

Master of Science in Energy and Environment 理學碩士 (能源及環境)

Mode of study: 2-year part-time or 1-year full-time **Maximum period of study:** 5-year part-time or 2.5-year full-time

Aims of the Programme

- Equip professionals with multiple knowledge and skill sets in energy and environment sectors;
- Combine both hard and soft sciences for balanced career development;
- Provide science- and engineering- driven education for energy and environmental engineers, sustainability managers, governmental officials, etc.

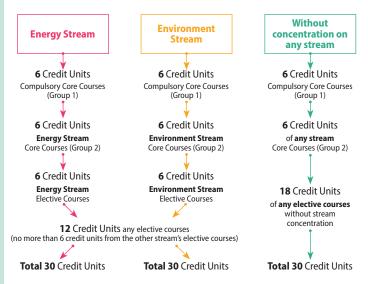
International Accreditation

- Institution of Gas Engineers and Managers (IGEM)
- Chartered Institution of Water and Environmental Management (CIWEM)
- Graduates who have successfully completed the degree can partially fulfill the academic requirements* for registration as Chartered Engineer (CEng), UK

Curriculum Design

- Attain 30 credit units in one year/ two years, or within the maximum period of study, according to the University's rules and regulations
- Complete four core courses and six elective courses each with 3 credit units, or four core courses and four elective courses with a dissertation which is 6 credit units

Academic Curriculum



Students are flexible to choose courses with or without concentration on stream:

Energy Stream • Environment Stream • Without concentration on any stream

Core Courses

Group 1: Compulsory Core Courses

- Energy, Environment and Sustainable Development
- Environmental and Energy Policy

Group 2: Stream Core Courses

Energy Core Courses

- Energy Conversion: Theory and Methodology
- Energy Conservation and Audit

Environment Core Courses

- Data Analysis in Environmental Applications
- Environmental Pollution: Theories, Measurement and Mitigation

Without concentration on any stream

 taking 6 credit units of any group 2 core courses without concentration on any stream.

Elective Courses

Energy Elective Courses

- Emerging Energy Technologies
- Electrochemical Energy Storage
- Fuel Processing
- Carbon Capture Use and Storage
- Hydrogen Production and Storage
- Power Grid Management
- Renewable Energy Generation

Environment Elective Courses

- Air Pollution and Atmospheric Chemistry
- Environmental Impact Assessment: Principles and Practice
- Environmental Modelling
- Wastewater Engineering and Water Quality Assessment
- Solid Waste Treatment and Management
- Environmental Engineering Science
- Ecosystem and Environmental Toxicology

Elective Courses without any concentrating on any stream

- Climate Change: Science, Adaptation and Mitigation
- Energy Generation and Storage Systems
- Energy Efficiency and Conservation Technologies
- Carbon Audit and Management
- Building Performance Assessment
- Environmental Assessment
- Dissertation
- Energy and Environmental Law



Remarks: Programme electives will be offered subject to the availability of resources and sufficient enrolment.

Master of Philosophy (MPhil) 哲學碩士

Mode of study: 2-year full-time

Doctor of Philosophy (PhD) 哲學博士

Mode of study: 4-year full-time

Master of Philosophy (MPhil) and **Doctor of Philosophy (PhD)** in all energy- or environment-related subjects in which SEE faculty members have expertise.

Before making an application, candidates are requested to contact one of the faculty members in SEE in the relevant subject discipline to discuss their proposed research topic within that discipline. A five-page research statement is also required to be submitted together with the application for admission.

Research and Development

Our established research expertise in energy-& environment-related subjects are grouped in research teams to engage in and develop cutting-edge research. Current research areas include:

Energy

Conversion & Generation

Prof. Fatwa F. ABDI

Prof. Sam H.-Y. HSU

Prof. Alex KY JEN

Prof. Patrick LEE

Prof. Michael K. H. LEUNG

Prof. Chunhua LIU

Prof. Yun Hau NG

Prof. Sai Kishore RAVI

Prof. Jin SHANG

Prof. Patrick SIT

Prof. Edwin C.Y. TSO

Prof. Jian WANG

Prof. Xue WANG

Prof. Zhenbin WANG

Prof. Wei WU

Prof. Charles Chunbao XU

Prof. Angus Hin-Lap YIP

Efficiency & Storage

Prof. Guohua CHEN

Prof. Sam H.-Y. HSU

Prof. Michael K. H. LEUNG

Prof. Chunhua LIU

Prof. Patrick SIT

Prof. Edwin C.Y. TSO

Prof. Jian WANG

Prof. Xue WANG

Prof. Zhenbin WANG

Prof. Wei WU

Prof. Charles Chunbao XU

Prof. Angus Hin-Lap YIP

Prof. Lin ZHANG

Environment

Atmospheric & Climate

Prof. Jung-Eun CHU

Prof. Jin-Soo KIM

Prof. Jin-Soo Kiivi

Prof. Alvin Chi Keung LAI

Prof. Patrick LEE

Prof. Theodora NAH

Prof. Yiming QIN

Prof. Jin SHANG

Prof. Xuan WANG

Prof. Charles Chunbao XU

Prof. Lin ZHANG

Water & Waste

Prof. Fatwa F. ABDI

Prof. Alicia K. J. AN

Prof. Guohua CHEN

Prof. Shauhrat S. CHOPRA

Prof. Liang DONG

Prof. Henry Y. HE

Prof. Sam H.-Y. HSU

Prof. Jason C. H. I AM

Prof. Carol LIN

Prof. Theodora NAH

Prof. Yun Hau NG

Prof. Sai Kishore RAVI

Prof. Wen-Xiong WANG

Prof. Charles Chunbao XU

Prof. Zhiguo YUAN AM

Sustainability and Policy

Prof. Shauhrat S. CHOPRA

Prof. Liang DONG

Prof. Alvin Chi Keung LAI

Prof. Wanxin LI

Prof. Carol LIN

Prof. Lin ZHANG







Message from Graduates

This programme has provided me with the opportunity to work with a multi-disciplinary group of advisers who have real world experience. Their work with government and industry provides me with access to contacts and data I need to study and develop an economically optimal water supply mix.



David William VON EIFF
PhD Graduate

The MSc Programme covers different areas in the energy and environment sector, and I can gain both theoretical and practical knowledge in the related industry. The range of projects that I had to work on during the MSc study has equipped me with the necessary skills in the workplace such as teamwork and communication skills.



Chun Ho SO <u>MSc Grad</u>uate

Application

For details, please refer to the website of Chow Yei Ching School of Graduate Studies:



MSc Energy and Environment https://www.cityu.edu.hk/pg/programme/p63



MPhil/PhD

https://www.cityu.edu.hk/pg/research-degree-programmes

Contact Us

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Hong Kong SAR

Tel: (852) 3442 2414

Email: see.enquiry@cityu.edu.hk **Website:** http://www.cityu.edu.hk/see