

**The University of Western Ontario  
Department of Civil and Environmental Engineering**

**CEE 4440 – Civil Engineering Thesis Course**  
**Outline 2025-2026**

The objective of the course is to provide the student with an opportunity to select and investigate an engineering problem in some depth under the individual supervision of a faculty member. The student will carry out analytical and/or experimental work and prepare a progress report and an engineering thesis. All students must deliver a public lecture.

**Anti-requisites:**

BME4400, CBE 415, ECE 4415/4416, MME 4410, SE 4450.

**Note:** It is students' **responsibility** to ensure that all Prerequisite conditions are met or that special permission to waive these requirements has been granted by the Faculty. Unless the student has either the requisites for this course or written special permission from the Associate Dean's Office to enrol in it, he/she will be removed from this course and it will be deleted from the student's record. It is also the student's **responsibility** to ensure that he/she has not taken a course listed as an Anti-requisite. The student may not be given credit if he/she violates the anti-requisite condition. The decisions regarding either prerequisite or anti-requisite may not be appealed. The student will receive no adjustment to tuition fees in the event that he/she is dropped from a course for failing to meet prerequisite and anti-requisite conditions.

**Faculty Advisor:**

It is the student's responsibility to ensure that they have a Faculty Advisor(s). At least one Faculty Advisor must be a faculty member in the Dept. of Civil and Environmental Engineering.

**Contact Hours:**

By arrangement with the Faculty Advisor. All students registered in this course are required to attend Civil Seminars, which are held on Tuesdays, 1:30 – 2:30 PM during Fall and Winter semesters, as part of learning experience for carrying out research in the broad field of civil and environmental engineering.

**Coordinator:**

Dr. Clare Robinson, SEB3006, [crobinson@eng.uwo.ca](mailto:crobinson@eng.uwo.ca)  
Office hours: by appointment

**Textbook:** N/A.

**Laboratory:** minimum 6 hours of personal work per week

**Units:** SI

### **Specific Learning Objectives**

1. Develop an ability to independently identify and formulate relevant engineering problem with clear objectives and scope [PA1, PA2, D1]
2. Perform detailed literature review to identify existing research gaps, relevant theories, and methodologies, critically analyzing previous work to inform research project [KB4, PA3, I3, ITW1]
3. Create a structured research plan that includes designing experiments or developing analytical/numerical models ensuring reliable and reproducible outcomes [I1, I2]
4. Demonstrate ability in conducting analytical and/or experimental investigations independently applying appropriate engineering theories, methodologies and technical tools [KB4, I1, I2, ET1, ET2]
5. Critically analyze data and results to identify trends and make conclusions and recommendations based on evidence [KB4, PA3, I3]
6. Enhance communication skills by preparing progress report and final thesis to articulate technical content clearly and effectively and present research findings in a public lecture demonstrating engagement and ability to explain complex engineering concepts to both technical and non-technical audiences [CS2, CS3]
7. Manage the research process independently, demonstrating initiative, self-discipline, and effective time management skills [ITW1, EPM2]
8. Enhance collaborative and professional skills by engaging with faculty advisor incorporating feedback into the research process [CS1, CS2]

### **General Learning Objectives**

Knowledge Base	A	Use of Engineering Tools	A	Impact on Society and the Environment	
Problem Analysis	A	Individual and Team Work	A	Ethics and Equity	
Investigation	A	Communication Skills	A	Economics and Project Management	A
Design	A	Professionalism		Life-Long Learning	

E=Evaluate, T=Teach, I=Introduce

I – The instructor will introduce the topic at the level required. It is not necessary for the student to have seen the material before. D – There may be a reminder or review, but the student is expected to have seen and been tested on the material before taking the course. A – It is expected that the student can apply the knowledge without prompting (e.g. no review).

### **Accreditation Units:**

Engineering Science = 60%

Complementary Studies = 40%

<b><u>Evaluation:</u></b>	Proposal	5% (by faculty advisor)
	Progress report	20% (by faculty advisor)
	Abstract and Oral presentation <sup>1</sup>	25% (by external judges)
	Final report	50% (by advisor and another faculty member)
	<b>Total</b>	<b>100%</b>

In addition to these evaluations, students are required to attend at least 50% of the Civil Seminars. Attendance at these seminars are tracked by the department.

<sup>1</sup>Oral presentations will be conducted in-person. The winner who receives the highest grade in the oral presentation will receive an award up to \$1,000 from the Department of Civil and Environmental Engineering to attend a technical conference/workshop or research related activity.

### **Course Notifications**

Students are responsible for checking their university email account (@uwo.ca) and course announcements in OWL Brightspace regularly to receive any notices posted by the Course Co-ordinator. When communicating with instructors by email, **students are required to use their university email account.**

### **Faculty of Engineering Policies and Procedures-Undergraduate**

The Faculty of Engineering has established for 2025 a set of [Policies and Procedures for Undergraduate Students](#). The policy covers:

- Absence/Late Accommodation Policy
- Religious Accommodation
- Academic Integrity
- Academic Offences
- Faculty of Engineering AI Policy
- Accessibility
- Inclusivity, Diversity, and Respect
- Health and Well-being

### **Important Contacts:**

<a href="#">Engineering Undergraduate Services</a>	SEB 2097	519-661-2130	engugrad@uwo.ca
<a href="#">Civil &amp; Environmental Engineering</a>	SEB 3005	519-661-2139	civil@uwo.ca
<a href="#">Office of the Registrar/Student Central</a>	WSSB 1120	519-661-2100	

### **Important Links:**

- [Western Academic Calendar](#)
- [Academic Rights and Responsibilities](#)
- [Engineering Progression Requirements and Academic Regulations](#)
- [University Students' Council \(USC\) - Services](#)
- [Important Dates and Deadlines](#)
- [Student Online Forms](#)

- [Office of the Registrar](#)
- Select University Policies:
  - [Academic Consideration for Medical Illness - Undergraduate Students](#)
  - [Accommodations for Religious Holidays](#)
  - [Scheduling of Assignments, Tests, and Examinations](#)
  - [Academic Appeals](#)