



Department of Systems Engineering
and Engineering Management

香港城市大學
City University of Hong Kong

Intelligent Manufacturing Engineering

College of Engineering
Department of Systems Engineering and
Engineering Management
City University of Hong Kong

**JOIN US
NOW!**



And be among the first
students in Hong Kong to
graduate in this exciting field.



The Intelligent Manufacturing Engineering programme

CityU offers a **brand-new undergraduate programme** aimed at developing young talents for “Industry 4.0” and “smart manufacturing”. This is in line with the Hong Kong Government’s push for re-industrialization, with the goal to develop “high-end manufacturing based on new technologies and intelligent production”.



Bachelor of Engineering in Intelligent Manufacturing Engineering



Knowledge and Skills in

- Engineering sciences
- Manufacturing innovations
- Automation
- Data Analytics

//

We must deal quickly with the fusion of the online world and the world of industrial production. In Germany, we call it Industrie 4.0.

- Angela Merkel,
Chancellor of Germany

//

//

Industry 4.0 is more than just a flashy catchphrase. A confluence of trends and technologies promises to reshape the way things are made.

- Cornelius Baur and Dominik Wee,
McKinsey & Company

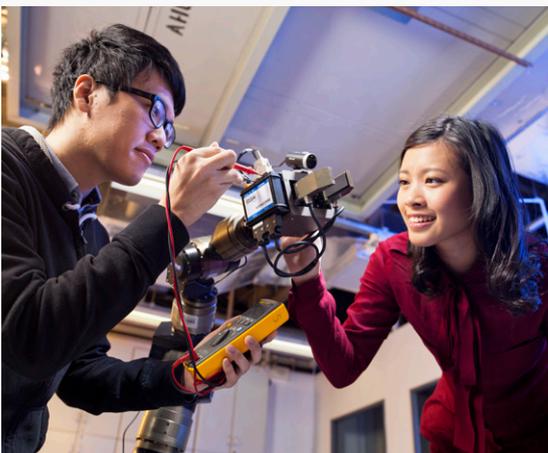
//

What is and Why Intelligent Manufacturing Engineering?

- The “Industry 4.0” initiative, introduced by the **German Government** in the 2010’s, promotes **intelligent manufacturing** through the integration of a software-intensive manufacturing system, big data and the Internet of Things, to form intelligent and highly efficient production networks.
- In the “Hong Kong 2030+: A Smart, Green and Resilient City Strategy” published by the **HK Government**, **intelligent production** and **Industry 4.0** are identified as a key component for Hong Kong’s future planning and growth.
- “Made in China 2025”, issued by Premier Li Keqiang and his cabinet in 2015, is a key **national strategic plan to further develop the manufacturing sector of Mainland China**.

What does our Intelligent Manufacturing Engineering programme offer?

- This major aims to develop the abilities of our students in engineering sciences, design innovations, automation and data analytics, so that these abilities can be applied to creating **Intelligent manufacturing systems** in the **Industry 4.0** setting.
- Our graduates will possess the practical skills and knowledge for **innovating and managing the operations of modern manufacturing enterprises**.
- These skills and knowledge will also be applicable to service industries and commercial enterprises, **in automating and digitalizing their various business processes**, to push for higher and higher efficiency.



Curriculum

Graduation Engineering project

Showcase your abilities to innovate on systems and processes in enterprises

Elective courses

The 3rd and 4th year of your study – freedom to follow your own path and interests

Advanced course to specialize in

- Data communications and Internet Technologies
- Intelligent Robot Design, Robotics, and Machine Vision
- Electronics, Optics, and Smart Sensors
- Advanced Technologies in Biomedical Devices
- Product Design and Innovation
- Contemporary Human Factors
- Project Management
- Data Visualization

Fundamental Courses in Intelligent Manufacturing Engineering

The second and third years of your study – to build up a firm foundation

- Essential Engineering Mathematics and Statistics
- Operations Research
- Quality and Reliability Engineering
- Automation Technologies/ Manufacturing Technologies
- Digital Manufacturing and Operations
- AI and Augmented Reality in Manufacturing and Operations
- System Modeling and Optimization
- Semiconductor Manufacturing
- Industrial Data and Analytics

General Education Courses

The first year of your university study – the basics

- English
- Chinese
- Calculus
- Computer Programming
- Physics
- Introduction to Professional Engineering Practice



“

The Fourth Industrial Revolution is still in its nascent state. But with the swift pace of change and disruption to business and society, the time to join in is now.

