

**Western University**  
**Faculty of Engineering**  
**Mechatronic Systems Engineering Program**

**MSE 2202—Introduction to Mechatronic Design**  
**Course Outline 2023–2024 (W2024)**

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**DESCRIPTION:** In this course, students will learn about the design process employed for the development of mechatronic devices and systems. Key components such as microcontrollers, sensors and actuators are introduced, and students will apply this knowledge to the completion of several hands-on labs during the first half of the term. Afterwards, students will use the second half of the term to expand upon this knowledge, apply the mechatronic design process and use analysis tools, while tackling a mechatronic design project. Throughout the project, students will be expected to complete milestones related to the design process, participate in design reviews, construct a functional prototype that will be presented at an open showcase at the end of the term, and produce comprehensive design documentation.

**ACADEMIC CALENDAR COPY:** Introduces engineering design and structured design methods from the perspective of mechatronic systems that integrate mechanical, electrical and control technologies. Topics include the mechatronic design process, simple sensors and actuators, electronic communications and microcontroller-based software design.

**CONTACT HOURS:** 3 lecture hours, 3 laboratory hours, 0.5 course.  
Timetable information is available at <https://draftmyschedule.uwo.ca/>. Lectures occur weekly starting January 8. Laboratory sessions occur weekly starting January 8.

**PREREQUISITES:** ES 1021A/B, ES 1022A/B/Y, ES 1050. Restricted to students enrolled in the Mechatronic Systems Engineering Program.

Unless you have either the requisites for this course or written special permission from your 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.

**CEAB ACADEMIC UNITS:** Engineering Science 50%, Engineering Design 50%

**RECOMMENDED TEXTBOOK:** J. Edward Carrer, R. Matthew Ohline and Thomas W. Kenny, *Introduction to Mechatronic Design*, Upper Saddle River, NJ: Prentice Hall, 2011. This text is recommended but not required.

**REQUIRED SOFTWARE:** Arduino IDE, Git, GitHub, SolidWorks, EAGLE

**RECOMMENDED REFERENCES:** The following list outlines several references that may prove useful over the duration of the course:

Clive L. Dym and Patrick Little, *Engineering Design: A Project-Based Introduction*, 4<sup>th</sup> edition, New York: John Wiley & Sons, 2013.

Kevin Otto and Kristin Wood, *Product Design: Techniques in Reverse Engineering and New Product Development*, Upper Saddle River, NJ: Prentice Hall: 2000.

David G. Ullman. *The Mechanical Design Process*, 6<sup>th</sup> edition, La Vergne, TN: Ingram, 2017.

George E. Dieter and Linda C. Schmidt, *Engineering Design*, 5<sup>th</sup> edition, New York, NY: McGraw-Hill, 2013.

David G. Alciatore and Michael B. Hstand, *Introduction to Mechatronics and Measurement Systems*, 5<sup>th</sup> edition, New York: McGraw-Hill, 2019.

William Bolton, *Mechatronics: Electronic Control Systems in Mechanical and Electrical Engineering*, 7<sup>th</sup> edition, Essex, England: Pearson, 2018.

Klaus Pohl, *Requirements Engineering: Fundamentals, Principles and Techniques*, London: Springer-Verlag, 2010.

Pankaj Jalote, *A Concise Introduction to Software Engineering*, London: Springer-Verlag, 2008.

Michael Margolis, Brian Jepson, Nicholas R. Weldin, *Arduino Cookbook*, 3<sup>rd</sup> edition, Sebastopol, CA: O'Reilly, 2020.

**GENERAL LEARNING OBJECTIVES (CEAB GRADUATE ATTRIBUTES):**

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

Notation: *x* represents the content level code as defined by the CEAB. blank = not applicable; I = introduced (introductory); D = developed (intermediate) and A = applied (advanced).

**TOPICS AND SPECIFIC LEARNING OBJECTIVES:** Mechatronics, as an engineering discipline, strives to optimally integrate mechanical, electronic and computer systems to create high quality products and processes. This course will cover a variety of design considerations relevant to the development of integrated mechatronic systems. Students will develop knowledge and skills that allow them to adopt an interdisciplinary and integrated approach to engineering design.

