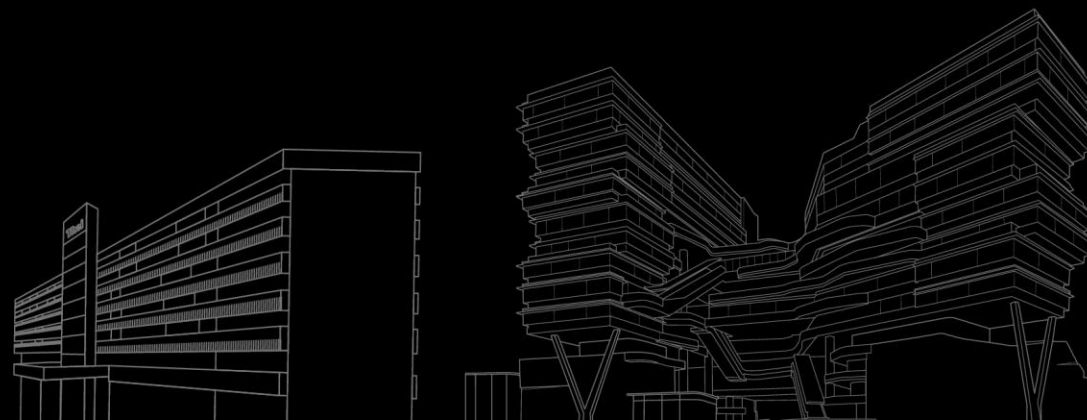
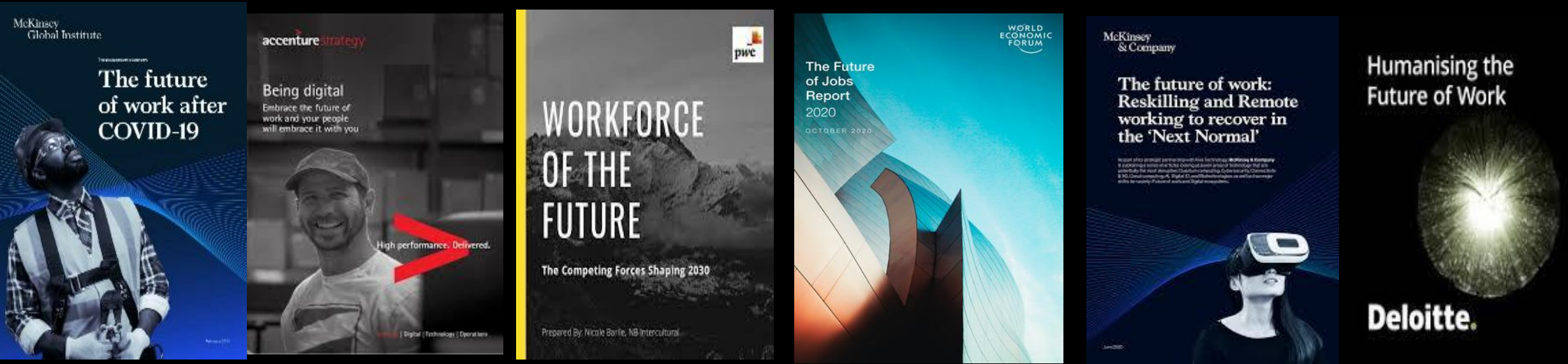


