

ACADEMIC COUNCIL MEETING

Graduate Studies Committee

AGENDA

Date: December 18, 2025 Time: 9:00 a.m. - 9:55 a.m.

Zoom Videoconference Link (registration required)

GSC Meeting Schedule and Materials 2025-2026

No.		Topic	Lead	Suggested Start Time				
PUBLIC SESSION								
1.		Call to Order and Land Acknowledgement						
2.		Agenda (M)	Chair	9:00 a.m.				
3.		Chair's Remarks						
4.		Major Program Modifications (Recommendation)						
	4.1	Faculty of Business and IT: PhD – Cybersecurity* (M)	S. Heydari	0.40				
	4.2	Frazer Faculty of Education: Master of Education* (M)	D. Petrarca	9:10 a.m.				
5.		Minor Program Adjustments (Approval)						
	5.1	Faculty of Engineering and Applied Science: Engineering Management, MEngM* (M)	A. Kiani	9:20 a.m.				
	5.2	Faculty of Engineering and Applied Science: Mechatronics Engineering, MASc* (M)	X. Lin					
6.		New Program Proposal (Recommendation)						
	6.1	Faculty of Engineering and Applied Science: Graduate Diploma in Railway Engineering* (M)	A. Kiani	9:30 a.m.				

7.		Academic Policy Instruments		
	7.1	Registration and Course Selection Policy Amendments* (M)	A. Wingate	9:40 a.m.
8.		Consent Agenda: (M)	Chair	0.50 - 75
	8.1	Public Minutes of the Meeting of November 25, 2025* (M)	Gilali	9:50 a.m.
	8.2	 Associate Graduate Faculty (I) Health Sciences, Manon Lemonde, Faculty of Health Sciences Health Sciences, Catherine Inibhunu, Faculty of Health Sciences Health Sciences, Kelly Picard, Faculty of Health Sciences Health Sciences, Samuel Howarth, Faculty of Health Sciences Materials Science, Brian MacLean, Faculty of Science Modelling and Computational Science, Yan Fossat, Faculty of Science 		
	8.3	Emeritus Graduate Faculty (I) Mechanical Engineering, Ebrahim Esmailzadeh, Faculty of Engineering and Applied Science		
	8.4	Course change: APBS 6090G		
9.		Termination (M)	Chair	9:55 a.m.

Kirstie Ayotte, Assistant University Secretary

*Documents attached



GRADUATE STUDIES COMMITTEE REPORT

ACTION REQUESTED:				
Recommend Decision Discussion/I Information				
DATE:	18 December	2025		
FROM:	Faculty of Business and information Technology			
SUBJECT:	Major Prograr	m Modification – PhD - Cybersecurity		

COMMITTEE MANDATE:

In accordance with Section III, part c) of the Graduate Studies Committee (GSC) Terms of Reference, GSC has the responsibility to "examine proposals for new graduate degree and diploma programs, major changes to existing programs and to recommend their approval, as appropriate, to Academic Council".

MOTION FOR CONSIDERATION:

That GSC hereby recommends to Academic Council the approval of the Major Program Modification to the Cybersecurity PhD program to add a part-time option and to modify the scheduling of the seminar component.

BACKGROUND/CONTEXT & RATIONALE:

The Faculty is proposing to add a part-time option in order to bring the program in line with most other PhD programs at Ontario Tech (e.g. Computer Science, Engineering, Forensic Psychology etc.) who accept part-time PhD students. We have received expressions of interest in the program from working professionals and government employees who due to the requirements of their jobs, can only participate in the program on a part-time basis.

Given the stated goals of the program in preparing cybersecurity experts not just for academia, but also in government, policymaking and industry roles, the presence of students from these sectors enriches the program and also allows exchange of research ideas and potential collaborations with those sectors.

The proposed change in the seminar course streamlines its operation and eliminates some problems with registration. In the original proposal, it was envisioned that students would register in the seminar course every semester, however, it has now been determined that such registration would cause significant operational problems with regard to registration and keeping track of seminars. Instead, in line with other PhD programs such as Computer Science and Engineering, students will now be required to present two seminars – one at candidacy and one exit seminar prior to defence – and to register in the seminar course at the time of the exit seminar.

RESOURCES REQUIRED:

No additional resources are required.

TRANSITION AND COMMUNICATIONPLAN:

No transition plan is required. Current students can take advantage of this option by switching to part-time studies if needed and subject to graduate program director's approval.

CONSULTATION AND APPROVAL:

- ✓ Graduate Curriculum Committee: 18 November 2025
- ✓ Faculty Council: 2 December 2025
- Graduate Studies Committee (for recommendation): 18 December 2025
- Academic Council (for approval): 27 January 2026

There has been informal consultation with students in class and through email correspondence. We have been informally asking students to register for these two required courses each term.

NEXT STEPS:

Pending the recommendation of GSC, this change will be presented for approval to Academic Council. Once approved, it will be included in the 2026-2027 Academic Calendar.

SUPPORTING REFERENCE MATERIALS:

Major Program Modification proposal
Course Change Proposal: INFR 7000G



GRADUATE STUDIES COMMITTEE REPORT

ACTION REQUESTED:				
Recommend Decision Discussion/ Information				
DATE:	18 December 2025			
FROM:	Frazer Faculty of Education			
SUBJECT:	Major Program Modification – Master of Education			

COMMITTEE MANDATE:

In accordance with Section III, part c) of the Graduate Studies Committee (GSC) Terms of Reference, GSC has the responsibility to "examine proposals for new graduate degree and diploma programs, major changes to existing programs and to recommend their approval, as appropriate, to Academic Council".

MOTION FOR CONSIDERATION:

That GSC hereby recommends to Academic Council the Major Program Modification to the Master of Education program to update all Masters level courses in the program to include EDUC 5001G and EDUC 5002G as pre-requisites with concurrency for all courses to ensure students take these courses at the beginning of the program.

BACKGROUND/CONTEXT & RATIONALE:

The Faculty is proposing to add EDUC 5001G and EDUC 5002G as pre-requisites with concurrency for all courses within the program to ensure students take these courses at the beginning of the program as they are foundational in nature. This change will help ensure that all students possess the knowledge and skills necessary to be successful in the remainder of the elective course offerings and will contribute to building a stronger academic culture within the program.

RESOURCES REQUIRED:

No additional resources are required.

TRANSITION AND COMMUNICATIONPLAN:

Current students will have to take EDUC 5001G and EDUC 5002G beginning Fall 2026 if they have not already done so by that time. New students will begin the program by taking these required courses.

