**

*informally and outside the classroom*

**VERSATILIST**

**Contemporary CAREER**

- Multiple Deep Skills
- Wide Scope of Roles
- Broad Experience
- Recognised in Other Domains



# L EARNING

throughout the

# LIFE SPAN



# L EARNING C ONTINUUM



**EDUCATION**  
— is never —  
**END**

but it always being  
built and constructed...

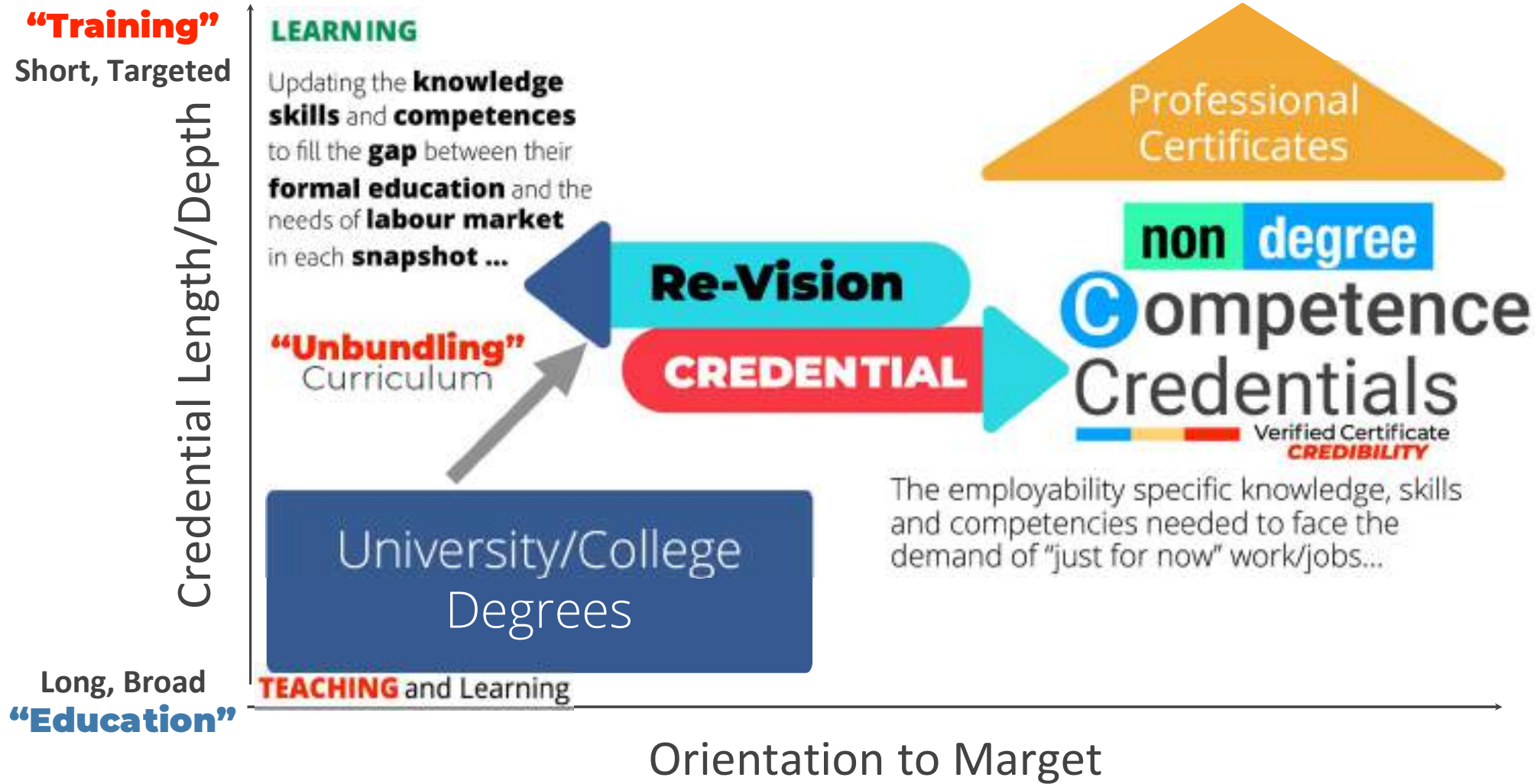
**CAN**

**KM** provide

**UTT SELF-INITIATED**

for workforces to learn throughout their

**MULTI-STAGE** *Life* ?





**“Training”**  
Short, Targeted

Credential Length/Depth

**LEARNING**

Updating the **knowledge skills** and **competences** to fill the **gap** between their **formal education** and the needs of **labour market** in each **snapshot ...**

**“Unbundling”**  
Curriculum

**Re-Vision**

**CREDENTIAL**

Professional  
Certificates

**non degree**



The employability specific knowledge, skills and competencies needed to face the demand of “just for now” work/jobs...