Course Topics and Specific Learning Outcomes	CEAB Graduate Attributes Indicators
<p><b>1. Microcontroller Programming</b></p> <p>At the end of this section, students will be able to:</p> <ol style="list-style-type: none"> <li>Understand the architecture and organization of microcontrollers</li> <li>Program an Arduino-compatible microcontroller</li> <li>Understand how to interface with analog and digital peripheral devices</li> <li>Develop a microcontroller-based control system</li> <li>Use an industry-standard version control system as part of the software development process</li> </ol>	KB3, KB4, ET2

<p><b>2. Introduction to mechatronic systems</b>  At the end of this section, students will be able to:</p> <ol style="list-style-type: none"> <li>a. Recognize and explain the components and characteristics of a mechatronic system</li> <li>b. Understand the role of sensors, actuators, control, and machine intelligence in product design</li> <li>c. Explain how intelligent products and systems are developed</li> </ol>	<p>KB3, KB4</p>
<p><b>3. Transducers</b>  At the end of this section, students will be able to:</p> <ol style="list-style-type: none"> <li>a. Explain the operating characteristics of sensors and actuators</li> <li>b. Understand the operation and use of basic sensors</li> <li>c. Select and integrate suitable sensors and actuators into a mechatronic design</li> </ol>	<p>KB3, KB4, ET2</p>
<p><b>4. Engineering design principles</b>  At the end of this section, students will be able to:</p> <ol style="list-style-type: none"> <li>a. Understand and apply the product design process</li> <li>b. Clearly define the design problem with customer requirements and engineering specifications</li> <li>c. Generate and evaluate multiple possible solutions using knowledge from different engineering disciplines</li> <li>d. Plan and schedule the complete design process</li> </ol>	<p>D1,D2,D3,EPM2</p>
<p><b>5. Detailed design</b>  At the end of this section, students will be able to:</p> <ol style="list-style-type: none"> <li>a. Understand how specify geometric dimensions and tolerances</li> <li>b. Produce detailed design documentation (detailed drawings, assembly drawings, etc.) to acceptable engineering standards</li> <li>c. Use an electronics CAD package (EagleCAD) to produce schematics and printed circuit board layouts for electronic circuits</li> <li>d. Apply best-practices to the design and documentation of software and mechatronic systems</li> </ol>	<p>ET2, D4, PA2</p>
<p><b>6. Design constraints</b>  At the end of this section, students will be able to:</p> <ol style="list-style-type: none"> <li>a. Understand and address a variety of factors that influence design decisions</li> <li>b. Apply techniques to improve the design of a product considering manufacturability, assembly, reliability, impact on the environment, disassembly, human factors, etc.</li> </ol>	<p>IESE2</p>

**COURSE MATERIALS:** Guides for the laboratories will be available on the course OWL site. The material for this course will be taught in both lectures and labs; therefore, it is imperative that you attend each lecture and lab.

**UNITS:** SI

**EVALUATION:** Grades for the course will be determined approximately on the following basis:

Labs (Total = 4)	12%
In-class examples (Total = 12–14)	6%
Team Project: Milestone deliverables (Total = 4)	12%
Prototype	10%
Final report	15%
Product development file	15%
Final Examination	30%

Students who actively participate in the Western Engineering Competition (WEC) may receive a participation bonus of 1%. Students who finish in the top 3 may receive an additional 1% bonus.

The labs, in-class examples, and project deliverables will be carried out according to the following schedule:

Evaluation Format	Weight	Effort Type	Assigned	Due
Labs	12%	Individual	Week of Jan. 8, Jan. 22, Jan. 29, Feb. 5	Week of Jan. 22, Jan. 29, Feb. 5, Feb. 12
In-class examples	6%	Individual	Weekly, starting week of Jan. 15	Weekly, starting week of Jan. 15
Milestones	12%	Team	Jan. 8	Feb. 26, Mar. 11, Mar. 22, Apr. 1
Design Showcase	5%	Team	Jan. 8	Apr. 4
Final Report	15%	Team	Jan. 8	Apr. 8
Product Development File	15%	Team	Jan. 8	Apr. 8

Note that the dates listed above are **tentative** and may be adjusted if needed. Marks will be assigned on the basis of method of analysis and presentation, correctness of solution, clarity and neatness.

**LABORATORIES:** Labs will run every week. There will be 4 introductory labs covering circuit construction and soldering, microcontroller programming, basic sensors and actuators, drive systems and mechanical construction. Students are **required** to purchase a lab kit that includes all of the components necessary to complete the laboratory exercises. Equipment required for the labs will be provided. The remainder of the term will focus on a team-based mechatronic design project.