Current and new students will be notified via email and through the Graduate Program Assistant. The faculty has already started communicating with current students for Fall 2025, Winter 2026 and Spring 2026 encouraging students to complete these two courses.

CONSULTATION AND APPROVAL:

- ✓ Graduate Curriculum Committee: 20 November 2025
- ✓ Faculty Council: 27 November 2025
- Graduate Studies Committee (for recommendation): 18 December 2025
- Academic Council (for approval): 27 January 2026

NEXT STEPS:

Pending the recommendation of GSC, this change will be presented for approval to Academic Council. Once approved, it will be included in the 2026-2027 Academic Calendar.

SUPPORTING REFERENCE MATERIALS:

Minor Program Adjustment Proposal

Course Change proposals: Please see 'Course Change Bulk - EDUC GR 26-27 - Complete.xlsx' available for download from the 'Files' Tab in the proposal above.



GRADUATE STUDIES COMMITTEE REPORT

ACTION REQUESTED:					
Recommend Decision Discussion/ Information					
DATE:	18 Decembe	er 2025			
FROM:	Faculty of E	ngineering and Applied Science			
SUBJECT:	Minor Progr	am Adjustment –Engineering Management, MEngM			

COMMITTEE MANDATE:

In accordance with the Graduate Studies Committee (GSC) Terms of Reference, GSC has the responsibility "to approve minor program adjustments" and report them to Academic Council for information.

MOTION FOR CONSIDERATION:

That GSC hereby approves the Minor Program Adjustment to the Engineering Management, MEngM program.

BACKGROUND/CONTEXT & RATIONALE:

Currently, students in the Engineering Management, MEngM program have limited flexibility in Group B course selection, with only three courses available. This lack of variety has caused scheduling challenges and confusion in tracking progress due to the complex structure of course requirements across Groups A, B, C, and D.

The Faculty is proposing to address these issues by making the following changes:

- Add three new entrepreneurship-focused courses to Group B to increase choice, improve scheduling flexibility, and strengthen program appeal.
- Simplifying course requirements for clarity and better academic planning in the course- and project-based options.

- Include Mechatronics Engineering, MEng in 'Group D Engineering elective courses' to provide additional engineering elective options.
- Update the course description for ENGR 5002G to ensure its content aligns with the program objectives, particularly when three or more elective courses are added.

These changes aim to streamline the program structure, enhance student experience, and support timely completion.

RESOURCES REQUIRED:

No additional resources required.

TRANSITION PLAN:

Fall 2026 onwards will follow the new course requirements. The FEAS graduate office will communicate with current MEngM students who may be affected by this transition plan.

CONSULTATION AND APPROVAL:

- ✓ FEAS Graduate Committee: 20 November 2025
- ✓ FEAS Faculty Council: 4 December 2025
- Graduate Studies Committee (Approval): 18 December 2025
- Academic Council (Information): 27 January 2026

These changes were made in consultation with the FBIT Dean. The FEAS and FBIT Deans have agreed on these courses and FBIT Dean offers to help in delivery as needed.

NEXT STEPS:

Pending the approval of GSC, this change will be presented for information to Academic Council and included in the 2026-2027 Academic Calendar.

SUPPORTING REFERENCE MATERIALS:

- Minor Program Adjustment Engineering Management, MEngM
 - o new course(s): ENGR 5421G, ENGR 5422G, ENGR 5423G
 - o course change(s): ENGR 5002G



GRADUATE STUDIES COMMITTEE REPORT

ACTION REQUESTED:					
Recommend Decision Discussion/ Information					
DATE:	18 Decembe	er 2025			
FROM:	Faculty of E	ngineering and Applied Science			
SUBJECT:	Minor Progr	am Adjustment – Mechatronics Engineering, MASc			

COMMITTEE MANDATE:

In accordance with the Graduate Studies Committee (GSC) Terms of Reference, GSC has the responsibility "to approve minor program adjustments" and report them to Academic Council for information.

MOTION FOR CONSIDERATION:

That GSC hereby approves the Minor Program Adjustment to the MASc Mechatronics Engineering program to remove ENGR 5201G Engineering Communication and Ethics course as a course listing.

BACKGROUND/CONTEXT & RATIONALE:

The Faculty is proposing to remove ENGR 5201G Engineering Communication and Ethics as a course listing from the Master of Applied Science (MASc) in Mechatronics Engineering program, as this course is specifically designed for students in the Master of Engineering programs.

RESOURCES REQUIRED:

No additional resources required.

TRANSITION PLAN:

Effective for Fall 2026. Graduate Engineering Program Office will communicate this change to students.

CONSULTATION AND APPROVAL:

✓ FEAS Graduate Committee: 20 November 2025

- ✓ FEAS Faculty Council: 4 December 2025
- Graduate Studies Committee (Approval): 18 December 2025
- Academic Council (Information): 27 January 2026

NEXT STEPS:

Pending the approval of GSC, this change will be presented for information to Academic Council and included in the 2026-2027 Academic Calendar.

SUPPORTING REFERENCE MATERIALS:

• Minor Program Adjustment – Mechatronics Engineering, MASc



GRADUATE STUDIES COMMITTEE REPORT

ACTION RE	QUESTED:		
Recommend	dation		
Decision			
Discussion/Direction			
Information			
DATE:	18 Decemb	er 2025	
FROM:	Faculty of Engineering and Applied Science		
SUBJECT:	New Progra	am Proposal – Graduate Diploma in Railway Engineering	

COMMITTEE MANDATE:

In accordance with the Graduate Studies Committee (GSC) Terms of Reference, GSC has the responsibility "to examine proposals for new graduate degree and diploma programs" and "to recommend their approval, as appropriate, to the Academic Council".

MOTION FOR CONSIDERATION:

That GSC hereby recommends to Academic Council the approval of the Graduate Diploma in Railway Engineering program and the subsequent recommendation of the program to the Board.

BACKGROUND/CONTEXT & RATIONALE:

The Faculty of Engineering and Applied Science was originally approached by Alstom and AtkinsRéalis about the possibility of developing a Railway Engineering Specialization for our undergraduate engineering programs. Despite Canada's strong reliance on the rail sector for moving people and freight, there are currently no engineering programs in Canada that educate engineers in railway systems. In fact, Canada is the only G7 nation without a railway engineering program (number of programs by nation: France 4, Germany 4, Italy 3, Japan 3, UK 3, and USA 3).

Rail has played a central role in the creation of Canada and its development and economic prosperity. This contribution continues to today, where Canadian freight railways transported half of Canada's exports in 2022 and a total of \$380 billion worth of goods (source: Rail Trends 2023 by Railway Association of Canada). Rail is one of the key components in decarbonizing the transportation sector, especially in public transit. Rail is the singular, most efficient way to move people in urban environments.