UNESCO PEACE FORUM 2021: Futures of Education

Skilling for Workforce Futures: VPET and Industry Integration

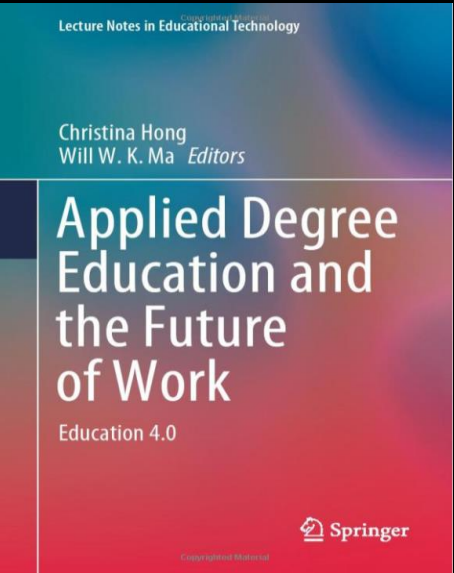
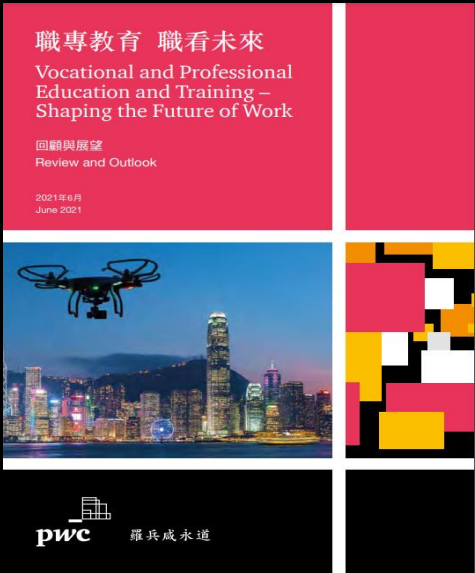
Professor Christina Hong, PhD
President, THEi





The Future of Work Value Creation

Applied Education
VPET Hong Kong



Top 10 skills of 2025



Reskilling needs



Type of skill

- Problem-solving
- Self-management
- Working with people
- Technology use and development



Analytical thinking and innovation



Active learning and learning strategies



Complex problem-solving



Critical thinking and analysis



Creativity, originality and initiative



Leadership and social influence



Technology use, monitoring and control



Technology design and programming



Resilience, stress tolerance and flexibility



Reasoning, problem-solving and ideation

Source: Future of Jobs Report 2020, World Economic Forum.

Skills Talent Shortage

Skills Gap

Skills Mismatch



How can we provide
education, skills and jobs
for 1 billion people by 2030?

Join a Revolution.

The Reskilling Revolution

<http://reskillingrevolution2030.org/>



Hong Kong Reports ...

- *HK workforces desires digital upskilling; fears losing jobs to technology; majority prefer a hybrid working model vs a traditional workplace.* - PwC Hopes and Fears 2021 Report.
- *Defining future workforce needs, upskilling and reinventing flexibility top of mind in 2021 for HK firms.* – Mercer 2021 Global Trends Study.
- *Hong Kong's IT sector facing shortage of skilled talent ...* - SCMP 13 March, 2021
- *In all three Greater China markets, the need for upskilling and reskilling has become a pressing requirement for organisations.* - Talent Report Greater China 2021, Morgan Philips Group
- *Experts call for credentials plan to fill HK skills mismatch.* - China Daily HK, 5 Oct, 2021

Reskilling and upskilling are a clear transformation priority for companies in Hong Kong in 2021.

On the back of rapid technological advances and the new roles they bring. Beyond just having a clear view of the skill gaps within their organisations, companies need to have a strategy to encourage skill adoption and learning.

Skills are the new currency in the future of work.

**2021 Global Talent Trends Study
Mercer Hong Kong**

Vocational and Professional Education and Training International Policy Reform - Agendas



Germany

National Skills Strategy (2019) & Work of Tomorrow Act (2020)

Development of continuing vocational education and training to increase vocational competence of the workforce



Switzerland

Mission Statement for VPET 2030

Enhance the flexibility and permeability of the VPET system to offer prospects for lifelong professional development



Mainland China

National 14th Five-year Plan (2021-25)

Speed up the development of the modern vocational education system, develop bachelor-level vocational education, and cultivate more high-quality technical professionals



United Kingdom

Skills for Jobs White Paper (2021)

Reforms to the Further Education and Technical training system to improve productivity and fill skills gaps



Australia

Heads of Agreement for National Skills Reform (2022 – 2026/27)

Simplifying, rationalising, streamlining VET qualifications, strengthening quality standards: new funding model, micro credentials.



