

Rising to the Challenge

Professor TAN Eng Chye
President, National University of Singapore



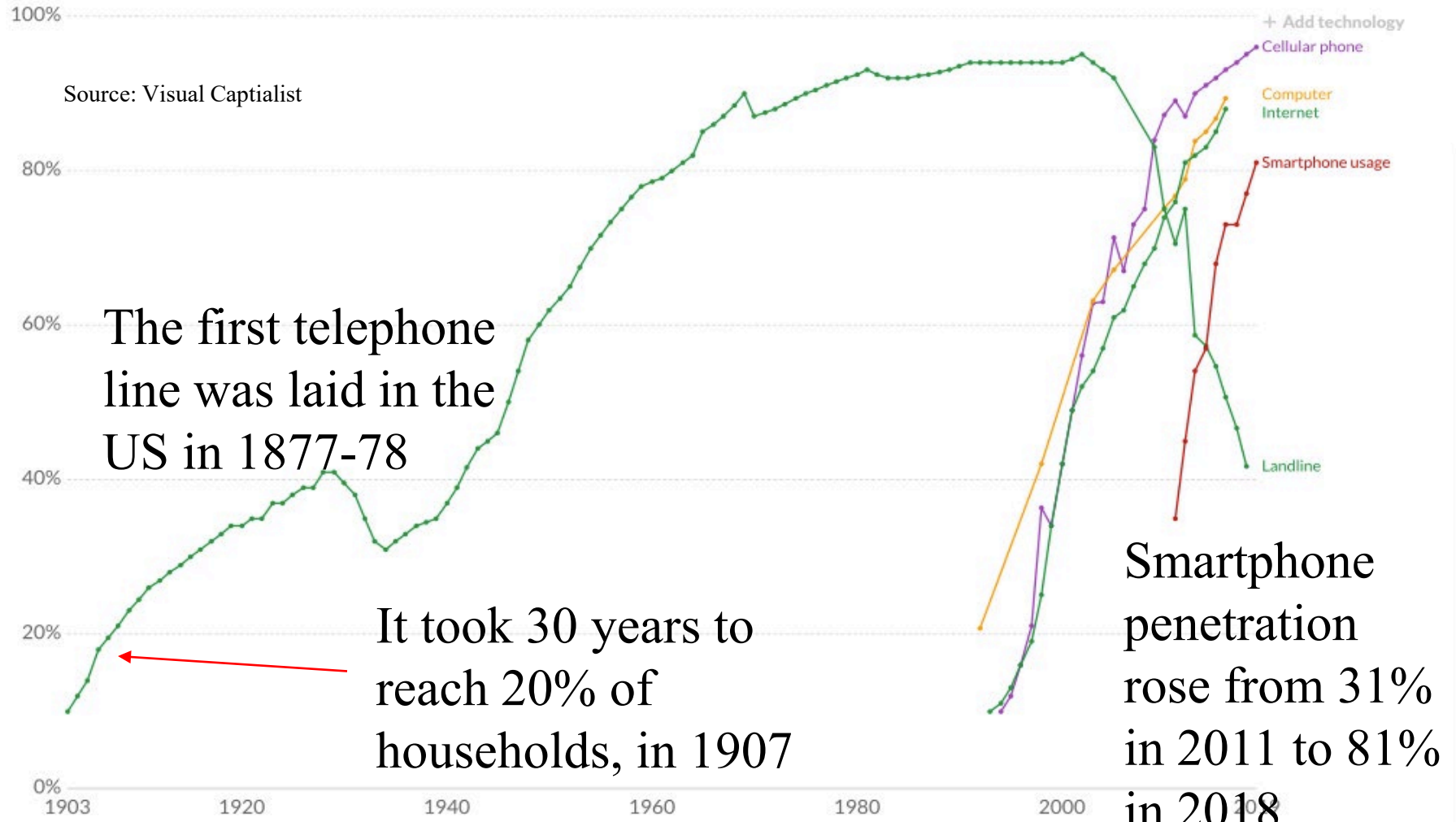
A World of Disruptions

- ✓ **Technology and Industry 4.0**
- ✓ **Megatrends driving change**
- ✓ **Change in career and training cycles**
- ✓ **Change in business models**
- ✓ **Environment and Sustainability**

ACCELERATED CHANGE

Technology adoption in US households

Technology adoption rates, measured as the percentage of households in the United States using a particular technology.