The growth of rail transit projects is enormous both in Canada and globally. Alstom, globally has close to a 100 billion euros (€) backlog of rail projects. As of September 2024, Alstom currently had over 100 open engineering positions in Canada alone, half of which were for early career engineering graduates.

There is a clear need and demand from industry to train engineers with railway engineering expertise in Canada. With the launch of the undergraduate Railway Engineering Specialization, we have received repeated requests from people in industry wishing to take similar courses. Alstom and Hitachi Rail have also expressed interest in having their new hires, who did not take the Railway Engineering Specialization during their undergraduate studies, the opportunity to take these courses.

The proposed GDip in Railway Engineering is designed to provide engineers in industry, from a wide range of engineering disciplines, the necessary core competencies in railway engineering that employers need.

RESOURCES REQUIRED:

The Faculty of Engineering and Applied Science will leverage the undergraduate Railway Engineering Specialization courses and it is anticipated there will be no major resource requirements.

CONSULTATION AND APPROVAL:

- ✓ Academic Resource Committee: 9 December 2025
- ✓ FEAS Faculty Council: 4 December 2025
- Graduate Studies Committee: 18 December 2025
- Academic Council (Approval and Recommendation): 27 January 2026
- Board of Governors (Approval) Prospective Target Date: 4 March 2026

NEXT STEPS:

- Pending the recommendation of GSC, the changes will be presented to Academic Council for approval and recommendation to the Board.
- The proposal must proceed through the following external approval steps subsequent to Academic Council:
 - Board of Governors
 - Ontario Universities Council on Quality Assurance
- The preferred date of implementation is in the Fall of 2026

SUPPORTING REFERENCE MATERIALS:

New Program Proposal with Appendices

Proposal last updated: December 2025



Full name of proposed program (as it will				
appear on the student's transcript):	Graduate Diploma in Railway Engineering			
(e.g., Master of Arts in Education; Master of	Graduate Dipioma in Kailway Engineering			
Science in Applied Bioscience)				
Degree designation and short form:				
(e.g., Master of Arts, M.A.; Master of Science,	GDip			
M.Sc.)				
Cost recovery program:	□Yes ⊠No			
Professional program:	⊠Yes □No			
For graduate diplomas:	□Type 2 ⊠Type 3			
Faculty offering the program:				
(i.e., where the program will be housed/site of	Faculty of Engineering and Applied Science			
academic authority)				
Collaborating Faculty(ies) (if applicable):	N/A			
Collaborating institution(s) (if applicable):	N/A			
Program delivery location:	Ontario Tech North Campus and Hybrid			
Proposed program start date (please change as	F-II 2026			
needed):	Fall 2026			
Program proponent/contact:	Scott Nokleby			
Version date (please change as you edit this	Docombor 0, 2025			
proposal):	December 9, 2025			
Date of Academic Council Approval:				

New Graduate Program Proposal

The program proposal and accompanying documents must address the purpose and content of the new program and the capacity of the unit to deliver a high-quality program. This template is for all proposals for new graduate programs and aligns with Ontario Tech Institutional Quality Assurance Process (IQAP) requirements and, together with the required supporting documents, will help to ensure that all evaluation criteria established by the Quality Council are addressed. All sections of the template are required.

<u>Brief</u> description of the proposed program¹: (NOTE: Text box is formatted to limit the description to 1000 characters or less. This description should be identical to the 'Program Abstract' on page one of the proposal.)

The rail sector is key to the Canadian economy with freight railways transporting half of Canada's exports. Rail is one of the key components in decarbonizing the transportation sector, especially in public transit, offering the most efficient way to move people in urban environments. The growth in the rail sector in Canada is enormous, with a growing demand from the industry for trained in Canada engineers with knowledge of railway systems. The Graduate Diploma in Railway Engineering is designed for recent graduates and industry professionals with an undergraduate engineering degree who want to learn the foundations of rail engineering and start careers in the rail sector. Through four hybrid courses that have been designed in collaboration with industry, students will learn the foundations of railway engineering including gaining core knowledge in types of rail systems, safety, signalling, rolling stock, and operations and maintenance.

Template updated: October 2024

¹ NOTE: Following the Quality Council's approval of the proposed program, the QA Secretariat will seek confirmation from the University that this description is appropriate to post on the Quality Council's website (<u>Approved Programs — Ontario Universities Council on Quality Assurance (oucqa.ca)</u>)

Proposal last updated: December 2025

For CIQE Use Only:

Approval Steps	Date (e.g., of site visit, final sign off,
	meeting, submission)
Notice of Intent (NOI) Open for Community Comment	2025
NOI at Academic Resource Committee (ARC)	2025/11/11
NOI Approved to Proceed	2025/11/11
Development of Proposal Brid	ef
✓ Program Learning Outcomes Workshops and Review	2025/12
Completed	
Writing of Proposal	2025/11
✓ Collect Data	
✓ Broad Consultation and Letters of Support	
✓ All Required Appendices Completed	
Library Report Completed	N/A (included in Learning Resources)
Draft Proposal at Faculty Council for Feedback	2025/12/04
Draft Proposal Reviewed by Centre for Institutional Quality	2025/12/05
Enhancement (CIQE)	
Draft Proposal Reviewed by School of Graduate and Post-Doctoral	[date]
Studies (if applicable)	
List of Potential Reviewers Submitted to CIQE	N/A
Draft Proposal Presented to ARC	2025/12/09
Draft Proposal Return to ARC (if required)	N/A
External Review (Degree Programs Only) and Completion of Proposal	
External Review Completed (degree programs)	N/A
Response to Review Completed (degree programs)	N/A
Final Proposal Completed	N/A
Decanal signoff	Hossam Kishawy, Dean, Faculty of
In signing I/We confirm that I/We have ensured appropriate:	Engineering and Applied Science
compliance with the evaluation criteria required in the	[Date of Signoff]
Ontario Tech Institutional Quality Assurance Process	
consultation with the Office of the Provost and Vice-	
President, Academic	
consultation with faculty and students, other University	
divisions, and external institutions where appropriate	

