Programme Structure

The Master of Science (M.Sc.) in Environmental Engineering is structured around lectures, continual assessments and end-of-semester examinations. Candidates may opt for part-time or full-time study. Part-time students will normally read 2 graduate modules equivalent to 8 MCs per semester and attend lectures two evenings per week. Full-time students will normally read 3 graduate modules equivalent to 12 MCs per semester and attend lectures three evenings per week.

A candidate needs to complete a program of study consisting of **3 core modules** and at least **7 elective modules**.

Some modules have prerequisites. It is the candidate's responsibility to ensure that the prerequisite requirements are met.

Candidates should also note that the final composition of graduate modules proposed by themselves is subject to approval by Division of Environmental Science & Engineering (ESE). Candidates may, as a part of the 10-module requirement for the MSc and subject to approval by ESE, take up to 2 modules not exceeding 10 MCs that are from other departments/faculties.

Modular Requirements

The graduate requirements include obtaining a minimum Cumulative Average Point (CAP) of 3.0 (equivalent to an average of Grade of B-) for the best 40 Modular Credits (MCs), inclusive of core modules. Of the 40 MCs, all must be at graduate level and at least 30 MCs must be within the subject or in a related discipline, and the remaining credits may be from other disciplines as approved by Division of Environmental Science & Engineering (ESE).

**CORE MODULES**

- ESE 5002  Environmental Engineering 1 (Physical Principles)
- ESE 5003  Environmental Engineering 2 (Chemical Principles)
- ESE 5301  Environmental Biological Principles

**ELECTIVE MODULES**

- ESE5201  Combustion Pollution Control
- ESE5202  Air Pollution Control Technology
- ESE5203  Aerosol Science & Technology
- ESE5204  Toxic & Hazardous Waste Management
- ESE5205  Sludge and Solid Waste Management
- ESE5401  Water Quality Management
- ESE5402  Industrial Wastewater Control
- ESE5403  Water Reclamation & Reuse
- ESE5404  Biological Treatment Processes
- ESE5405  Water Treatment Processes
- ESE5406  Membrane Treatment Process Modeling
- ESE601  Environmental Risk Assessment
- ESE602  Environmental Management Systems
- ESE603  Pollution Minimization & Prevention
- ESE604  Process Engineering Design Principles
PROGRAM STRUCTURE FOR M.Sc. (ENVIRONMENTAL ENGINEERING)

A. To complete the following 3 CORE MODULES

ESE5002 Environmental Engineering 1
ESE5003 Environmental Engineering 2
ESE5301 Environmental Biological Principles

B. At least 5 modules from the following
ESE5XXX Any ESE5000 level series graduate module
ESE6XXX Any ESE6000 level series graduate module

C. At least 2 additional modules, for a total of 10 modules for the MSc.

D. Note that all 10 required modules can be from ESE but a maximum of 2 modules of the 10 required modules may be from other Departments/Faculties, including the following modules (subject to approval of ESE)

DE5107  Environmental Planning
GE6211  Spatial Data Processing
LX5103  Environmental Law
PP5227  Environmental Policy and Natural Resource Management
SH5101  Industrial Toxicology
SH5104  Occupational Health

All modules listed are of 4 MCs each.