**IN-CLASS EXAMPLES:** Up to 10 practice examples will be completed in class. An exit ticket will be handed in by the students at the end of the class. A minimum of 80% of the practice examples must be completed to obtain full marks. Assigned dates will be announced ahead of time when possible (during class).

**TEAM PROJECT:** A group project will be completed in which students will design, build, and test a complete mechatronic system. The details of the project and the associated deliverables will be distributed on OWL and discussed in class.

**FINAL EXAMINATION:** The final exam will take place during the regular examination period. The final exam will be three hours long, closed book. Only simple, nonprogrammable calculators are allowed.

**COURSE POLICIES:** All work submitted must be of professional quality in the requested format. Material that is handed in dirty, illegible, disorganized, or in an unapproved format will be returned to the student for resubmission and the late submission penalty will take effect. An additional penalty of 10% may be deducted for poor grammar, incoherence, or lack of flow in the written reports.

In-class examples: No make-up days will be offered for in-class examples regardless of the circumstances for which the class was missed. Missing up to two in-class examples with or without academic consideration will not be penalized. Missing three or more in-class examples with academic consideration in all of them will automatically shift the weight of the missed dates according to the number attended. Missing three or more examples without academic consideration in any of them will result in a loss of marks proportionate to the number of in-class example days held. Arriving more than 15 minutes late for an in-class example day will not allow you to receive an exit ticket.

Laboratory sessions: Attendance at all laboratory sessions is mandatory. Absence from **any session, or a portion of a session**, without permission will result in a zero assigned to the corresponding laboratory report. The teaching assistants will sign your lab report as testimony to your attendance. Students who arrive 20 min after the scheduled lab time without a legitimate reason, leave the lab early without permission from the teaching assistant, or miss the lab without a legitimate reason will receive a zero for the corresponding laboratory assignment. Students who miss a lab with academic consideration are required to contact the course instructor for further instructions. Failure to do so will result in a zero mark for that lab.

Except where indicated, the laboratory exercises are to be completed individually.

A minimum average of 60% across all laboratory exercises is required to pass the course.

Team project: Project teams will be formed by the third week of the term. Students must form a team with others in the same lab section.

The default assumption is that everyone contributes equally to the team effort, and hence all students will receive the same grade for the project components. Each student will be asked to specify the contribution made by each member of the team, including themselves. Team grades may be adjusted by up to 30% for each student based on self and peer evaluation.

A minimum of 60% must be obtained on the project in order to pass the course.

Final examination: To obtain a passing grade in the course, a mark of 60% or more must be achieved on the final examination. A final examination mark  $< 60\%$  will result in a final course grade of 48% or less.

If the above conditions are not met, your final grade cannot be greater than 48%. Students who have failed this course (i.e., final average  $< 50\%$ ) must repeat all components of the course.

**LATE SUBMISSION POLICY:** All deliverables will be penalized by 20% of the available marks per day for late submission. Deliverables submitted more than 5 days late will not be accepted.

**TIPS FOR SUCCESS:** Paying close attention to the material presented each week will ensure your understanding of the topics and will allow you to gain the most from the course. In particular, the laboratory and in-class exercises are intended to prepare you for the major course deliverables.

While every student works at a different level, it is the effort placed in each requirement that ultimately leads to success. Your interest in the course, participation in class by asking relevant questions, engaging the TAs during the labs, and talking to the instructor during office hours will all contribute to your successful completion of the labs, project, and final exam. Such behavior is highly encouraged.

It is your responsibility to determine what is required of you. If you miss a lecture, it is your responsibility to find out what was discussed and what instructions were given regarding upcoming lectures, laboratory sessions, the project, or exam.

**USE OF ENGLISH:** In accordance with Senate and Faculty Policy, students may be penalized up to 10% of the marks on all assignments, tests, and examinations for improper use of English. Additionally, poorly written work, with the exception of the final examination, may be returned without grading. If resubmission of the work is permitted, it may be graded with marks deducted for poor English and/or late submission.

In the professional life of an engineer, the manner in which oral and written communications are presented is extremely important. An engineering student must develop these skills as an integral part of the undergraduate program. To encourage the student to do so, the grades assigned to all written and oral work will take into account all aspects of presentation including conciseness, organization, neatness, use of headings and the preparation and use of tables and figures.

*All work will be marked first for content* after which a penalty not to exceed the maximum indicated may be applied for lack of proficiency in English and/or presentation.