New Zealand

Education (VET Reform) Amendment Act (2020)

Creates a unified and cohesive VET system – New VET regulatory framework, establishes Workforce Development Councils and NZ Institute of Skills and Technology Te Pukenga.

Lifelong Learning and Social Mobility



VPET providers play a crucial role in offering lifelong learning opportunities for **upskilling and reskilling** the workforce.

VPET significantly improves social mobility through **education and career enhancement**.



Economic Contribution of VPET



In **2018/19** VPET providers and their graduates generated a total of **HK\$97 Billion+ value add** to Hong Kong's economy.
Equivalent to **3.4% of HK GDP** in **8 core industries**



Engineering



Construction



Business &
Marketing



Design &
Creative



Tourism &
Hospitality



Information
Technology



Healthcare &
Sciences

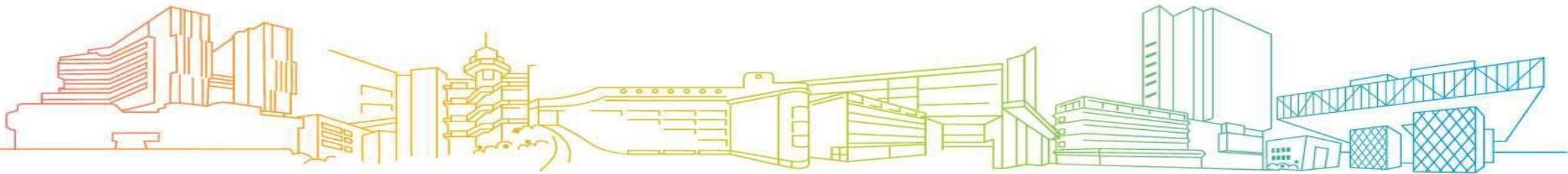


Education &
Community
Services



Vocational and Professional Education and Training (VPET) in Hong Kong:

Vocational Training Council (VTC)



Comprehensive Suite of Qualifications under Hong Kong Qualifications Framework



QF Level

7 Doctorate Degree

6 Master Degree, Postgraduate Diploma, Postgraduate Certificate

Postgraduate Programmes in partnership with overseas universities

5 Bachelor Degree

Degree and Top-up Degree

4 Higher Diploma / Associate Degree

Higher Diploma

3 Diploma

Diploma of Foundation Studies
Diploma of Vocational Education
Diploma of Vocational Baccalaureate
Diploma Programmes

2 Certificate

Industry Certificate
Junior General Purpose Rating

1 Certificate





PR & Event Management | Prof Accounting



Civil Engineering | Environmental Eng



Culinary Arts | Hotel Operations



Aircraft Engineering



Nutrition & Health Care | Food Science



Horticulture Arboriculture Landscape



Sports and Recreation Management



Building Services Engineering



Fashion Design



ICT | Multimedia Technology & Innovation



Landscape Architecture



Product Design | Advertising



Surveying



Testing and Certification



Chinese Medicinal Pharmacy

THEi extends the VTC VPET Value-Chain

THEi's 21 applied degrees and related professional diplomas and credentials are deeply connected to industry, employers and the changing world of work.