Source: Comin and Hobijn (2004) and others
Note: See the sources tab for definitions of household adoption, or adoption rates, by technology type.

Length of career



60 to 70 years

Average tenure in a job



4.5 years

Half-life of a learned skill



5 years

Companies accelerate training cycles

- SVP HR of Huawei shared that the company's training academy (Huawei University) has to continuously upgrade skills of its 200K workers every **18 months**.
- And it takes **11 months** for new skills to be learned.

Rapid change in competencies and capabilities, especially in tech knowledge & skills

National University of Singapore

17 faculties
and schools

which offer
multiple

educational
Pathways

for **38,000**

students



Nurturing Future-ready Graduates

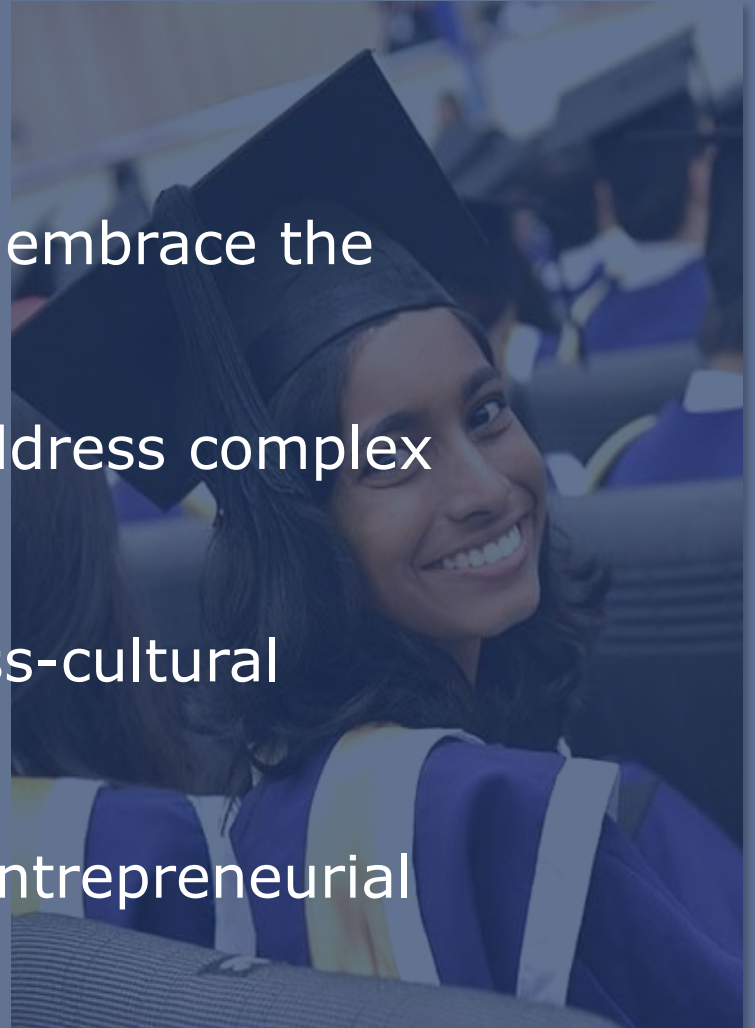
Preparing NUS graduates to be:

Adaptable and agile – ready to embrace the digital economy

Analytical, with the ability to address complex problems

Adept at interpersonal and cross-cultural communication

Creative and innovative, with entrepreneurial dare



Nurturing Future-ready Graduates

A = Academic

From “T” to π ; Training in > 1 discipline;
General education

G = Global & Experiential

Self-discovery, personal & interpersonal
skills, cross-cultural effectiveness

I = Industry Relevant

Compulsory internships, Co-op Programmes

L = Lifelong Learning

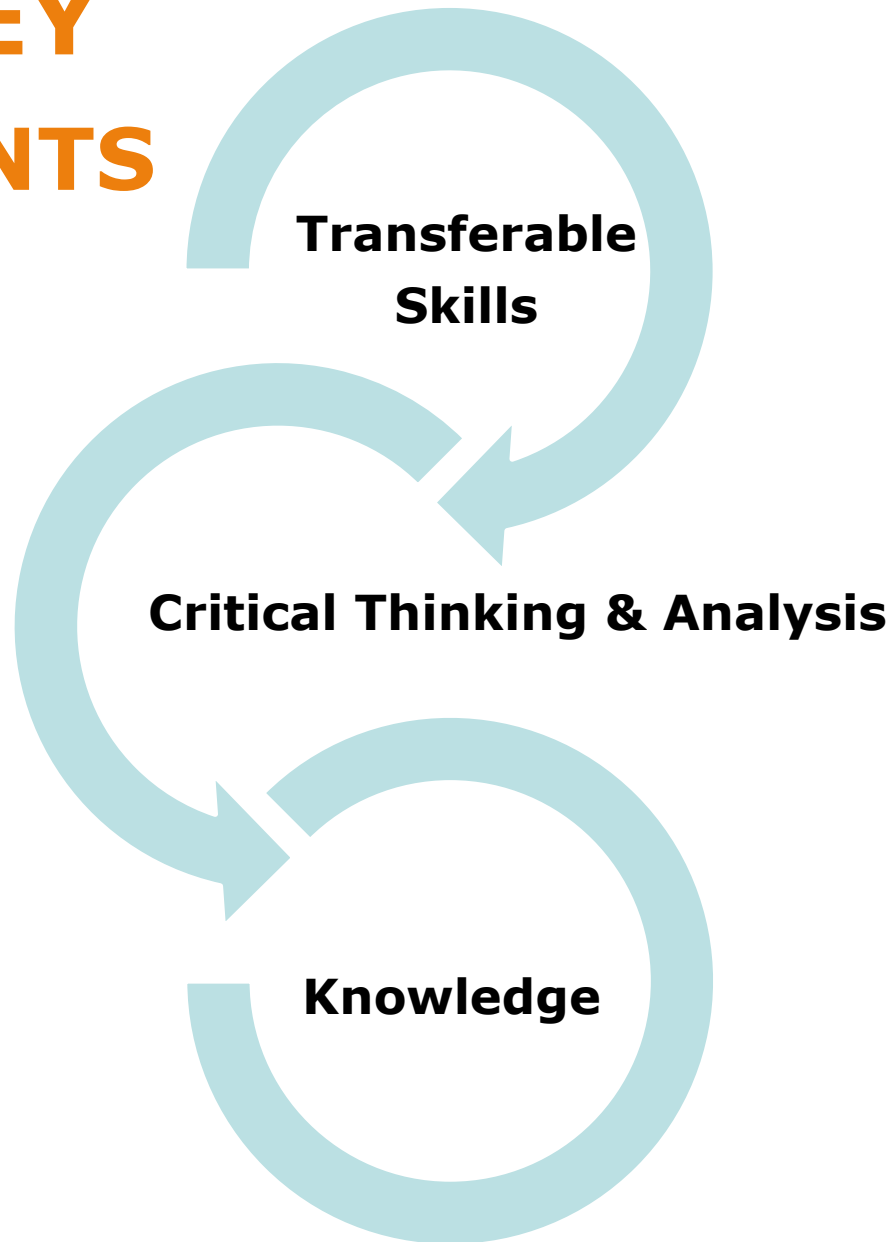
SCALE, L³ Programme, etc

E = Entrepreneurial

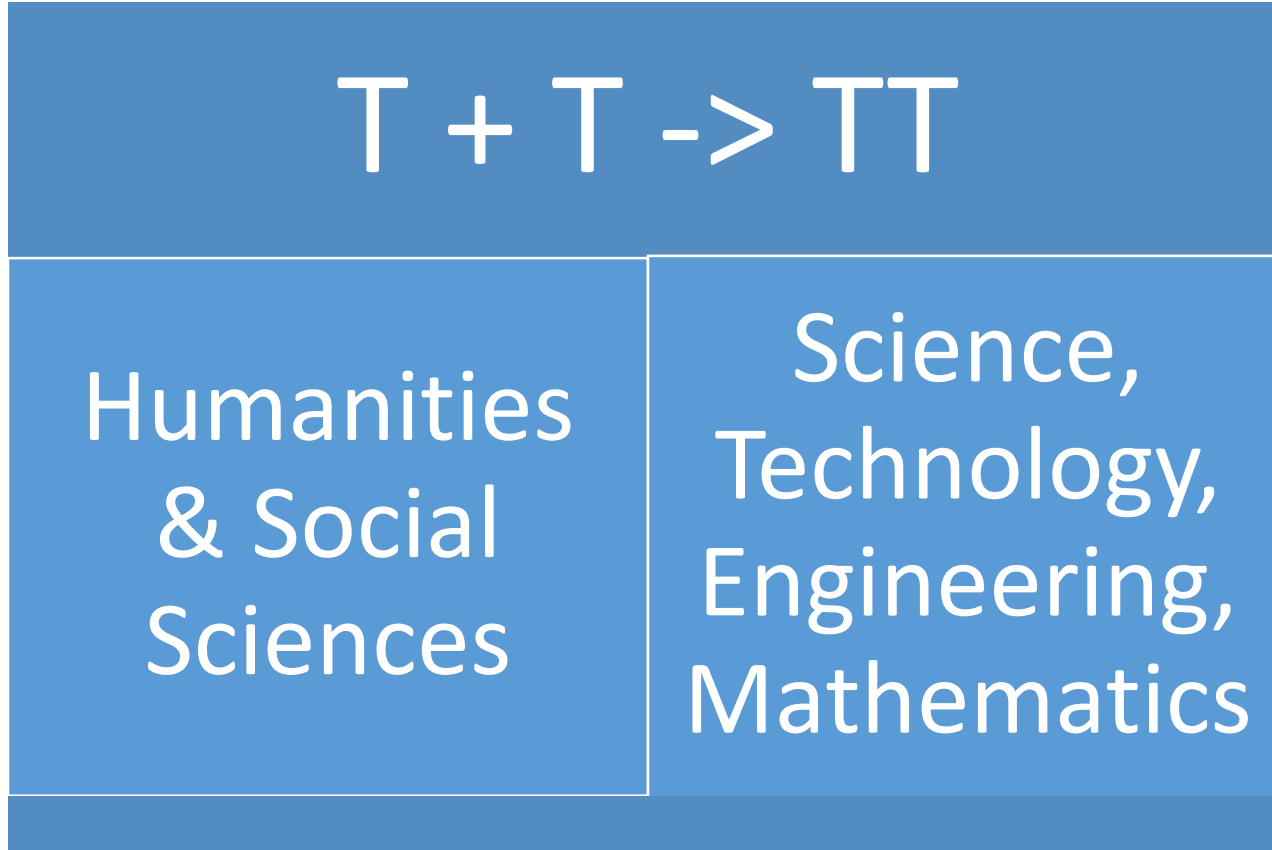
NUS Overseas Colleges



THREE KEY COMPONENTS



Nurturing Future-ready Graduates



Training in > 1 discipline, major-minors

Great emphasis on industry attachment and internship, including overseas



IHLs are introducing more experiential learning into the curriculum.

Industry
Experience



Overseas
Exposure and
Entrepreneurship



Being
Hands-On



Education and Career Guidance



Better support students to discover their interests and aptitudes

Practice of IHLs today

- Frontloading education - packing a lot of stuff into the first few years
- Students funneled into occupation-specific courses right from the start
- Over time, courses proliferated, as employers wanted graduates with specialised skills and wanted them fast

As IHLs transform into centres for lifelong learning, this approach will change.