Proposal last updated: December 2025

Provostial signoff	Lori Livingston, Provost and Vice-
In signing I confirm that the new program proposal:	President, Academic
Is complete and includes information on all evaluation	[Date of Signoff]
criteria required in the Ontario Tech Institutional Quality	
Assurance Process	
Faculty Council Approval	2025/12/04
Submission to University Governa	nce
Undergraduate/Graduate Studies Committee Recommendation	[date]
Academic Council Approval and Recommendation (must be within	[date]
two years of NOI approval)	
Board of Governors Approval	[date]
The program may begin advertising once academic and fiscal approval	has been received and the proposal has
been submitted to the Ontario Universities Council on Quality Assurance	e (Quality Council) as long as any and all
material includes the clear statement that, "No offer of admissions wil	l be made to the program pending final
approval by the Quality Council and the Ministry of Colleges and	Universities (where the latter is
sought/required)."	
External Approval and Launch of Pro	gram
Quality Council	[date]
□External reviewers' report N/A	☐Summary of changes N/A
□Program's and Dean's response (with date)* N/A	□Final, revised proposal
\square CVs, course outlines, and other supporting material (as appendices,	
where applicable)	
Anticipated Submission to the Ministry (where sought/required)	[date]
Final Expected Start Date	[date]
Initial Intake Report Due (based on expected start date)	[date]
1-Year Report Due (based on expected start date)	[date]
Date of First Cyclical Review (based on expected start date)	[date]

New Graduate Program Proposal

Graduate Diploma in Railway Engineering Faculty of Engineering and Applied Science

1 Program Abstract

Please provide a brief overview of the proposed program, summarizing the key points, to be shared with the public, in 1000 characters or less. You may wish to include:

- A clear statement of the purpose of the program (who is it for, what are the outcomes)
- Any program components, such as fields, pathways, or micro-credentials (note that fields, pathways, and micro-credentials are not required)
- Nature of the learning environment, noting any distinctive elements, including alternative modes of delivery (including online)

Note that this statement will be used on a standalone basis and is for external purposes; what do you want potential students/advisors to know about this program? (You may wish to complete this section last.)

The rail sector is key to the Canadian economy with freight railways transporting half of Canada's exports. Rail is one of the key components in decarbonizing the transportation sector, especially in public transit, offering the most efficient way to move people in urban environments. The growth in the rail sector in Canada is enormous, with a growing demand from the industry for trained in Canada engineers with knowledge of railway systems. The Graduate Diploma in Railway Engineering is designed for recent graduates and industry professionals with an undergraduate engineering degree who want to learn the foundations of rail engineering and start careers in the rail sector. Through four hybrid courses that have been designed in collaboration with industry, students will learn the foundations of railway engineering including gaining core knowledge in types of rail systems, safety, signalling, rolling stock, and operations and maintenance.

2 Academic Rationale

 Identify what is being proposed, clearly state the program objectives, and provide an academic rationale for the proposed program (what is being created and why?)

- Explain the appropriateness of the program name and degree nomenclature, particularly as they relate to the program objectives
- Describe the mode of delivery (in-class, hybrid, online) and any work-integrated learning; outline how the delivery and components are appropriate to support students in achieving the Degree Level Expectations, program outcomes, and Program Learning Outcomes
- Discuss how the program addresses the current state of the discipline or area of study
- Describe the ways in which the program fits into the broader array of program offerings within the Faculty and the University
- Describe any unique curriculum or program innovations, creative components, or significant high impact practice

Building upon the anticipated success of the undergraduate Railway Engineering Specialization, the proposed GDip in Railway Engineering has been designed for engineers in industry and recent engineering graduates who wish to pursue a career in the rail sector. The program structure for the GDip will be hybrid and is comprised of four courses:

- ENGR 5511G: Railway Systems
- ENGR 5522G: Railway Safety and Signalling
- ENGR 5533G: Railway Rolling Stock
- ENGR 5544G: Railway Systems Operation and Maintenance

The GDip offering of the courses will share the same lectures as those in the equivalent undergraduate Railway Engineering Specialization courses, but have different, graduate level deliverables and no labs.

The program name and nomenclature accurately reflect the program's scope and objectives. It signals a focused, graduate-level credential that builds on an engineering foundation while specializing in railway systems.

Innovative features of the program include integration with an established undergraduate specialization for resource efficiency and academic continuity, graduate-level assignments emphasizing applied research and industry-relevant problem-solving and a curriculum aligned with high-impact practices, fostering expertise in a sector vital to Canada's economic and environmental goals.

The Graduate Diploma in Railway Engineering addresses a critical skills gap in a discipline undergoing rapid transformation due to sustainability goals, technological innovation, and infrastructure modernization.

Describe any fields and/or any pathways from related programs. (Graduate programs are not required to have fields in order to highlight an area of strength or specialization within a program, nor are they required to provide specific pathways from programs at the college, bachelor, or other level.)

The Faculty of Engineering and Applied Science is currently updating its MEng programs to allow students who complete an engineering GDip a pathway into completing an MEng degree. While the specific details are still being developed, the changes will provide flexibility to students to complete an MEng degree, with the following options available:

- Complete the GDip in Railway Engineering (12 credits) plus a second four course engineering GDip plus two additional engineering graduate courses (6 credits)
- Complete the GDip in Railway Engineering (12 credits) plus a second four course engineering GDip plus the MEng Project (6 credits)
- Complete the GDip in Railway Engineering (12 credits) plus six additional engineering graduate courses (18 credits)
- Complete the GDip in Railway Engineering (12 credits) plus four additional engineering graduate courses (12 credits) plus MEng Project (6 credits)

3 University Mission, Vision, Integrated Academic and Research Plan, and Strategic Mandate Agreement

- Detail the consistency of the program objectives with the Mission, Vision,
 Integrated Academic and Research Plan, and Strategic Mandate Agreement
- Describe how the program contributes to the University's Mission and Vision
- Explain how the program aligns with the goals and priorities outlined in the Faculty's(ies') and University's Integrated Academic and Research Plan
- Is this program consistent with the mandate of the sector? (i.e. technically/vocationally/theoretically/academically oriented for universities)

Identify how the program fits within one or more areas of strength or growth in Ontario Tech University's <u>Strategic Mandate Agreement</u>

The act that created the University of Ontario Institute of Technology (Ontario Tech) states: "The objectives of the university are, (a) to provide undergraduate and postgraduate university programs with a primary focus on those programs that are innovative and responsive to the individual needs of students and to the market-driven needs of employers..." The proposed GDip in Railway Engineering is a clear example of delivering on this objective. Industry has clearly demonstrated the need for engineers trained in Canada with knowledge of railway systems.

The vision of Ontario Tech is: "Embracing technology with a conscience to advance knowledge and promote sustainability." Railway is key to the sustainability of Canada, including making its cities livable, as well as playing a key role in the decarbonization of the transportation sector. As the population of Canada continues to grow, rail is the only viable solution to moving large numbers of people in urban centres to improve the livability of Canadian cities.

The proposed GDip aligns well with Ontario Tech's mission to "... equip future leaders to solve complex problems." Modern railway systems are extremely complex. The proposed GDip will give graduates the skill-set needed by the rail industry to allow them to make immediate contributions to this growing field.