Professional Recognition



Examples of professional bodies recognising VTC programmes



CHARTERED
SOCIETY OF
DESIGNERS



教育局
Education Bureau

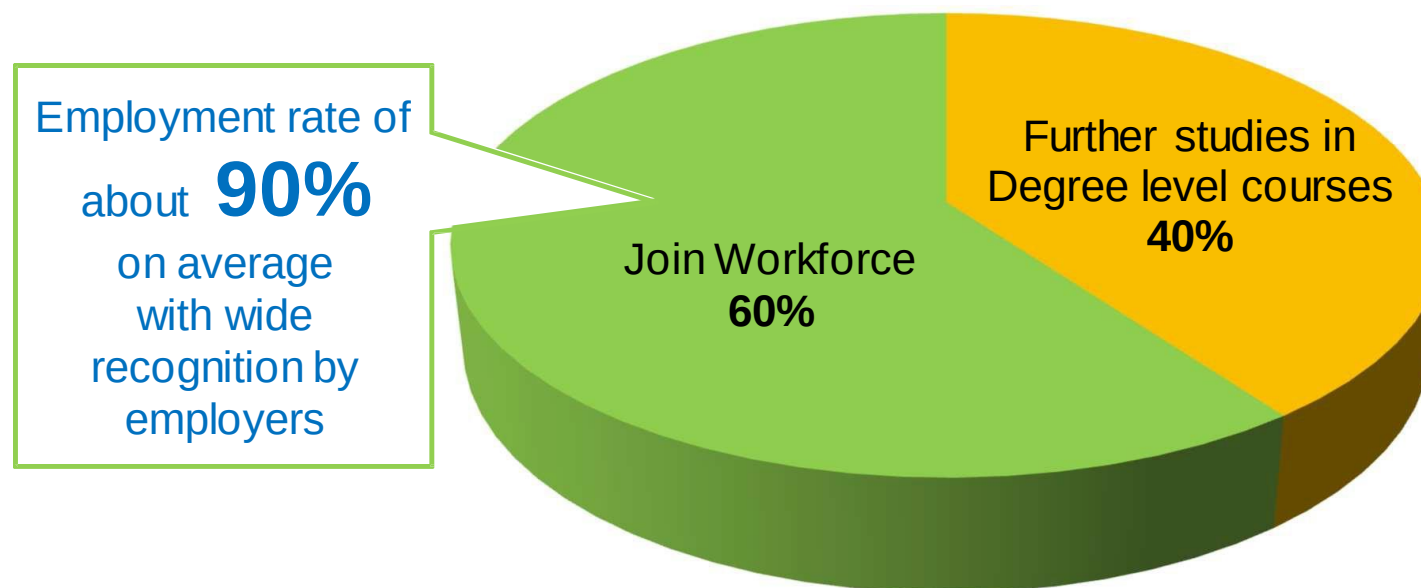


香港設計師協會



High Graduate Employment Rate

- Higher Diploma graduates:



Thei Degree Graduate Employment rate of 90%

* Source: VTC Statistics

VTC Skilling for the Future: VPET and Industry Integration



1. Industry Engagement and Work-integrated Learning



THEi Degree programmes:

- Up to 480 hours **work-integrated learning**

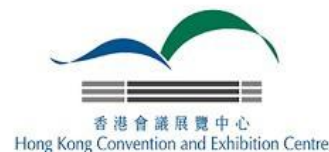
IVE Higher Diploma programmes:

- at least 90 hours **industrial attachment** across disciplines
- one semester industrial attachment for construction and engineering (>400 hours)



1. Industry Engagement and Work-integrated Learning

Industry Partners - Examples



2. Dual-track Approach



VTC Earn & Learn Scheme

- Tripartite collaboration between the Government, Industry and VTC since 2014
- Increase workforce supply for industries with a keen labour demand
- Regularised with 1,200 places subvented by Government per year at Diploma of Vocational Education and Higher Diploma levels starting 2019
- Web-based assessment platform to facilitate systematic training and assessment at the workplace for dual-track programmes
- Government incentive ~HK\$3,000/month (per trainee) for Earn and Learn employers undertaking workplace assessment (*capped at HK\$36,000 per trainee*)



2. Dual-track Approach

Earn & Learn Degree Programmes

- Five Degree Programmes in areas of
 - Building Services Engineering
 - Civil Engineering
 - Aircraft Engineering
 - Horticulture Arboriculture and Landscape Management
 - Chinese Medicinal Pharmacy





Innovation and Technology
Industry integration

Re-Industrialisation and Technology Training Programme (RTTP)

- Launched by the HKSAR Government and administered by Innovation and Technology Training Board of VTC
- Subsidises local companies in staff development in advanced technologies, especially related to Industry 4.0

