The University of Western Ontario Department of Mechanical & Materials Engineering

MME 4410 — Mechanical & Materials Engineering Thesis **COURSE OUTLINE 2025-26**

CALENDAR **DESCRIPTION:** The objective of the course is to provide the student with an opportunity to select and investigate an engineering problem in some depth independently under the supervision of a faculty member. The student will carry out analytical and/or experimental work and prepare a progress report and an engineering thesis. Each student must deliver a public lecture. This course is primarily directed at students considering future graduate studies.

COORDINATOR:

Prof. A.G. Straatman Room: SEB 3002,

Telephone: 519-661-2111, Ext. 88249

e-mail: agstraat@uwo.ca

PREREQUISITES:

Completion of the third year of the Mechanical & Materials Engineering program with a minimum A- average. Unless you have either the requisites for this course or written special permission from your Chair or Dean to enroll in it, you will be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

ANTIREQUISITES

CBE 4415, ECE 4416, SE 4450; MME 4401y

ACCREDITATION

UNITS:

Engineering Science = 75%, Complementary Studies = 25%

CONTACT HOURS:

By arrangement with the thesis Faculty Advisor.

Laboratory: 3 hours of personal work per week. Full course (1.0 credit).

LEARNING OUTCOMES:

The Mechanical and Materials Engineering Program has been accredited by Canadian Engineering Accreditation Board (CEAB) of Engineers Canada. Accredited programs provide the academic requirements for licensure as a professional engineer in Canada. Western Engineering has defined indicators of the 12 Graduate Attributes (GAs) that the CEAB expects graduating engineering students to demonstrate. The connections between course learning outcomes and Western Engineering's GA Indicators are identified below.

Upon successful completion of this course, students will be able to:

- 1. Independently gather background knowledge necessary to undertake a research project (LL2)
- 2. Carefully manage time and resources to ensure completion of all project milestones (EPM2)
- 3. Write a comprehensive thesis document describing research activities (CS3)
- 4. Orally present and defend research activities (CS2)

TEXT: N/A **UNITS:** SI

MME 4410—Course Outline 2.

EVALUATION: Proposal 5% (by faculty advisor)

Progress report 20% (by faculty advisor)

Abstract and Oral presentation
Final report

25% (by judges of U/G thesis competition)
50% (by faculty advisor and coordinator)

CONSULTATION: Students are encouraged to discuss problems with their Faculty Advisor(s) and/or Course

Coordinator. Faculty Advisor(s) will have weekly office hours scheduled for MME4410.

General Faculty / University Policies

The Faculty of Engineering and Western University have overarching policies that prescribe how undergraduate courses should run. The course-specific policies described above should be considered *in addition to* those overarching policies, or as course-specific interpretations of them. In the event of contradictions or confusion between course-specific policies above and general Faculty / University policies, please contact your course instructor for clarification.

Western Engineering's undergraduate polices can be found by navigating to:

https://www.eng.uwo.ca/undergraduate/academic-support-and-accommodations/policies.html

and then clicking the "Engineering Undergraduate Policies framework" link.