EMBRACE CHANGE IN THE CENTURY OF ENGINERING 掌握變革 · 擁抱工程世紀

CIVIL AND ENVIRONMENTAL ENGINEERING

What is Civil & Environmental Engineering (CIVL)?

Civil and Environmental Engineering is a discipline dealing with the planning, design, construction and management of civil infrastructure, while maintaining a clean living environment and sustainable world. Civil and environmental engineers often face large scale and complex problems. Their solutions require solid knowledge of the physical sciences, understanding of human/social behavior, and familiarity with the latest technologies. An eagerness to constantly explore new ideas and apply the latest research results is also essential. Hence, our programs provide training in engineering fundamentals, problem solving, design and management as well as general skills such as communication, teamwork and self-learning to meet modern day challenges.

The Program

undergraduate program is 126,

earned through eight

semesters in four years.

The Department offers two undergraduate programs, namely BEng in Civil Engineering, and BEng in Civil and Environmental Engineering. The curriculum strikes a balance between a practice-oriented curriculum and longer-term benefits of acquiring problem solving skills important for self-directed learning. This enables students to develop an integrated and analytical view of civil engineering sub-specialties along with exceptional communication skills. The total credit contained in the curriculum of the



BEng in Civil Engineering (CIVL)

Civil Engineering concerns the planning, design, construction, maintenance and management of various types of infrastructure systems. Examples include buildings, bridges, roads, railways, tunnels, airports, harbor facilities, slopes, dams, landfills, water pipes, water and sewage treatment plants, power lines, gas mains and various other structures. In short, Civil Engineering is about the infrastructure of modern civilization.

Our Civil Engineering program aims at equipping students with the technical skills, intellectual aspiration and humanistic appreciation needed to:

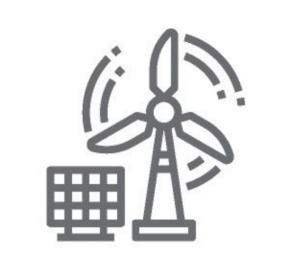
infrastructure systems locally and worldwide



BOTH CIVL & CIEV

The BEng in Civil Engineering and Civil and Environmental Engineering program offered by the Department of Civil and Environmental Engineering at HKUST is accredited by the Hong Kong Institution of Engineers (HKIE). Graduates are eligible to apply for Graduate Membership in the HKIE.

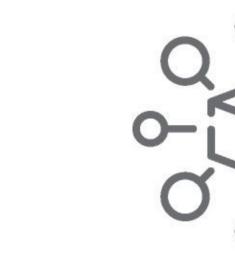
AN INNOVATIVE AND BALANCED CURRICULUM



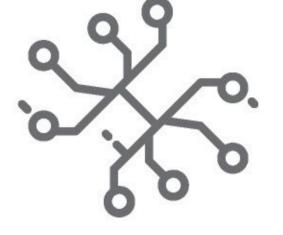
Engineering



Engineering









Transportation and System

Water Resources

HIGHLIGHTS

Structures

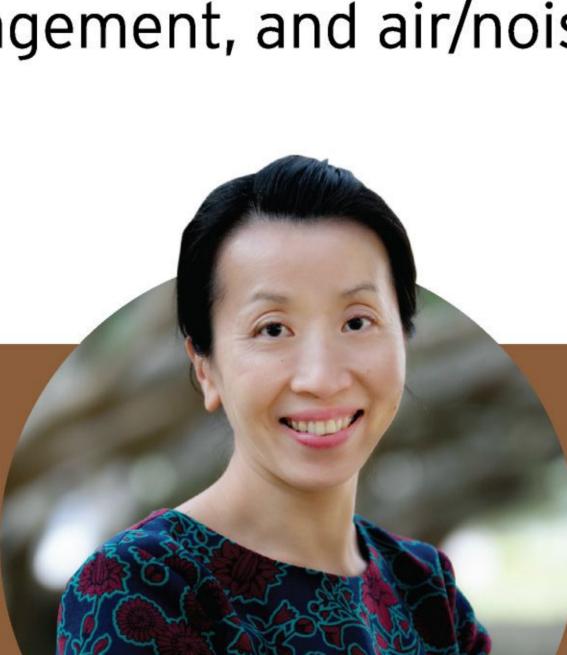
and Materials

- 100% internship and industrial training
- Final-Year Project and Capstone Design Project
- HKIE Accreditation
- Strong alumni network & Mentorship Program
- International exchange program
- Over 90% graduate industry placement

Beng in Civil and Environmental Engineering (CIEV)

Environmental quality is a major public concern all over the world. With the rapid economic development in Hong Kong, more and more resources are being committed to improving and managing our environment. Thus, there will be a great need for properly trained environmental engineers.