University/College  
Degrees

Long, Broad  
**“Education”**

**TEACHING** and Learning

Orientation to Marget

# Micro Credentials

[www.4lifelonglearning.org](http://www.4lifelonglearning.org)

Show us what you can. Move on when ready.





**KMUTT4Life<sup>82</sup>**

reimagining of higher education's business in the disruptive era ...

# **L**EARNING **C**ONTINUUM

for

*Lifelong*

**EMPLOY**

**ABILITY**

**PLAT**FORM







**Learning Outcomes**

**DEGREE**



Verified Certificate  
**CREDIBILITY**



**NON DEGREE**



**NEW NORMAL**

connecting **LEARNING** to  
**EARNING** and **RETURNING**  
for everyone at all ages  
“Lifelong Learning and Employability”

**LIFE** **TIME**  
“**BESPOKE**”  
**CURRICULUM**

**CONSTRUCTING** **COMPETENCE**

Education in human life cycle:

From **Sprinting**  
to **Mathorns**

**KMUTT 4 Life** 



**LIFELONG LEARNING**  
OPPORTUNITY

**DEGREE**



Learner-Centred  
**bitesize EDUCATION**


**FLEXIBILITY**  
**ADAPTABILITY**  
**AGILITY** In-Demand and  
Just Right  
Learning Pathway ...

- Discipline based programme
- Focus on constructing knowledge from teaching facts...
- Three-stage of life ...getting education, working, retiring ...
- Segregating on the basis of chronological age
- Long-term Career

## **NON DEGREE**

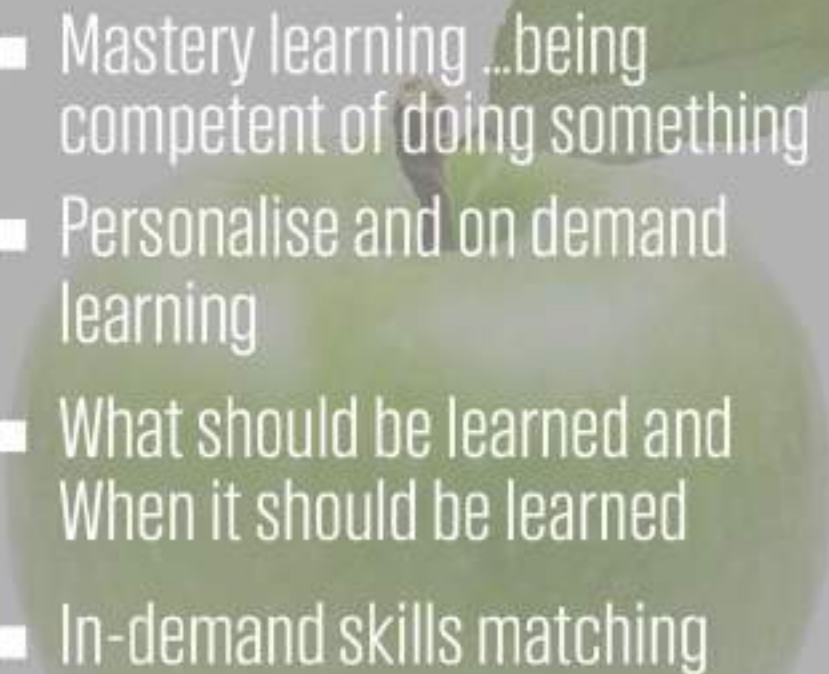
- Competence/Competency based programme
- Focus on performance/behaviour to do the job ...transforming knowledge...
- Multi-stage of life ...maintaining employability by continuing learning...
- Contemporary jobs, Non-existing career



- 
- Seat time education ...# of credit hours (of teaching) ...
  - Synchronous learning

**DEGREE**

## **NON DEGREE**

- 
- Mastery learning ...being competent of doing something
  - Personalise and on demand learning
  - What should be learned and When it should be learned
  - In-demand skills matching