5. Use of New Technology



Internet of Things (IoT) Innovation and Technology Centre

- Located in IVE (Sha Tin)
- Support IoT teaching and learning, industry collaborative applied research and multi-disciplinary collaborations

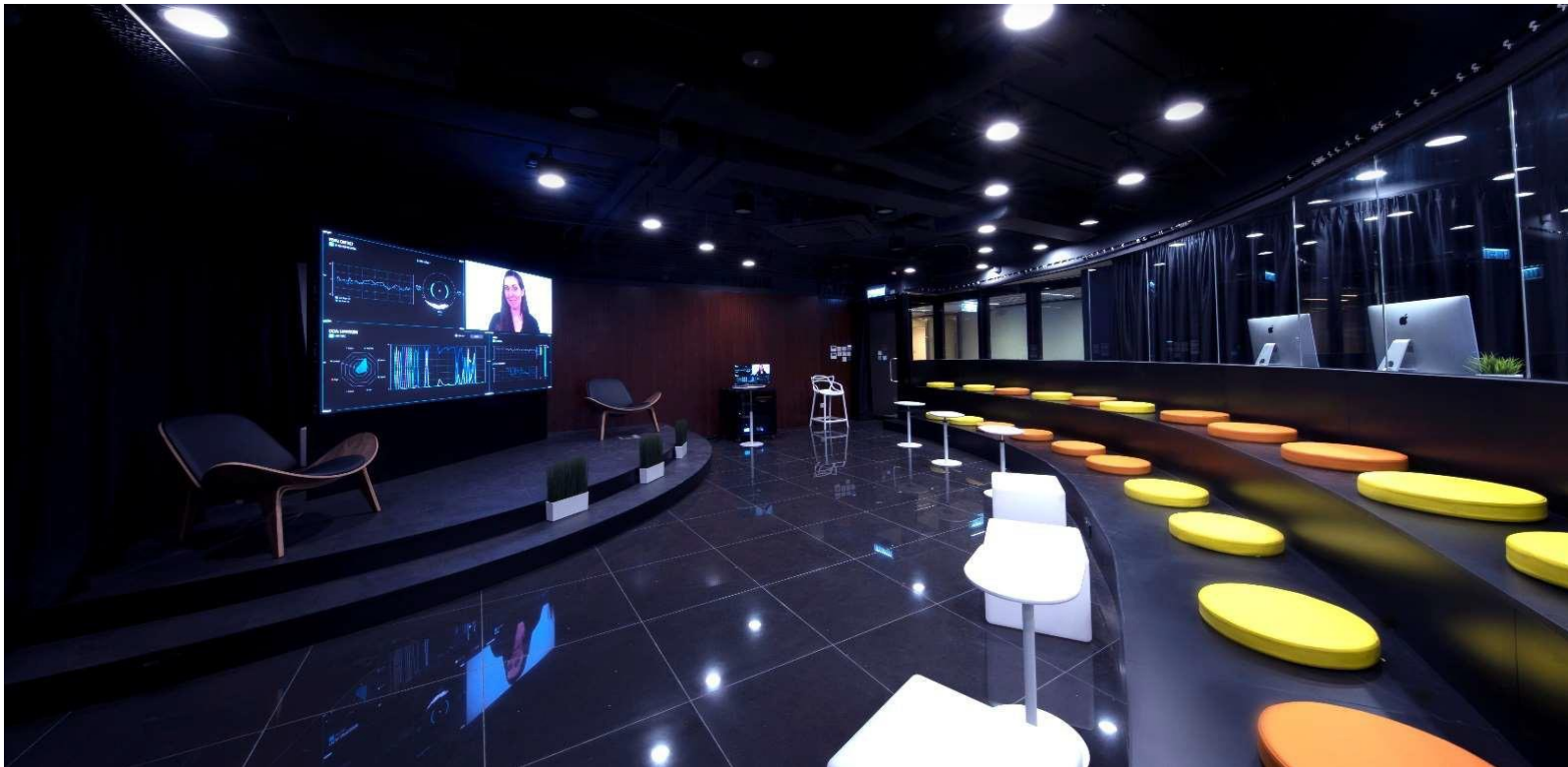


5. Use of New Technology



Innovation and Technology Co-Creation Centre

- Located in IVE (Morrison Hill)
- For co-creation of new ideas and solutions with industries