**ATTENDANCE:** Attendance is mandatory for scheduled activities, including labs, the design reviews, and final showcase. Any student who, in the opinion of the instructor, is absent too frequently from class or laboratory periods in any course, will be reported to the Dean (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Dean, the student will be debarred from taking the regular examination in the course.

**RELIGIOUS ACCOMMODATION:** Students should consult the University's list of recognized religious holidays, and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the [Western Multicultural Calendar](#).

**ABSENCE DUE TO ILLNESS OR OTHER CIRCUMSTANCES:** Students should immediately consult with the instructor or program Director if they have any problems that could affect their performance in the course. Where appropriate, the problems should be documented (see the attached "Instructions for Students Unable to Write Tests or Examinations or Submit Assignments as Scheduled"). The student should seek advice from the instructor or program Director regarding how best to deal with the problem. Failure to notify the instructor or program Director immediately (or as soon as possible thereafter) will have a negative effect on any appeal.

For more information concerning medical accommodations, see the relevant section of the Academic Handbook:

[http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_medical.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf)

For more information concerning accommodations for religious holidays, see the relevant section of the Academic Handbook:

[http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_religious.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf)

**CHEATING AND PLAGIARISM:** Students must write their essays and assignments in their own words. Whenever students take an idea or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. University policy states that cheating, including plagiarism, is a scholastic offence. The commission of a scholastic offence is attended by academic penalties, which might include expulsion from the program. If you are caught cheating, there will be no second warning.

All required papers may be subject to submission for textual similarity review to commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted will be included as source documents on the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between the University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

Scholastic offences are taken seriously and students are directed to the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

[http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf)

*Note that, unless a particular assignment or deliverable explicitly states otherwise, the use of generative artificial intelligence tools and apps is strictly prohibited. This includes ChatGPT and other AI writing and coding assistants. The use of generative AI in this course may be considered use of an unauthorized aid, which is a form of cheating.*

**POLICY ON REPEATING ALL COMPONENTS OF A COURSE:** Students who are required to repeat an Engineering course must repeat all components of the course. No special permissions will be granted enabling a student to retain laboratory, assignment, or test marks from previous years. Previously completed assignments and laboratories cannot be resubmitted by the student for grading in subsequent years.

**USE OF ELECTRONIC DEVICES:** Turn off all sound for pagers and cell phones. Students may use laptops, tablet computers, or smart phones only to access the course OWL site during lectures and laboratories. Use of nonprogrammable calculators only is permitted for in-class activities and examinations. No other electronic devices may be used at any time during lectures, tutorials, or examinations.

**INTERNET AND ELECTRONIC MAIL:** Students are responsible for regularly checking their Western e-mail and the course web site (<https://owl.uwo.ca/portal/>) and making themselves aware of any information that is posted about the course. If the student fails to act on information that has been posted on these sites and does so without a legitimate explanation (i.e., those covered under the illness/compassionate form), then there are NO grounds for an appeal.

**ACCESSIBILITY:** Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: [Academic Accommodation for Students with Disabilities](#).

**Note: The above topics and outline are subject to adjustments and changes as needed.**

**STATEMENT ON GENDER-BASED AND SEXUAL VIOLENCE**

Western [is committed to reducing incidents of gender-based and sexual violence](#) and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced gender-based or sexual violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts, [here](#). To connect with a case manager or set up an appointment, please contact [support@uwo.ca](mailto:support@uwo.ca).

**INSTRUCTIONS FOR STUDENTS UNABLE TO WRITE TESTS OR EXAMINATIONS OR SUBMIT ASSIGNMENTS AS SCHEDULED**

If, on medical or compassionate grounds, you are unable to write term tests or final examinations or complete course work by the due date, you should follow the instructions listed below. You should understand that academic relief will not be granted automatically on request. You must demonstrate to your department (or the Undergraduate Services Office) that there are compelling medical or compassionate grounds that can be documented before academic relief will be considered. Different regulations apply to term tests, final examinations and late assignments. Please read the instructions carefully.

