# Western S Engineering

## **Civil: Environmental Engineering (Option B)**

## September 2024 (students who entered first year in September 2023 or later)

## Year 2:

| Term A         |   |
|----------------|---|
| NMM 2270a      | Applied Math for Engineering II (Formerly AM 2270B) |
| CEE 2224       | Engineering Fluid Mechanics                         |
| CEE 2202a      | Mechanics of Materials                              |
| CEE 2217a      | Introduction to Environmental Engineering           |
| CEE 2220a      | Introduction to Structural Engineering              |
| SS 2141a       | Applied Probability and Statistics for Engineers    |
| Term B         |   |
| NMM 2277b      | Applied Math for Civil and Chemical Engineering II  |
|                | (Formerly AM 2277B)                                 |
| CEE 2224       | Engineering Fluid Mechanics                         |
| CEE 2219b      | Computation Tools for Civil Engineers               |
| CEE 2221b      | Structural Theory and Design                        |
| EarthSci 2281b | Geology for Engineers                               |
| Writing 2130g  | Building Better (Communication) Bridges: Rhetoric & |
|                | Professional Communication for Engineers            |

**Note: CEE 3324a (Surveying).** This course is available each summer (10 days) Must complete before graduation from program.

## Year 3:

#### Term A

| CEE 3321a     | Soil Mechanics and Hydrogeologic Engineering   |
|---------------|--|
| CEE 3348a     | Project Management and Engineering Cases       |
| CEE 3362a     | Drinking Water Quality and Treatment           |
| CEE 3386a     | Numerical Modeling for Environmental Engineers |
| CEE 3369a     | Materials for Civil Engineering                |
| EarthSci3340a | Watershed Hydrology                            |

## Term B

| Introduction to Geotechnical Engineering |
|--|
| Municipal Engineering Design             |
| Environmental Hydraulics Design          |
| Wastewater Treatment                     |
|  |

Two 0.5 Non-technical elective taken from the approved list.

## <u>Year 4:</u>

| Term A          |   |
|-----------------|---|
| CEE 4441        | Civil Engineering Design Project          |
| CEE 4426a       | Geotechnical Engineering Design           |
| CEE 4465a       | Environmental Design for Waste Disposal   |
| One 0.5 Non-te  | chnical elective taken from approved list |
| Two 0.5 Technic | al electives                              |

#### Term B

| CEE 4441                   | Civil Engineering Design Project                        |  |
|----------------------------|---|--|
| CEE 4424b                  | Earth Structures Engineering                            |  |
| CEE 4463b                  | Watershed Modelling                                     |  |
| CEE 4478b                  | Case Studies in Civil Engineering                       |  |
| ELI 4110g                  | Engineering Ethics, Sustainable Development and the Law |  |
| One 0.5 Technical elective |   |  |
|                            |   |  |

## NOTES:

### Important:

Students are responsible for ensuring they have the correct courses required for their degree. If you are unsure which courses you still need or if you see courses listed on the progression sheet that are no longer offered or are not offered in the term you see listed here, please contact your Academic Counsellor.

#### Non-technical Electives:

http://www.eng.uwo.ca/undergraduate/upper\_year/electives.html

### **Technical Elective List:**

Some technical electives may not be offered in a given academic year. Consult the Academic Timetable for a current listing.

| CEE 4401a/b      | Principles of Transportation Engineering                          |
|------------------|---|
| CEE 4418a/b      | Systems Approach for Civil and                                    |
|                  | Environmental Engineering   |
| CEE 4420a/b      | Data Science for Geotechnical Engineers                           |
| CEE 4428a/b      | Selected Topics in Civil Engineering I                            |
| CEE 4429a/b      | Selected Topics in Civil Engineering II                           |
| CEE 4438a/b      | Introduction to Wood Design                                       |
|                  | Civil Engineering Thesis (full year course –                      |
| CEE 4440         | 1.0 Technical Elective)   |
|                  | Risk Analysis and Decision  |
| CEE 4458a/b      | Making in Engineering   |
| 055 4470- //-    | Subsurface Contamination by Hazardous                             |
| CEE 4479a/b      | Industrial Chemicals  |
| 055 4400 //      | Wind Engineering: Modelling,                                      |
| CEE 4480a/b      | Assessment and Mitigation   |
| CEE 4485a/b      | Cities: Resilience and Sustainability                             |
| CBE 4405a/b      | Air Pollution   |
| CBE 4463a/b      | Water Pollution Design  |
| CBE 11050/D      |   |
| EarthSci 4440a/b | Hydrogeology: Principles, Processes, and                          |
|                  | Hydrogeology: Principles, Processes, and<br>Professional Practice |
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