- Gary Coleman
Global Industry and Senior Client Advisor,
Deloitte Consulting

”

“

You're either the one that creates the automation or you're getting automated.

- Tom Preston-Werner,
Founder of GitHub

”

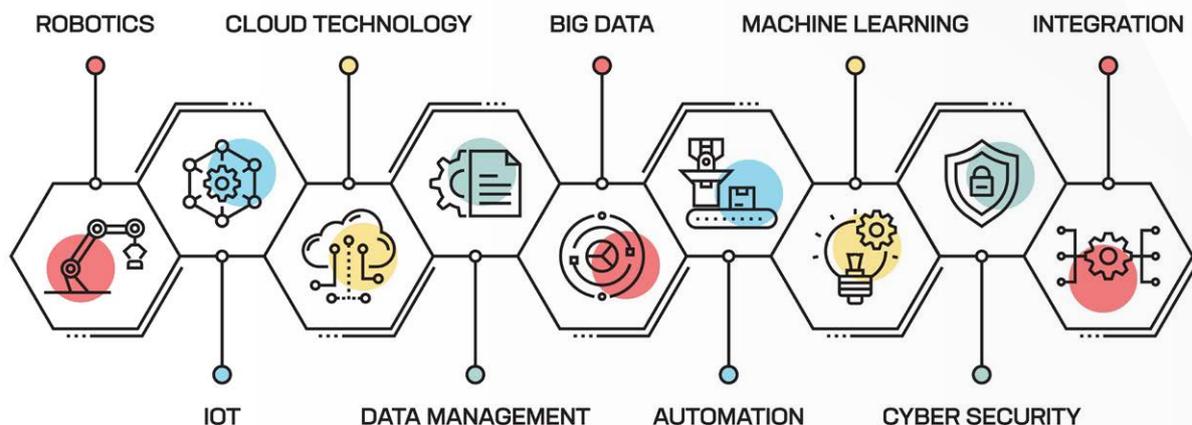
“

I believe this new program can provide graduates with essential trainings of qualitative and quantitative knowledge ... and can help meet this huge need of manpower.

Eric Chen,
SEEM alumnus,
Founder of Vitargent Biotechnology Ltd.,
Forber Asia 30 under 30 business leader 2017

”

This figure shows the basic structure of our programme. It is subject to update.



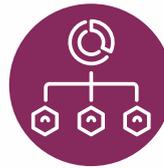
Career prospect



Manufacturing Engineer



Management Consultant
(e.g. for IoT and digital strategy)



Business Process Automation Specialist



Digital Transformation Specialist



Manufacturing Engineering Manager



Business Process Manager



Graduate/Management Trainee

Why CityU?



1st A first undergraduate programme emphasizing intelligent manufacturing and Industry 4.0 in Hong Kong

48th Ranked 48th among the world's top 200 university (QS ranking 2020)

19th Ranked 19th among Asia's top universities (QS ranking Asia 2020)

You can work in many different industries:

- Manufacturing
- Various service industries/ commercial enterprises that can benefit from digitalization
- Healthcare
- Transportation & Logistics
- Government

Admission criteria

Please visit our website
<https://www.cityu.edu.hk/seem/prg-bengitme.htm>

Questions? Ask us at

seemgo@cityu.edu.hk

Contact

852-3442-9321



Student life

- **Exchange**
Experience student life in different countries
- **Scholarship & awards**
We support and recognize outstanding students
- **Internship**
Opportunities for overseas and local internships
- **Activities**
Mentor schemes, company visits, career talks and guest lectures



* The new major Intelligent Manufacturing Engineering is subject to the approval of the University.