In addition, the proposed GDip will be a unique offering amongst engineering programs in Canada. Ontario Tech will be the only engineering school offering a GDip in Railway Engineering.

4 Need, Demand, and Duplication

Provide evidence of the need and demand for the program and how this has been determined, focusing on:

- Student interest:
- > including number of prospective student inquiries, applications and registrations for similar programs, results from surveys/focus groups of existing students, graduates, or professionals in the field (include information about domestic vs. international student interest)
- Societal need:

- including evidence of the need for graduates of the program and in which fields (within academic, public, and/or private sectors);
- employment opportunities for prospective graduates, indicating at least three occupations in which graduates from this proposed program may be employed, selecting at least one using the <u>Ontario Job Futures website</u> and one from the <u>Government of Canada Labour Market Trends website</u>; you may also wish to review the <u>Durham Workforce Authority</u> website and provide any relevant sector portfolio or local/community impact information;
- for professional programs, a description of the program's congruence with current regulatory requirements
- note if any employers in the area support the need for this program and include a letter(s) of support as an additional appendix

The Faculty of Engineering and Applied Science was originally approached by Alstom and AtkinsRéalis about the possibility of developing a Railway Engineering Specialization for our undergraduate engineering programs. Despite Canada's strong reliance on the rail sector for moving people and freight, there are currently no engineering programs in Canada that educate engineers in railway systems. In fact, Canada is the only G7 nation without a railway engineering program (number of programs by nation: France 4, Germany 4, Italy 3, Japan 3, UK 3, and USA 3).

Rail has played a central role in the creation of Canada and its development and economic prosperity. This contribution continues to today, where Canadian freight railways transported half of Canada's exports in 2022 and a total of \$380 billion worth of goods (source: Rail Trends 2023 by Railway Association of Canada). Rail is one of the key components in decarbonizing the transportation sector, especially in public transit. Rail is the singular, most efficient way to move people in urban environments. The growth of rail transit projects is enormous both in Canada and globally. Alstom, globally has close to a 100 billion euros (€) backlog of rail projects. As of September 2024, Alstom currently had over 100 open engineering positions in Canada alone, half of which were for early career engineering graduates.

There is a clear need and demand from industry to train engineers with railway engineering expertise in Canada. With the launch of the undergraduate Railway Engineering Specialization, we have received repeated requests from people in industry wishing to take similar courses. Alstom and Hitachi Rail have also expressed interest in having their new hires, who did not take the Railway Engineering Specialization during their undergraduate studies, the opportunity to take these

courses. Projected enrollment would initially be around 30-40 students per year with the potential to enter into partnership with employers, like Alstom and Hitachi Rail, to deliver the courses to their new hires directly.

The proposed GDip in Railway Engineering is designed to provide engineers in industry, from a wide range of engineering disciplines, the necessary core competencies in railway engineering that employers need.

 Describe how the program is distinct from other programs at Ontario Tech. Is it reasonable to anticipate this program might affect enrolment in other related programs? If so, how might this be addressed?

The GDip in railway engineering is distinct from other programs at Ontario Tech. Although the Railway Engineering Specialization exists for some of the undergraduate programs, the GDip is designed for those who did not have the opportunity to take the Railway Engineering Specialization during their undergraduate studies.

The GDip will not affect enrolment in other programs at Ontario Tech.

• Is this a new area of study? Please explain:

The GDip builds upon the already existing undergraduate Railway Engineering Specialization, so it is not a new area of study. However, it is a further step into expanding Ontario Tech's offerings that contribute to the training needs of the rail sector.

- Identify similar or complementary programs offered by other universities with specific reference to Ontario and Canadian examples, using the table in the Appendix. Please be brief but specific in the table. Avoid value-based statements; rather, focus on need and demand, describing how the proposed program is similar to or different from existing programs. Please fill out and refer to the table in the Appendix when discussing the comparator programs
- Provide additional overall comment on the justification for any duplication

The GDip in Railway Engineering is unique at the graduate level and there are no similar programs available in Ontario or in Canada. At the undergraduate level, other than the Ontario Tech Railway Engineering Specialization, the only similar

undergraduate specialization is at Polytechnique Montreal which offers a French language version of the Railway Engineering Specialization.

5 Enrolment Information

- Please complete Table 1 and provide, in paragraph form, information regarding enrolment projections
- Please determine the academic year when the program enrollment will reach a steady-state and add an asterisk (*) in the corresponding box beside the number
- This table should reflect normal estimated program length. (Table may be adjusted as necessary.)

Table 1: Projected Enrollment by Academic and Program Year

	Academic Year						
	2026-2027 2027-2028 2028-2029 2029-2030 2030-2031 2031-2032						
Level of Study							
Master's year 1	30-40	30-40	40-50*	40-50	40-50	40-50	
Total Enrollment	30-40	30-40	40-50	40-50	40-50	40-50	

Projected enrollment would initially be around 30-40 students per year with the potential to enter into partnership with employers, like Alstom and Hitachi Rail, to deliver the courses to their new hires directly. The planned steady-state is 40-50 students per year. Note these directed offerings may be offered in alternate formats other than the traditional 12-week semester.

6 Admission Requirements

Outline the formal admission requirements as they will appear in the Academic Calendar

Minimum Academic Requirements for Graduate Diploma Programs:

- Hold a four-year honours degree or its equivalent from a recognized institution in the area of graduate study or a closely related subject.
- A minimum B-minus average (GPA: 2.7 on a 4.3 scale).
- Applicants that have a degree in subject areas outside of engineering or those
 who do not meet the minimum GPA requirements, but have relevant
 engineering experience will be evaluated on an individual case-by-case basis.

Template updated: October 2024

- Explain how the program's admission requirements are appropriate for the program objectives and program learning outcomes: How will they help to ensure students are successful? How do they align with the learning outcomes of the program?
- Explain in detail any additional requirements for admission to the program such as minimum grade point average, special language, portfolio, etc. (and how the program recognizes prior work or learning experience, if applicable)
- Indicate the programs from which students may be drawn

Graduates from any Canadian accredited undergraduate engineering program (or its equivalent) will be eligible to enrol in the GDip, including: Automotive Engineering, Civil Engineering, Electrical Engineering, Energy Engineering, Industrial Engineering, Manufacturing Engineering, Mechanical Engineering, Mechatronics Engineering, and Software Engineering.

Note, the consideration of applicants from non-engineering programs or those who do not meet the minimum GPA requirements is to provide applicants looking to reskill for the rail sector the potential opportunity to do the GDip in Railway Engineering.