**A. GENERAL REGULATIONS & PROCEDURES**

1. All first-year students will report to the Undergraduate Services Office by submitting the [Academic Consideration Request Form](#), for all instances.
2. If you are an upper year student and you are missing a test/assignment/lab or examination you will report the absence by submitting [Academic Consideration Request Form](#). Absences worth LESS THAN 10% of your mark, will be processed by your department office. If your course work is worth 10% OR MORE of your final grade, your request will be processed by the Undergraduate Services Office.
3. Check the course outline to see if the instructor has a policy for missed tests, examinations, late assignments or attendance.
4. Documentation must be provided as soon as possible. If no one is available in your department office or the Undergraduate Services Office, leave a message clearly stating your name & student number and reason for your call. The department telephone numbers are given at the end of these instructions.
5. If you decide to write a test or an examination you should be prepared to accept the mark you earn. Rewriting tests or examinations or having the value of a test or examination reweighted on a retroactive basis is not permitted.

**B. TERM/MIDTERM TESTS**

1. If you are in first year and you are unable to write a midterm/term test, contact the Undergraduate Services Office, SEB 2097 PRIOR to the scheduled date of the test.
2. If you are an upper year student and you are unable to write a midterm/term test, inform your instructor PRIOR to the scheduled date of the test and request relief through the [Academic Consideration Request Form](#). If the instructor is not available, leave a message for him/her at the department office. If the test is worth LESS THAN 10% of your mark, your request for relief will be processed by your department office. If the test is worth MORE THAN 10% of your final grade your request for relief will be processed by the Undergraduate Services Office.
3. Be prepared to attach supporting documentation to the Department Chair and/or the Undergraduate Services Office through the online form (see next page for information on documentation).
4. Discuss with the instructor if and when the test can be rescheduled. The approval of the Chair or the Undergraduate Services Office is required when rescheduling midterm/term tests.



### C. FINAL EXAMINATIONS

1. If you are unable to write a final examination, contact the Undergraduate Services Office **PRIOR TO THE SCHEDULED EXAMINATION TIME** to report your absence using the [Academic Consideration Request Form](#) and request permission to write a Special Final Examination. If no one is available in the Undergraduate Services Office, leave a message clearly stating your name & student number.
2. Be prepared to provide the Undergraduate Services Office with supporting documentation (see next page for information on documentation) the next day, or as soon as possible (in cases where students are hospitalized). The following circumstances are not considered grounds for missing a final examination or requesting special examinations: common cold, headache, sleeping in, misreading timetable and travel arrangements.
3. In order to receive permission to write a Special Examination, you must obtain the approval of the Chair of the Department **and** the Associate Dean and in order to apply you must submit an "[Application for a Special Exam](#)" form. The Undergraduate Services Office will then notify the course instructor(s) and reschedule the examination on your behalf.

**PLEASE NOTE: It is the student's responsibility to check the date, time and location of the Special Examination.**

### D. LATE ASSIGNMENTS

1. Advise the instructor if you are having problems completing the assignment on time (**prior** to the due date of the assignment).
2. Be prepared to submit the [Academic Consideration Request Form](#) and provide documentation if requested by the instructor (see reverse side for information on documentation).
3. If you are granted an extension, establish a due date. The approval of the Chair of your Department (or the Assistant Dean, First Year Studies, if you are in first year) is not required if assignments will be completed prior to the last day of classes.
4.
  - i) Extensions beyond the end of classes must have the consent of the instructor, the department Chair and the Associate Dean, Undergraduate Studies. Documentation is mandatory.
  - ii) A Recommendation of Incomplete Form must be filled out indicating the work to be completed and the date by which it is due. This form must be signed by the student, the instructor, the department Chair and the Associate Dean, Undergraduate Studies.

### E. SHORT ABSENCES

If you miss a class due to a minor illness or other problem, check your course outlines for information regarding attendance requirements and make sure you are not missing a test, laboratory or assignment. Cover any readings and arrange to borrow notes from a classmate.

### F. EXTENDED ABSENCES

If you are absent more than one week or if you get too far behind to catch up, you should consider reducing your workload by dropping one or more courses. (Note drop deadlines listed below). You are strongly encouraged to seek advice from your Academic Counsellor in the Undergraduate Services Office.

### G. DOCUMENTATION

If you consulted an off-campus doctor or Student Health Services regarding your illness or personal problem, **you must provide the doctor with a Student Medical Certificate** to complete at the time of your visit and then bring it to the Department (or the Undergraduate Services Office). **This note must contain the following information: severity of illness, effect on academic studies and duration of absence. Regular doctor's notes will not be accepted; only the Student Medical Certificate will be accepted.**

**In Case of Serious Illness of a Family Member:** Provide a Student Medical Certificate to your family member's physician to complete and bring it to the Department (or the Undergraduate Services Office if you are in first year).