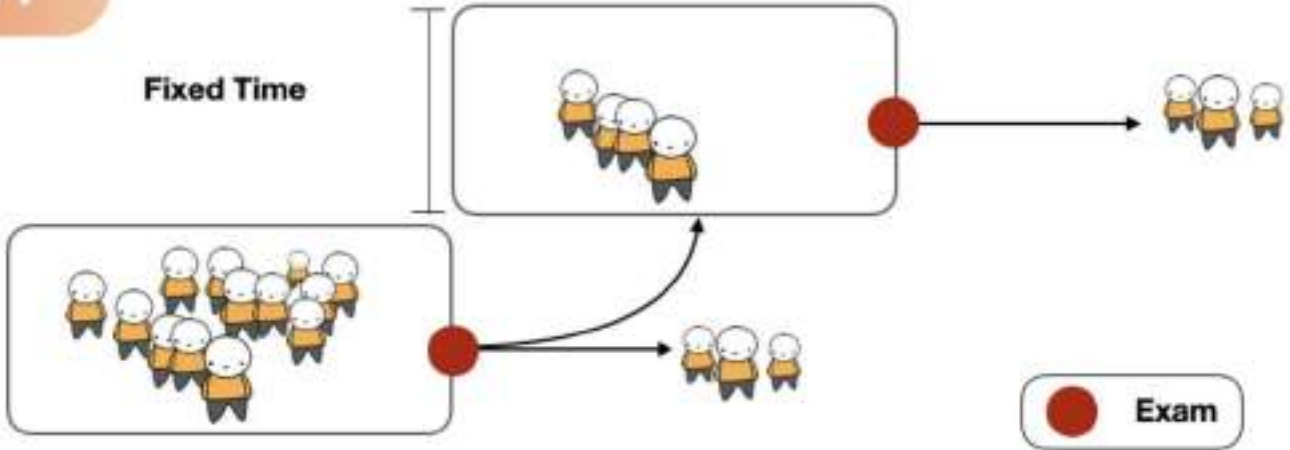
**KMUTT4Life**





KMUTT

Fixed Time



Exam



Show us what you can

KMUTT4Life



Verified Certificate  
**CREDIBILITY**



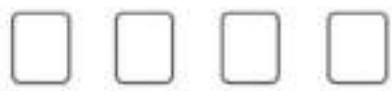
Move on when "ready"



**NON DEGREE**

Learn what you need

Self-pace learning



Evidence based measurement



# KMUTT Micro-Credential

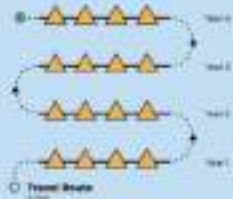
ระบบการศึกษาแบบใหม่ที่เชื่อต่อการเรียนรู้ตลอดชีวิต



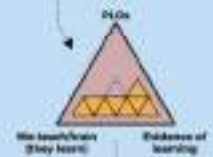
## ROUTE



Bachelor's Degree  
Master's Degree  
PhD



Curriculum



## ROUTE



Micro-Credentials

What is Micro-Credentials?

Micro-Credentials (MC) คือ ส่วนการศึกษาที่มุ่งเน้นการเรียนรู้เฉพาะด้านหรือทักษะที่จำเป็น (Competency-based Learning) โดยผู้เรียนสามารถเลือกเรียนเฉพาะด้านที่ต้องการได้ทันที (Just-in-time) หรือเรียนตามความพร้อมของตนเอง (Just-for-me) โดยไม่ต้องเรียนตามตารางเรียนที่กำหนดไว้ล่วงหน้า ผู้เรียนสามารถเรียนตามความพร้อมของตนเองได้ทันที (Just-in-time) หรือเรียนตามความพร้อมของตนเองได้ทันที (Just-for-me) โดยไม่ต้องเรียนตามตารางเรียนที่กำหนดไว้ล่วงหน้า

Curriculum



Micro-Credentials



## Learning Pathway



[www.4lifelonglearning.org](http://www.4lifelonglearning.org)



High-Quality and Stackable Credentials

- Data Science
- Robotics
- Digital Literacy
- Engineering Education
- Engineering Thinking
- Smart and Intelligent system
- Art, Design, and Technology
- Tech Entrepreneurial Leadership
- Debate and Programming
- Science and Engineering Communication

CONSTRUCTING COMPETENCE

UT 4Life

# LIFE TIME

“Made for ME”  
**CURRICULUM**  
Designed for Lifelong Learner

On-the-Job Learning is  
part of curriculum...