The Civil and Environmental Engineering program provides broad engineering training with an emphasis on the areas of water and wastewater engineering, solid and hazardous waste management, and air/noise pollution control.



Notable Alumni

Florence Ko

- Head of Tree Management Office, Development Bureau, The Government of the HKSAR
- BEng in Civil and Structural Engineering, Class of 1997



Derrick Leung

- Technical Director at Yee Hop Engineering Ltd
- MPhil in Civil Engineering, Class of 1993



Clifford Phung

- Director at Meinhardt Infrastructure and Environment Ltd
- BEng in Civil and Structural Engineering, Class of 1999



Terry Tsang

- Founder and CEO of Madhead
- BEng in Civil and Structural Engineering, Class of 2004
- MPhil in Civil Engineering, Class of 2006



Jenny Yeung

- Chief Geotechnical Engineer (Slope Safety), Geotechnical Engineering Office, Civil Engineering and Development Department, The Government of the HKSAR
- BEng in Civil and Structural Engineering, Class of 1995









Department of

Civil and Environmental Engineering 土木及環境工程學系



4 YEAR PROGRAM

The Program

Civil Engineering concerns the planning, design, construction, maintenance and management of various types of structures. Examples include buildings, bridges, roads, railways, tunnels, airports, harbor facilities, slopes, dams, landfills, water pipes, water and sewage treatment plants, power lines, gas mains and various other structures. In short, Civil Engineering is about the infrastructure of modern civilization.

Civil Engineering program aims at equipping students with the technical skills, intellectual aspiration and humanistic appreciation needed to

- (i) build infrastructure systems locally and worldwide, and
- (ii) maintain a safe, clean and sustainable environment.

Entrance Requirements to School of Engineering

JUPAS applicants

- · Level 2 or above in Liberal Studies
- Level 3 or above in English Language, Chinese Language, Mathematics (Compulsory Module), and either 2 electives⁺ or 1 elective⁺ plus M1* / M2**
 - One elective must be Biology/ Chemistry/ Physics/ Combined Science/ ICT
 - * M1: Mathematics Extended Module 1 (Calculus & Statistics)
 - ** M2: Mathematics Extended Module 2 (Algebra & Calculus)

Direct-entry applicants

- Holders of an associate degree or a higher diploma from a relevant discipline; or
- · Local international high school graduates; or
- International or mainland students holding equivalent admission requirements.



Civil Engineering [] _ []



4 YEAR PROGRAM

Curriculum

Required courses in civil engineering

Optional elective courses in the following areas

- · Construction management and financial engineering
- · Geotechnical engineering
- · Structural engineering
- · Construction materials
- · Transportation engineering
- · Water resources and hydraulics engineering

Optional minor programs

- · Aeronautical engineering
- Bioengineering
- · Engineering management and law
- · Environmental sustainability and management
- · Information technology
- · Technology management
- · Maths, science, business, humanities or social science

Professional Recognition

The BEng in Civil Engineering program offered by the Department of Civil and Environmental Engineering at HKUST is accredited by the Hong Kong Institution of Engineers (HKIE). Graduates are eligible to apply for Graduate Membership in the HKIE.

Career Prospects

Graduates of the BEng in Civil Engineering program have excellent opportunities to work in a wide range of areas such as government departments, engineering consulting firms and construction companies, etc. A civil engineering education also provides a good foundation to pursue future careers as middle-to-top level managers and sales/technical representatives in a wide range of businesses.



Department of Civil and Environmental Engineering

http://www.ce.ust.hk

HKUST Admissions Office

http://join.ust.hk/index.html

Enquiries Ms Queenie Tso

Tel.: 2358 7154

Email: civilweb@ust.hk