5. Use of New Technology



Cybersecurity Centre

- Located in IVE (Chai Wan)
- To provide authentic training and facilitate community engagement in developing cybersecurity awareness



5. Use of New Technology

Building Information Modelling Innovation Hub (BIMiHub)



- Located at THEi Tsing Yi
- Supports learning and teaching of BIM modules
- Industry professional development – technical seminars, professional diploma
- BIM Manager Certified Training



5. Use of New Technology



CLP Power Engineering Laboratory

- Located at the Water Front Annex Building of IVE (Haking Wong)
- Equipped with advanced smart grid and high voltage training facilities to nurture power engineering talent





BA(Hons) Advertising



BA(Hons) Product Design

The HKIE Outstanding Paper Award for Young Engineers/Researchers 2020

"A Case Study of Lighting Retrofit to Improve Building Energy Efficiency and Lighting Quality by Using Luminares with Nano Optical Coating"

Mr Jeffrey Y C Cheng*	Carbon Exchange (Hong Kong) Ltd
Ms Nancy C Y Wong	Carbon Exchange (Hong Kong) Ltd
Ir Tony W L Ho	Carbon Exchange (Hong Kong) Ltd
Mr Hiu Fai Kwong	Technological and Higher Education Institute of Hong Kong
Ir Dr Roger T H Ng	Technological and Higher Education Institute of Hong Kong
Dr Howard Cheung	Carbon Exchange (Hong Kong) Ltd