**In Case of a Death:** Obtain a copy of the death certificate or the notice provided by the funeral director's office. You must include your relationship to the deceased and bring it to the Department (or the Undergraduate Services Office if you are in first year).

**For Other Extenuating Circumstances:** If you are not sure what documentation to provide, ask the Departmental Office (or the Undergraduate Services Office if you are in first year) for direction.

**Note: Forged notes and certificates will be dealt with severely. To submit a forged document is a scholastic offence (see below).**

## H. ACADEMIC CONCERNS

1. You need to know if your instructors have a policy on late penalties, missed tests, etc. This information may be included on the course outlines. If not, ask your instructor(s).
2. **You should also be aware of attendance requirements in some courses. You can be debarred from writing the final examination if your attendance is not satisfactory.**
3. If you are in academic difficulty, check out the minimum requirements for progression in the calendar. If in doubt, see your Academic Counsellor.

**Calendar References:** Check these regulations in your 2023 Western Academic Calendar available at [www.westerncalendar.uwo.ca](http://www.westerncalendar.uwo.ca).

### **Absences Due to Illness:**

[https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page\\_13\\_5](https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_13_5)

### **Academic Accommodations for Students with Disabilities:**

[http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page\\_10](http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_10)

### **Academic Accommodations for Religious or Holy Days:**

[http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page\\_16](http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_16)

### **Course Withdrawals:**

[http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=6&SelectedCalendar=Live&ArchiveID=#Page\\_75](http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=6&SelectedCalendar=Live&ArchiveID=#Page_75)

### **Examinations:**

<http://www.westerncalendar.uwo.ca/PolicyPages.cfm?PolicyCategoryID=5&command=showCategory&SelectedCalendar=Live&ArchiveID=#>

### **Scheduling of Term Assignments:**

[http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=5&SelectedCalendar=Live&ArchiveID=#SubHeading\\_78](http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=5&SelectedCalendar=Live&ArchiveID=#SubHeading_78)

### **Scholastic Offences:**

[http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page\\_20](http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_20)

### **Student Medical Certificate:**

<https://www.eng.uwo.ca/files/undergraduate/student-medical-certificate.pdf>

### **Engineering Academic Regulations:**

[http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=4&SelectedCalendar=Live&ArchiveID=#Page\\_86](http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=4&SelectedCalendar=Live&ArchiveID=#Page_86)

**Note:** These instructions apply to all students registered in the Faculty of Engineering regardless of whether the courses are offered by the Faculty of Engineering or other faculties in the University.

<b><u>Add Deadlines:</u></b>	First term half course (i.e. “A” or “F”)	September 15, 2023
	Full courses and full-year half course (i.e. “E”, “Y” or no suffix)	September 15, 2023
	Second term half course (i.e. “B” or “G”)	January 16, 2024

<b><u>Drop Deadlines:</u></b>	First term half course without penalty (i.e. “A” or “F”)	November 13, 2023
	Full courses and full-year half courses without penalty (i.e. “E”, “Y” or no suffix)	November 30, 2023
	Second term half or second term full course without penalty (i.e. “B” or “G”)	March 7, 2024

### **Contact Information:**

Undergraduate Services Office:	SEB 2097 Phone: 519-661-2130	E-mail: <a href="mailto:engugrad@uwo.ca">engugrad@uwo.ca</a>
Chemical & Green Process Engineering:	TEB 477 Phone: 519-661-2131	E-mail: <a href="mailto:cbeugrad@uwo.ca">cbeugrad@uwo.ca</a>
Civil Engineering:	SEB 3005 Phone: 519-661-2139	E-mail: <a href="mailto:civil@uwo.ca">civil@uwo.ca</a>
Computer, Electrical, Mechatronic Systems & Software Engineering	TEB 279 Phone: 519-661-3758	E-mail: <a href="mailto:eceugrad@uwo.ca">eceugrad@uwo.ca</a>
Integrated Engineering	ACEB 2410 Phone: 519-661-6725	E-mail: <a href="mailto:engceli@uwo.ca">engceli@uwo.ca</a>
Mechanical Engineering:	SEB 3002 Phone: 519-661-4122	E-mail: <a href="mailto:mmeundergraduate@uwo.ca">mmeundergraduate@uwo.ca</a>