7 Program Requirements, Learning Outcomes, Degree Level Expectations (DLEs), and Program Structure

Participate in program learning outcome (PLO) development sessions and complete the PLO mapping document to describe what the student will know or be able to do by the end of the program and how that knowledge or skill will be demonstrated; include the mapping document as an appendix; refer to the new PLOs and PLO mapping document to complete the questions in this section.

Please see Appendix A for a list of the Program Learning Outcomes, Degree Level Expectations, Courses, and Assessments.

Discuss how the design, structure, requirements, and delivery of the program are appropriate for the program learning outcomes, program outcomes, and Degree Level Expectations. Guidance on program objectives and program-level learning outcomes, including examples, is available <a href="https://examples.com/here/be/here/be/design.com/h

- The sequencing of required courses or other learning activities
- The mode of delivery of the program (is this an online or hybrid program?)
- Will the program be offered full-time and/or part-time; what is the program length for both full-time and part-time students; how will the program requirements reasonably be completed within the proposed time?
- A clear indication of how faculty scholarship and research is integrated; for researched-focused graduate programs, provide a clear indication of the nature and suitability of the major research requirements for degree completion; for professional graduate programs, how an understanding of research in this area will be reflected in curriculum and/or assessment
- How the program will be administered
- The unique curriculum or program innovations or creative components in this program
- The ways in which the curriculum addresses the current state of the discipline
- If the program is to be accredited, include with the above details about the accreditation requirements and add the accreditation tables, if available, as an additional Appendix

The program consists of four core courses, delivered over two semesters, that cover key knowledge for those wishing to pursue a career in the rail sector:

- ENGR 5511G: Railway Systems
- ENGR 5522G: Railway Safety and Signalling
- ENGR 5533G: Railway Rolling Stock
- ENGR 5544G: Railway Systems Operation and Maintenance

Typically, ENGR 5511G and ENGR 5522G will be offered in the Fall semester and ENGR 5533G and ENGR 5544G will be offered in the Winter semester to align with the delivery of the undergraduate Railway Engineering Specialization. The sequencing of the courses is designed so that students are first given an overview of railway systems in ENGR 5511G and safety and signalling in ENGR 5522G in the Fall semester and then build upon these courses in the Winter semester where they focus on rolling stock in ENGR 5533G and railway systems operations and maintenance in ENGR 5544G. By the end of the four courses, graduates will have core knowledge about the key areas of railway systems.

Delivery mode for the four courses will be hybrid. In addition to the traditional 12-week semester delivery, the courses may be delivered in compressed time formats to meet the needs of industry partners.

To facilitate access to all potential students, part-time studies are permitted. In particular, engineers in industry may wish to pursue a graduate diploma program through part-time studies.

The courses available in the program cover the state-of-the-art in railway engineering and are taught by instructors with subject matter expertise. The courses were developed in conjunction with subject matter experts from industry. An Industrial Advisory Committee made up of representatives from the rail industry will help ensure the courses remain relevant and current.

All course deliverables will be designed to ensure that the students are meeting the program learning outcomes and support the achievement of Degree Level Expectations. Assessments will not only measure content knowledge but also foster advanced competencies expected at the graduate level.

Provide evidence that each graduate student is required to take a minimum of two-thirds of the course requirements from among graduate-level courses

All four courses that are required for the GDip are graduate level.

Describe how the principles of Equity, Diversity, Inclusion, and Decolonization have been considered:

- Does the program contain concepts, materials, or resources from scholars/professionals who are part of one or more historically marginalized groups?
- Are multiple perspectives represented in the program, such as those offered by those who are Indigenous, Black, Persons of Colour, and/or 2SLGBTQIA+?
- How has accessibility been considered? More specifically, have the needs of students with disabilities been integrated into the program design (e.g., the ways that students are asked to demonstrate their learning)? Please provide information beyond the services offered by Student Accessibility Services
- Discuss how the program structure and delivery reflect <u>universal design for</u>
 <u>teaching and learning</u> and how the potential need to provide mental or physical
 health accommodations have been considered; describe how the program
 structure and delivery methods promote student well-being and resiliency and any
 elements that support a sense of community in the program
- Will this program provide space to allow for the discussion of other viewpoints outside the "dominant, Western narrative"?

The Faculty of Engineering and Applied Science (FEAS) is fully committed to Equity, Diversity, and Inclusion (EDI), including in all its courses and all its research activities. The material covered in this program considers the development of railway systems that serve the public, so it is critical that EDI considerations are incorporated into the development of these systems, in particular ensuring these systems are accessible for all users. The courses, where appropriate, will cover these issues to ensure that students understand the importance of designing accessible systems.

As an example of its focus on EDI, FEAS has the Women in Engineering Society with the following goals:

- We foster a welcoming and engaging space for female engineering students to create a sense of community on and off campus.
- We connect female students to future employers and engineering career opportunities across Canada, and showcase successful female engineering professionals.
- We equip our students with professional skills, connections, and inspiration to prepare them for their professional careers.
- We give back to the community by running outreach events to encourage and inspire young women to pursue an education in engineering.

In addition to the above, FEAS's Engineering Outreach offers programs targeting Indigenous and black students to inspire and encourage them to pursue engineering.

For students who have accommodation needs, existi (SAS) supports will be available to students who requ	_		_
Does this Program contain any Indigenous content?	□ Yes	⊠ No	□ Unsure
For more information on how Indigenous content is de and how to consult with the Indigenous Education Advathe <u>Protocol for Consultation with the Indigenous Edu</u>	, visory Circle (I	IEAC), ple	ase refer to

What was the advice you received from the IEAC, and how has it been included in your proposal?

If yes, when? N/A

☐ Yes ☒ No

Has the IEAC been contacted

Ά

Did the IEAC ask you to return the proposa	I to them	for revi	ew?	□ Yes	□ No
If yes, have they completed their review?	□ Yes	□ No	□N	I/A	

Is there an experiential learning component (e.g. workplace learning, co-op, internship, field placements, service learning, mandatory professional practice) to the program? If yes, please describe this component in 2500 words or less. Include confirmed partners, duration of the experiential learning component(s), and projected number of placements (where applicable) and provide letters of support.

N/A

8 Assessment of Teaching and Learning

Using examples from the PLO mapping document, address the following. Please see <u>Guidance on Assessment of Teaching and Learning</u> and speak with the Teaching and Learning Centre (TLC) for advice on how to satisfy these criteria.

