BIORESOURCE ENGINEERING (NON-THESIS): ENVIRONMENTAL ENGINEERING (M.SC.A.) (45 CREDITS)

Offered by: Bioresource Engineering (Faculty of Agricultural and Environmental Sciences)
Degree: Master of Science Applied
Program credit weight: 45

Program Description

This inter-departmental graduate program leads to a master's degree in Environmental Engineering. The objective of the program is to train environmental professionals at an advanced level. The program is designed for individuals with an undergraduate degree in engineering. This non-thesis degree falls within the M.Eng. and M.Sc. programs which are offered in the Departments of Bioresource, Chemical, Civil, and Mining, Metals, and Materials Engineering.

Note: For information about Fall 2025 and Winter 2026 course offerings, please check back on May 8, 2025. Until then, the "Terms offered" field will appear blank for most courses while the class schedule is being finalized.

Research Project (6 credits)

Expand allContract all

Course	Title	Credits
BREE 671	Project 1.[1]	6
BREE 672	Project 2.	6

[1] BREE 671 Project 1. may also be taken as part of this requirement.

Required Courses (9 credits)

Expand allContract all

Course	Title	Credits
BREE 533	Water Quality Management.	3
CHEE 591	Environmental Bioremediation.	3
CIVE 615	Environmental Engineering Seminar.	3

Complementary Courses (19 credits)

Data Analysis Course

3 credits from the following:

Expand allContract all

Course	Title	Credits
AEMA 611	Experimental Designs 1.	3
CIVE 555	Environmental Data Analysis.	3
PSYC 650	Advanced Statistics 1.	3

Toxicology Course

3 credits from the following:

Expand allContract all

Course	Title	Credits
OCCH 612	Principles of Toxicology.	3
OCCH 616	Occupational Hygiene.	3

Water Pollution Engineering Course

4 credits from the following:

Expand allContract all

Course	Title	Credits
CIVE 651	Theory: Water / Wastewater Treatment.	4
CIVE 652	Bioprocesses for Wastewater Resource Recovery.	4
CIVE 660	Chemical and Physical Treatment of Waters.	4

Air Pollution Engineering Course

3 credits from the following:

Expand allContract all

Course	Title	Credits
CHEE 592	Industrial Air Pollution Control.	3
MECH 534	Air Pollution Engineering.	3

or an approved 500-, 600-, or 700-level alternative course.

Environmental Impact Course

3 credits from the following:

Expand allContract all

Course	Title	Credits
GEOG 601	Advanced Environmental Systems Modelling.	3

or an approved 500-, 600-, or 700-level alternative course.

Environmental Policy Course

3 credits from the following:

Expand allContract all

Course	Title	Credits
URBP 506	Environmental Policy and Planning.	3

or an approved 500-, 600-, or 700-level alternative course.

Further complementary courses (balance of coursework to meet the 45-credit program requirement):

Remaining Engineering or Non-Engineering courses from an approved list of courses, at the 500, 600, or 700 level, from the Faculty of Engineering, Faculty of Agricultural and Environmental Sciences, Faculty of Law, Faculty of Religious Studies, Desautels Faculty of Management, and Departments of Atmospheric and Oceanic Sciences,

Biology, Chemistry, Earth and Planetary Sciences, Economics, Epidemiology and Biostatistics, Geography, Occupational Health, Political Science, Sociology, and the Bieler School of Environment.