



# MECHANICAL ENGINEERING CURRICULUM UPDATES & ENROLLMENT UPDATES

Fall/Winter 2025/26

# MECHANICAL ENGINEERING RECAP

For students following the 2023-2024 Academic Calendar and prior:

MECH 4401 3.00 and MECH 4504 3.00 are no longer offered. Review each scenario below and enrol in the required make-up course(s).

Scenario	MECH 4401 3.00	MECH 4504 3.00	Make-up Course(s)
1	Passed	Passed	Not applicable. Degree requirements already satisfied.
2	Not taken or failed	Passed	Complete MECH 4411 3.00
3	Passed	Not taken or failed	Complete MECH 4411 3.00
4	Not taken or failed	Not taken or failed	Complete MECH 4411 3.00 <u>and</u> minimum 3.00 <i>additional</i> credits from:* MECH 4201 3.00, MECH 4202 3.00, MECH 4203 3.00, MECH 4301 3.00, MECH 4510 3.00, MECH 4511 3.00, MECH 4512 3.00, ENG 4650 3.00, MECH 4403 3.00

If a student has taken MECH 4401 and MECH 4504, but then wants to repeat one of the courses to increase their GPA, the student can take MECH 4411 and use that to replace the lower grade of MECH 4401 or MECH 4504. After completing MECH 4411, students in this scenario must [connect with a Lassonde Academic Advisor](#) to ensure their record is updated correctly and in accordance with the [Course Repeat Policy](#).

# MECHANICAL ENGINEERING RECAP

For students following the 2019-2020 Academic Calendar and prior:

Scenario	MECH 4201 3.00	MECH 4510 3.00 or MECH 4511 3.00 or MECH 4512 3.00	Make-up Course(s)
1	Passed	Passed	Not applicable. Degree requirements already satisfied.
2	Not taken or failed	Passed	<b>Complete minimum 3.00 additional credits from:</b> MECH 4201 3.00, MECH 4202 3.00, MECH 4203 3.00, MECH 4301 3.00, MECH 4510 3.00, MECH 4511 3.00, MECH 4512 3.00, ENG 4650 3.00 <b>MECH 4403 3.00</b>
3	Passed	Not taken or failed	<b>Complete minimum 3.00 additional credits from:</b> MECH 4201 3.00, MECH 4202 3.00, MECH 4203 3.00, MECH 4301 3.00, MECH 4510 3.00, MECH 4511 3.00, MECH 4512 3.00, ENG 4650 3.00 <b>MECH 4403 3.00</b>
4	Not taken or failed	Not taken or failed	<b>Complete minimum 6.00 additional credits from:</b> MECH 4201 3.00, MECH 4202 3.00, MECH 4203 3.00, MECH 4301 3.00, MECH 4510 3.00, MECH 4511 3.00, MECH 4512 3.00, ENG 4650 3.00 <b>MECH 4403 3.00</b>

If you failed a course, you can only replace the grade in your GPA by repeating the same course (see [Course Repeat Policy](#)).

# Technical Electives: \*NEW\*



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## New Courses Effective 2025

## RATIONALE

LE/ESSE338o 4.00  
Introduction to Mechatronics

Provides students with greater course selection and opportunities to learn information relevant to the field of Mechatronics.

LE/ESSE438o 4.00  
Mechatronic Systems and Design

Provides students with greater course selection and opportunities to learn information relevant to the field of Mechatronics.

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# 2025/2026 Technical Electives\*

Recommended Term	Course Code	Course Title	Notes / Prerequisites
Fall	LE/MECH4201 3.00	Transport Phenomena	Prerequisites: LE/MECH 3201 3.00; LE/MECH 3203 3.00
Fall	LE/MECH4202 3.00	Aerodynamics	Prerequisites: LE/MECH 2301 3.00, LE/MECH 3202 3.00, and LE/MECH 2401 3.00
Fall	LE/MECH4203 3.00	Energy Conversion and Storage	Pre-requisites: LE/MECH 3401 3.00 and LE/EECS 1021 3.00
Fall	LE/MECH4403 3.00	Artificial Intelligence and Generative Design for Mechanical Systems	Pre-requisites: LE/MECH 3401 3.00 and LE/EECS 1021 3.00
Winter	LE/MECH4510 3.00	Advanced Mechanical Technologies	Prerequisites: SC/MATH 2015 3.00, LE/MECH 2202 3.00, and LE/MECH 3503 3.00
Winter	LE/MECH4512 3.00	Principles of Bioengineering	Pre-requisites: 21 3000-level science or engineering credits including LE/MECH 3503 3.00
Winter	LE/ENG 4650 3.00	Feedback Control Systems	Prerequisites: LE/ENG 4550 3.00
Winter	LE/MECH 4301 3.0	Introduction to Composite Materials	Prerequisites: SC/MATH 1025 3.00 and LE/MECH 3502 3.00.
Winter	LE/ESSE 3380 4.0	Introduction to Mechatronics	Co-requisites: LE/MECH 3302 3.00; Prerequisites: LE/MECH 2401 3.00; SC/PHYS3050 3.00 or LE/EECS 3505 3.00

\*Please note that this list is subject to change

# Courses that are Available in Summer 2025

Course	Coure Title	Prerequisites/Notes
LE/MECH 2201 3.00	Thermodynamics	Prerequisites: SC/PHYS 1800 3.00
LE/MECH 2202 3.00	Heat and Flow Engineering Principles	Prerequisites: SC/MATH 1013 3.00, SC/MATH 1014 3.00, and SC/PHYS 1800 3.00
LE/MECH 2401 3.00	Engineering Graphics & CAD Modelling	Prerequisite: LE/ENG 1102 4.00. Cross-listed: LE/ESSE 2401 3.0
LE/MECH 3202 3.00	Fluid Dynamics	Prerequisite: LE/MECH 2202 3.00
LE/MECH 3409 3.00	Machine Elements Design	Prerequisites: LE/MECH 2301 3.00, LE/MECH 2401 3.00
LE/MECH4502 3.0	Vibrations	Prerequisites: SC/MATH 2271 3.00.

\*Please note that this list is subject to change