- Appropriateness of the proposed methods for the assessment of student achievement of the intended program learning outcomes and Degree Level Expectations
- Describe plans for documenting and demonstrating:
 - > The overall quality of the program
 - > Whether the program is achieving in practice its proposed objectives;
 - Whether the students are achieving the program learning outcomes and a level of performance consistent with the Degree Level Expectations; and
 - How the resulting information will used to inform continuous program improvement

The learning outcomes for the program are achieved through a combination of graduate-level course work, including assignments, exams, projects, and presentations.

Learning activities and materials in graduate courses will be carefully designed to ensure that learners are deliberately exposed to study, the majority of which is at, or informed by, the forefront of engineering theory and practice.

The courses have been designed to give students key knowledge in railway engineering as well as an opportunity for advanced development of generic skills such as communication and teamwork. In addition, there will be scholarly activities of independent investigation, report writing, and presentations.

Throughout the curriculum, learning activities are planned, and student progress will be monitored to ensure that safety, professional guidelines, and ethical responsibilities relevant to engineering are modelled, developed, and evaluated.

The courses available in the program cover the state-of-the-art in railway engineering and are taught by instructors with subject matter expertise. The courses were developed in conjunction with subject matter experts from industry. An Industrial Advisory Committee made up of representatives from the rail industry will help ensure the courses remain relevant and current.

Student feedback surveys will be completed at the end of each course delivery to gather feedback. As well student performance in each course will be monitored yearly. The Graduate Program Director responsible for the program will review both the student feedback surveys and the student performance to ensure that the program is meeting its goals. In addition, the Industrial Advisory Committee will also provide feedback on the program delivery. Insights from these surveys and reviews will be documented and used to identify specific areas for improvement, inform curriculum adjustments, and guide enhancements to teaching and learning strategies.

To ensure sustained quality, program effectiveness will be assessed and monitored through the cyclical review process, providing actionable insights for continuous improvement. In addition to the review every eight years, Ontario Tech's Academic Resource Committee requires a brief report at program launch and a full report one-year after the launch of a new program. If there are areas of concerns raised at the one-year report, a subsequent 18-month report will be required. The one-year report will ask the program to review enrollment data, admission averages, and provide an analysis of successes and challenges encountered in the first year. If it is deemed necessary, recommendations will be made to enhance program effectiveness and student success. If required, the 18-month report will address key curricular and student data (e.g., GPA, retention data, etc.) as well as any outstanding recommendations from the one-year report. Pending the committee's review, further documentation may be required of the program for ongoing monitoring.

9 Calendar Copy and Program Map(s)

- Provide, as an Appendix using the template provided, a clear and full calendar copy. The template ensures consistency across all programs in the Academic Calendar
- Provide, as an Appendix, a full list of all courses included in the program including course numbers, titles, and descriptions. Please indicate clearly whether the courses are new/existing. Include full new course proposals for new courses, the template for which will be provided by CIQE. Include the most recent course descriptions for existing courses. If you are making changes to the existing courses, also include a course change form. In an Appendix referenced in Section 11 below, you will note which faculty members are expected to teach in the program and who is responsible for developing any new courses.

Please see Appendix B for the Calendar Copy and New Course Proposals for the program.

10 Consultation

- Describe the expected impact of the new program on the nature and quality of other programs delivered by the home and collaborating Faculty(ies) and any expected impact on programs offered by other Faculties
- Outline the process of consultation with the Deans of Faculties that will be implicated or affected by the creation of the proposed program
- Provide letters of support for the program from Deans at Ontario Tech and/or from other institutions/partners
- Describe any consultation undertaken with regard to the principles of Equity, Diversity, Inclusion, and Decolonization not covered in Section 7 above

The Graduate Diploma in Railway Engineering is designed to complement, rather than compete with, existing programs within the Faculty and across the University. By leveraging shared lectures with the undergraduate Railway Engineering Specialization, the GDip enhances resource efficiency without diminishing the quality of undergraduate offerings. Graduate-level course deliverables ensure academic rigor and differentiation, maintaining clear boundaries between credential levels.

The Office of the Registrar and the School of Graduate and Postdoctoral Studies were both consulted in the development of this program. No issues were raised.

As noted above, there will be no impact on other programs offered at Ontario Tech.

Please see Appendix C for Letters of Support obtained from Industry partners.

11 Resource Requirements

Resource Summary

Provide a brief summary statement of the funding requirements and the rationale. Please consult with the Provost's Office early regarding any resource implications described in this section.

As the program is leveraging the undergraduate Railway Engineering Specialization courses, it is anticipated there will be no major resource requirements. By leveraging shared lectures with the undergraduate Railway Engineering Specialization, the GDip enhances resource efficiency without diminishing the quality of undergraduate offerings. Graduate-level course deliverables ensure academic rigor and differentiation, maintaining clear boundaries between credential levels.

The resource requirements outlined in Section 11 have been reviewed by the Academic Resource Committee (ARC): <u>December 9, 2025</u>
(date of review)

11.1 Human Resource Requirements

Faculty – New and Existing Requirements

Complete, as an Appendix, the table detailing the list of faculty committed to the program and provide, in paragraph form below, the following:

- Clear evidence that faculty have the recent research or professional/clinical expertise needed to sustain the program, promote innovation, and foster an appropriate intellectual climate
- Additional information to demonstrate how supervisory loads are distributed in light of qualifications and appointment status, if not clear from the table
- Evidence of the participation of a sufficient number and quality of faculty who will actively participate in the delivery of (teach and/or supervise) the program and achieve the goals of the program and foster the appropriate academic environment, contribute substantively to the program, and commit to student mentoring
- Describe the role of any sessional/part-time faculty and any adjunct faculty; provide an approximate percentage used in the delivery of the program and the

Proposal last updated: December 2025

- plans to ensure the sustainability of the program and quality of the student experience
- Explain the provision of supervision of any experiential learning opportunities; how will supervisory loads be distributed?

Provide the CVs of all faculty who appear in the table of faculty committed to the program. These CVs should form a separate document with a table of contents and should have all CVs in alphabetical order by surname. CVs should be submitted in a consistent format.

The program will be delivered by three existing faculty members in the Faculty of Engineering and Applied Science with railway engineering expertise: Yuping He, Zia Saadatnia, and Mohamed Yousseff. Like the undergraduate Railway Engineering Specialization, some courses may be taught by sessional instructors with relevant industry experience. Alstom and AtkinRéalis have confirmed they can provide qualified engineers to teach courses as needed.

There is no supervision of experiential learning opportunities in this program.

Please see Appendix D for the Faculty Information for the program.

Are additional faculty required to be able to offer this program? \square Yes \square No

Please explain, i.e. Why would new faculty not be required? Would this change over time? What year will the faculty hire be required, and are there additional criteria associated with the hiring requirement (e.g. enrolment levels, program growth, University or Faculty priorities)?