BEng (Hons) Building Services Engineering

Active
Learning
with and for
Industries

Project Based Learning

Applied Research

Portable Near Infrared Rapid Authentication System

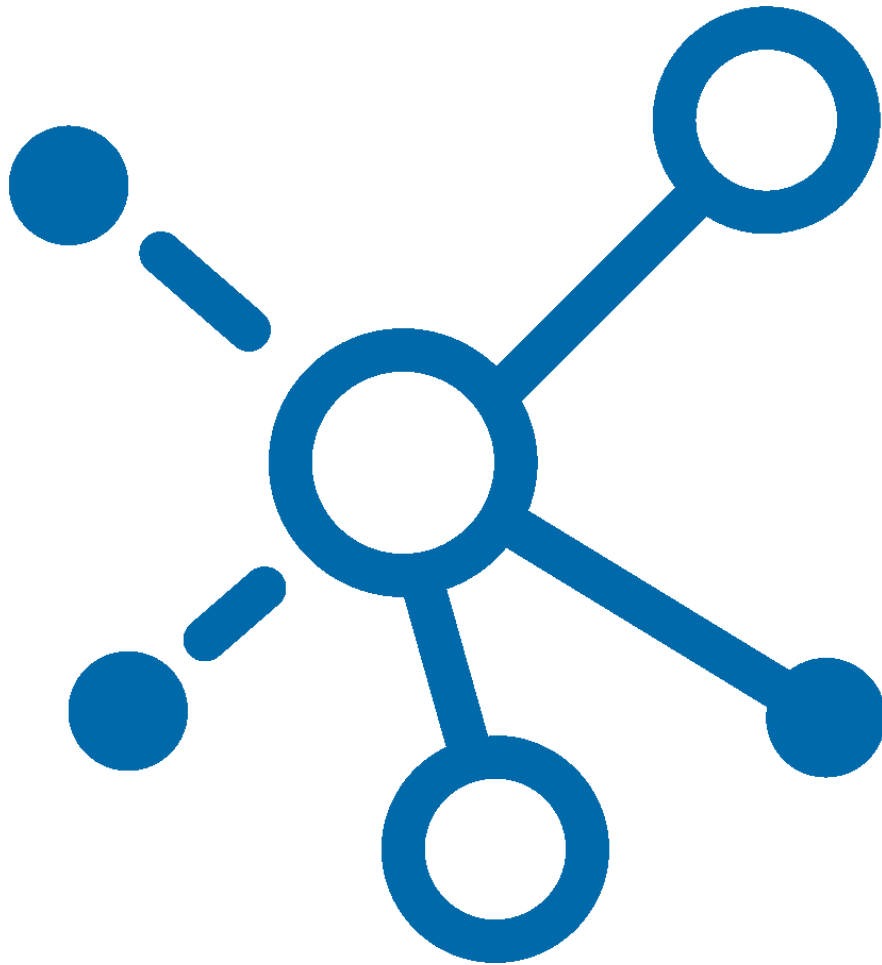


BSc (Hons) Chinese Medicinal Pharmacy

Project-Based Learning | Student + Staff Applied Research

- Co-developed with medical biotech start-up company
- Capitalizes on AI and blockchain technologies to help fast-track testing of Chinese medicines
- Champion in Cyberport “Block AdVenture” Competition 2020-21



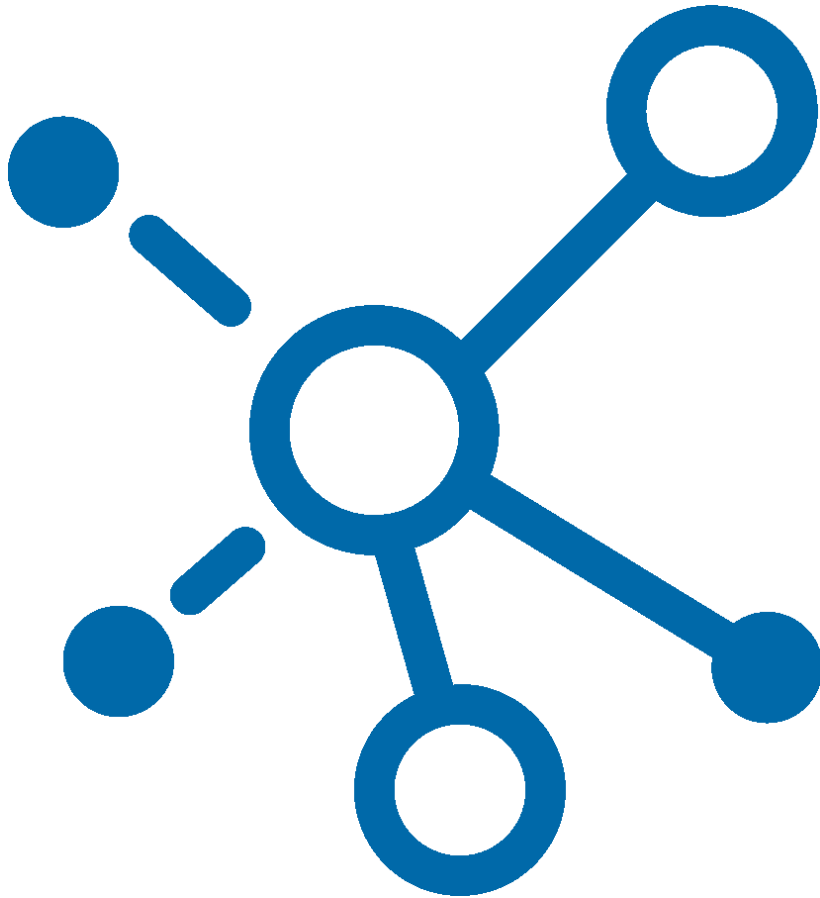


Ecosystem Approach

*Skilling for Workforce Futures:
VPET and Industry Integration*

Ecosystem Approach

Skilling for Workforce Futures



- *Industry Co-creation and Integration*
- *Qualifications Recognition and Harmonisation aka Tuning Project*
- *Infrastructure alignment – RPL, Micro-credentials*
- *Flexible Scaffolding and Stair-casing*
- *Ecosystem collaboration & mutual esteem*
- *Mindset shift | Growth Mindset*

Thank You

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