Why Lifelong Learning

**No university can provide
all the skills and
knowledge that one would
need for the next 50 years**

Existing Education Model: Separation of Education and Work



NUS LifeLong Learners (L³)



- Place
- Pace
- Pathway
- Pedagogy

Foundational

Experiential, Skills-based,
Industry-relevant

Start degree Finish degree



School of Continuing and Lifelong Education

NUS SCALE was set up in 2016, dedicated to lifelong learning



SCALE was officially launched on 17 June 2016
GOH: Mr. Ong Ye Kung, Minister for Education



NUS SCALE works with NUS Faculties & Schools to aggregate CET capabilities, to provide current and diverse training

NUS CET Ecosystem

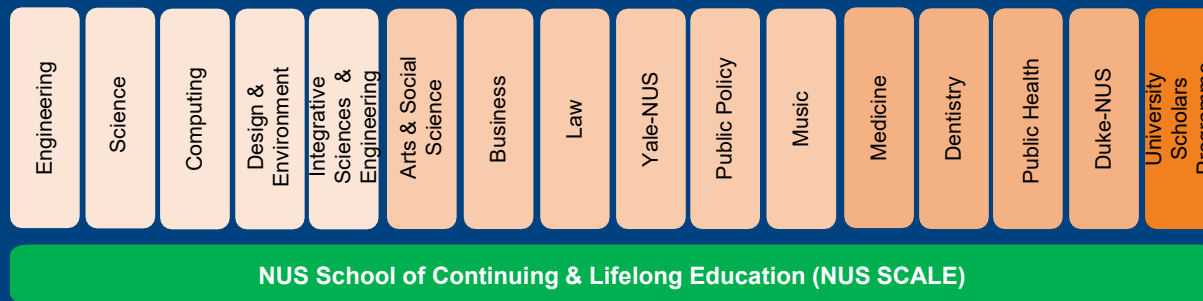
Expand & offer identified CET courses (Standard, Tailored, Customised)

Research, develop & implement CET-related innovations (Training structures & methods to make training more accessible & effective)

Develop & establish diverse CET solutions (Part-time Degree; Executive Education; Trade Conferences; Consultancy)

CET Capabilities Expansion

Work with the various faculties & schools in expanding & offering CET solutions



NUS keeps our fingers on the pulse through advanced research, consultation with SSG and employers, and market testing & observations



NUS's continued emphasis on research helps identify current topics and develop current content.

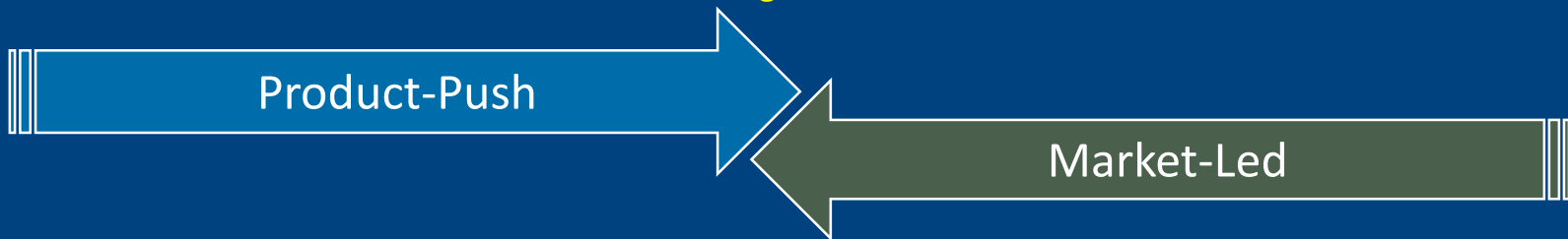


We consult the ITMs to identify key skills needed for the various clusters / sectors of focus.

All-You-Can-Learn
(AYCL)

Through our AYCL initiative, there are close consultation with and feedback from employers.

Market Testing & Observations:

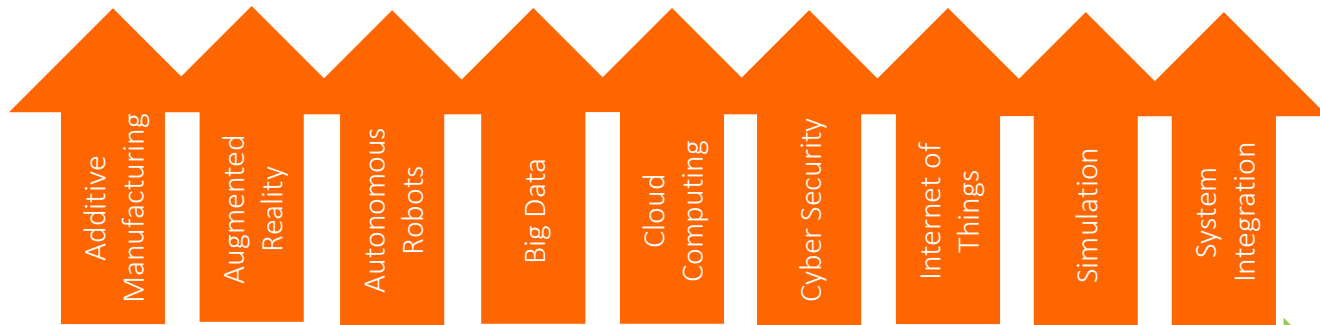


Based on industry sensing, NUS CET courses will include Industry 4.0 type of courses to help professionals stay current and organisations transform



Industry 4.0

Deep Vertical & Broad Horizontal Training
(A Conceptual framework by NUS SCALE to support organisations/industries transform, through strategies enabled by technologies.)



Examples: Design Thinking; New Media Literacy; Business & Technology / Digital Transformation; Innovation / Creativity; Complex Problem Solving; IP Management

NUS CET500 – For the Workforce



Our CET Value Proposition



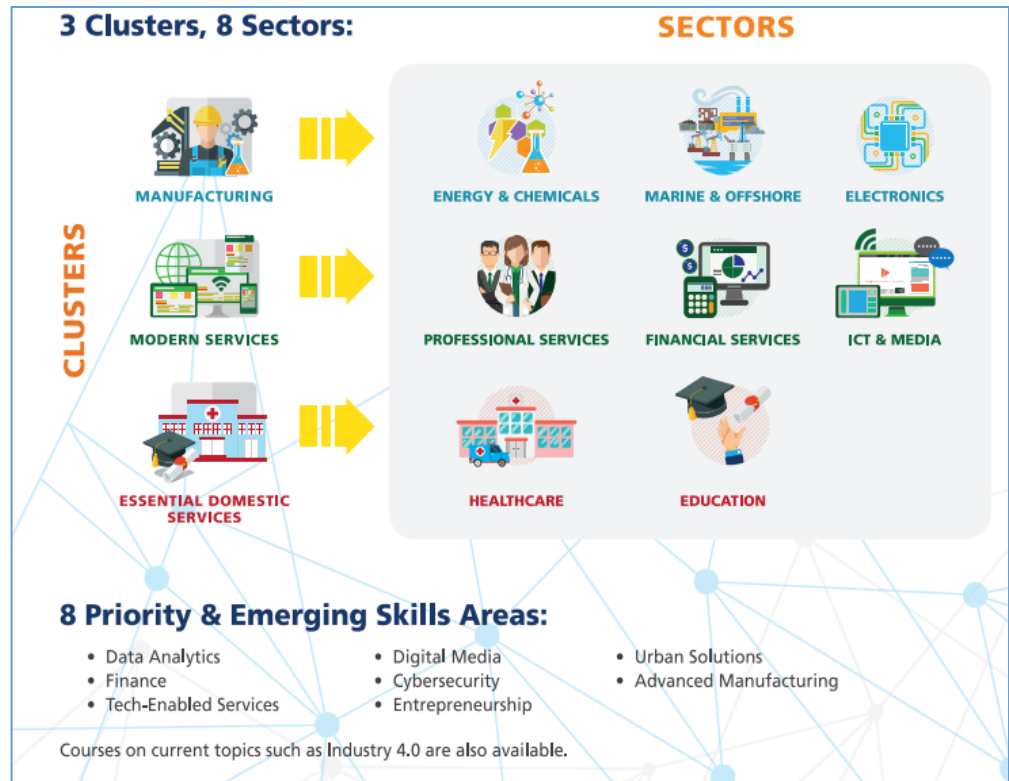
Skills-Based, Industry-Relevant Courses for the Public/Corporates



Choice of Modular Courses (including micro-credentials) & Short Courses that are SSG-Funded



Learning Anytime Anywhere Enabled by Blended-Learning



Thank You



NUS
National University
of Singapore

National University of Singapore