



The Chinese University of Hong Kong

Environmental Science Programme School of Life Sciences 環境科學課程 Faculty of Science



Environmental Science Programme
The Chinese University of Hong Kong
Established 1994

BACKGROUND

Environmental Science is an integrated science using the basic knowledge and skills of applied biochemistry, biology and chemistry to assess and resolve environmental problems. In response to the growing public concerns about the environmental protection and conservation issues, the University established the Environmental Science Programme in 1994.



PROGRAMME MISSION & HIGHLIGHTS

Our body of lecturing staff comprises professors from the School of Life Sciences and Department of Chemistry, as well as other professionals from related disciplines.

Students should focus either on Environmental Management or Environmental Chemistry.

We foster our students with multi-disciplinary training in ecology, environmental chemistry, instrumentation, pollution control, environmental management, biodiversity, conservation biology, toxicology and health, environmental impact assessment, and policy research.

Our Advisory Committee, composed of specialists from the government, industries, and other academic sectors, also provides precious advice on curricular matters, thus improving the relevance of our graduates to the local needs in particular, and that of overseas as well.

COURSES HIGHLIGHT

- Introduction to Environmental Science
- Chemical Treatment Processes
- Ecology
- Environmental and Biochemical Toxicology
- Environmental Biotechnology
- Environmental Chemistry
- Environmental Health
- Environmental Impact Assessment
- Environmental Instrumentation Techniques
- Environmental Protection and Pollution Control
- Field Study
- Internship
- Senior Experimental Project
- Senior Literature Research

SELECTED JOB PROFILES

Mr. Chickee Chow
Consultant, Environmental Resources Management (ERM)

Dr. Eric Sze
Assistant Professor, School of Science and Technology, Open University of Hong Kong

Mr. Alfred Tang
Senior Compliance Engineer, Avery Dennison

Ms. Carol Tse
Manager - Sustainability New World Development Company Limited

Mr. F F Yeung
Country Parks Officer, Agriculture Fisheries and Conservation Department, HKSAR Government

Dr. Patrick C W Yeung
Project Manager, World Wide Fund-Hong Kong

Ms. W Y Yiu
Environmental Protection Officer, Environmental Protection Department, HKSAR Government

ACTIVITIES



Environmental Science Programme

(Applicable to students admitted in 2020-21 and thereafter in a 4 year curriculum)

(JUPAS Catalogue No. JS4601)

BSc Programme in Environmental Science (Minimum Requirement: 123 units)

Other Required Courses

Year One

68 Units

Faculty package (9 units):

LSCI1002 Introduction to Biological Sciences (3 units)
CHEM1280 Introduction to Organic Chemistry and Biomolecules (3 units)
Any one from MATH1520, PHYS1001, PHYS1002, STAT1012 (all 3 units each)

GE (15 units) +
College GE (6 units)

PE (2 units)

Year Two

Core (17 units):

BCHE2030 Fundamentals of Biochemistry (3 units)
BIOL2120 Cell Biology (3 units)
LSCI2002 Basic Laboratory Techniques in Life Sciences (2 units)
ENSC2270 Introduction to Environmental Science (3 units)
BIOL2210/2213 Ecology/Laboratory (2 + 2 units)
LSCI2003 Scientific Conduct and Ethics (2 units)



Other Courses (≥ 32 units) e.g. language courses, courses from minor programme or other departments

Year Three

Recommended Concentrations: Environmental Management or Environmental Chemistry

Core (15 units):

ENSC2515/2517 Environmental Chemistry/Laboratory (5 units)
ENSC3415/3417 Environmental Instrumentation Techniques/Laboratory (5 units)
ENSC3520/3580 Environmental and Biochemical Toxicology/Laboratory (5 units)

Year Four

Capstone Courses, at least 4 units from:

ENSC4901/4902/4903 Senior Experimental Project I/II/III (2 units/2 units/2 units) or
LSCI4000 Senior Literature Research (2 unit); ENSC4906 Internship (2 units), or
ENSC4907 Field Study (2 units)

Major Electives ≥ 23 unit

Group A: Courses Offered by Environmental Science Programme (≥ 11 unit)

ENSC4525 Advanced Environmental Chemistry (3 units)
ENSC4535 Chemical Treatment Processes (3 units)
ENSC4250 Environmental Health (3 units)
ENSC4240/4242 Environmental Impact Assessment/Laboratory (3 + 2 units)
ENSC4310/4510 Methods in Toxicological Research/Laboratory (3 + 2 units)
ENSC3230 Principles of Environmental Protection and Pollution Control (3 units) or GRMD3202 Environmental Management (3 units)

Group B: Courses Offered by other Programmes

BIOL3012 Biodiversity Laboratory I (2 units)
BIOL3022 Biodiversity Laboratory II (2 units)
BIOL3410 General Microbiology (3 units)
BIOL3560 Biology of Fungi and Non-Vascular Plant (2 units)
BIOL3570 Biology of Vascular Plants (2 units)
BIOL3610 Invertebrate Form and Function (2 units)
BIOL3620 Vertebrate Life (2 units)
BIOL3710 Marine Biology (3 units)
BIOL4012 Field and Environmental Biology (2 units)
BIOL4220 Environmental Biotechnology (3 units)
BIOL4260 Conservation Biology (3 units)
BIOL4510 Hong Kong Flora and Vegetation (3 units)
CHME4280 Chemistry in Biofuel (2 units)
CHME4400 Advanced Analytical Chemistry (2 units)
CHME4430 Practices in Testing Laboratory (2 units)
CHME4440 Food Testing and Environmental Analysis (2 units)
ENER3020 Energy Utilization and Human Behaviour (2 units)
ESSC3200 Atmospheric Science (3 units)
ESSC3300 Introduction to Physical Oceanography (3 units)

ESSC3320 Hydrogeology (3 units)
ESSC3600 Understanding Our Biosphere (3 units)
ESSC3800 Global Environmental Change (3 units)
ESSC4400 Hydrology (3 units)
GRMD3104 Satellite Image Analysis (3 units)
GRMD3202 Environmental Management (3 units)
GRMD3203 Urban Environmental Problems (3 units)
GRMD3224 Tourism Planning and Management (3 units)
GRMD3323 Urban and Regional Planning (3 units)
GRMD3403 Methods for Resource Evaluation and Planning (3 units)
GRMD4202 Hydrology and Water Resources (3 units)
GRMD4203 Ecosystem Restoration and Management (3 units)
GRMD4204 Environmental Planning and Assessment (3 units)
GRMD4401 Energy Resources (3 units)
GPAD3360 Global Environmental Politics (3 units)
LAWS4310 The Environment and the Laws (3 units)
PHPC3016 Environment and Health (3 units)
STAT3210 Statistical Techniques in Life Sciences (3 units)
URSP3300 Sustainable Urban Transport (3 units)
URSP4100 Urban Planning Practise and Theory (3 units)

Class of 2019