Since the course delivery will leverage the undergraduate Railway Engineering Specialization course offerings, no additional human resources will be required, unless the number of students enrolled reaches the point where more than one section of a given course needs to be offered.

Over time, as the numbers warrant, the Faculty will make the case to hire two dedicated faculty members to support both the undergraduate Railway Engineering Specialization and the GDip in Railway Engineering.

Additional Academic and Non-Academic Human Resources

Give details regarding the nature and level of TA support required by the program, the level of administrative (i.e. new program director appointment), and academic advising support, etc. If new staff resources are needed, provide further details below.

No TAs will be required unless the enrolment per course for GDip students exceeds 40-50 students.

Are additional staff required to be able to offer this program? \square Yes \boxtimes No

If yes, please outline what year the staff hire(s) will be required and any additional criteria associated with the hiring requirement (e.g. enrolment levels, program growth, University or Faculty priorities):

N/A

11.2 Learning Resources

Provide an opening statement to describe the resources to sustain the quality of scholarship and research activities of undergraduate and graduate students, enhance the learning and teaching environment, promote student well-being and resiliency in the learning and teaching environment; refer as noted to the two standard Appendices.

The program will leverage existing institutional resources and targeted supports, including access to modern facilities, technology-enabled classrooms, and research infrastructure. Dedicated student services, academic advising, and wellness initiatives will promote student well-being and resiliency, ensuring a supportive and inclusive learning environment.

Please see Appendix E for a University statement concerning Learning Resources.

11.3 Information Technology

Provide a summary of evidence that there are adequate information technology resources to sustain the quality of scholarship and research activities of undergraduate and graduate students; address any unique requirements including renovations to existing space, Faculty-specific space/equipment, etc.; are there additional technology requirements specific to being able to successfully launch this program? Refer as noted to the standard Appendix.

Template updated: October 2024

The institution provides robust information technology resources to support high-quality scholarship and research activities for both undergraduate and graduate students. These include access to modern computing facilities, high-speed networks, secure data storage, and discipline-specific software to enhance teaching and learning. Existing spaces are equipped with technology-enabled classrooms and research infrastructure ensuring the program can be successfully implemented and sustained.

Please see Appendix F for a University statement concerning information technology services.

Supporting information for online and hybrid programs

Where applicable, please provide the following details for online and hybrid programs:

- Describe the adequacy of the technological platform to be used for online delivery
- Describe how the quality of education will be maintained
- Describe how the program objectives will be met
- Describe how the program learning outcomes will be met
- Describe the support services and training for teaching staff that will be made available
- Describe the sufficiency and type of supports that will be available to students
- How has accessibility been considered?
- What strategies have been considered to accommodate students with disabilities?
- Have the principles of Universal Design been considered?
- Will course content be offered in both written and audible forms (e.g., closed captioning, transcriptions)?
- Is course content designed logically and is it easy to follow with limited instruction?
- Are assignment expectations clear (i.e., a rubric)?
- Have the needs of students with limited or unreliable access to wi-fi been considered (e.g., breaking down pre-recorded lectures into maximum 10-minute videos)?

The program will leverage existing University IT infrastructure. Ontario Tech is a laptop university where students bring their own laptop devices and are provided access to a software portal where they can download any necessary software required for their courses, including a variety of engineering specific packages such as SolidWorks, NX, Multisim, MATLAB, Adams, and Nastran.

The hybrid delivery of the courses will make use of Ontario Tech's flexible hybrid classrooms that allow for synchronous delivery with active participation from

students both in room and online and the ability for all students to see all other students.

11.4 Financial Support for Graduate Students

Provide evidence that financial assistance for students, including TA-ships where applicable, will be sufficient to ensure adequate quality and numbers of students.

No financial assistance will be provided as this is a professional program.

11.5 Space and Infrastructure Requirements

- Provide evidence that there are adequate resources to sustain the quality of scholarship and research activities of undergraduate and graduate students, including information about laboratory and research space access, where applicable, and office space; address any unique requirements
- Highlight the change in the number of faculty, students, administrative staff, etc.
 as well as information on changes in equipment and activities; renovation of
 existing space; or whether the current space allocation will accommodate the new
 program
- Are there additional space requirements specific to being able to successfully launch this program?

The hybrid delivery of the courses and the leveraging with the undergraduate Railway Engineering Specialization course delivery will have minimal impact on classroom requirements.

No additional space requirements are required.

11.6 Other Resource Implications

- Note here if this new program may impact enrolment agreements with other institutions/external partners that exist with the Faculty/Provost's office. Indicate if the new program will require changes to any existing agreements with other institutions or will require the creation of a new agreement. Please consult with CIQE (ciqe@ontariotechu.ca) regarding any implications to existing or new agreements
- Are there inter-Faculty teaching implications?
- If this is a new joint program with another institution, indicate how the program will be administered and how program reviews will be conducted (refer to the Ontario Tech Institutional Quality Assurance Process Policy for more information)

The program does not impact any existing agreements Ontario Tech has with institutional and external partners. In addition, there are no inter-Faculty implications.

12 Closing Statements Regarding Program Quality

- Please summarize the appropriateness of the faculty's collective expertise and how it contributes substantively to the proposed program; use indicators to provide evidence of the quality of the faculty (e.g., qualifications, funding, honours, awards, research, innovation, and scholarly record).
- Please summarize how the program and faculty will ensure the intellectual quality of the student experience.

The GDip in Railway Engineering has been designed in consultation with experts from the railway sector to meet the demands of this rapidly growing sector. The Faculty has several professors with railway expertise as well as access to a slate of industry experts from our partner companies who can deliver courses as needed. The program has been designed to meet the needs of the rail sector. The Faculty has a history of quality program delivery that will serve as a model for the delivery of this new program.

Appendices

Please include at minimum the below. Additional Appendices may be added, as appropriate. Appendices should ultimately be listed below, attached as separate documents, and clearly labelled (A, B, C, etc.) in the order in which they are first mentioned in the document.

Appendix A: Program Learning Outcomes, Degree Level Expectations, Courses, and Assessments

Appendix B: Calendar Copy and New Course Proposals

Appendix C: Letters of Support from Industry

Appendix D: Faculty Information Appendix E: Learning Resources

Appendix F: Information Technology Resources

Appendix A_PLO, DLE, Courses, Assessments.xlsx

Graduate Diploma in Railway Engineering

PLO#	Program Learning Outcomes
1	Explain advanced concepts, principles, and theories in railway systems related to safety, signalling, rolling stock, operations, and maintenance.
2	Use engineering knowledge and methods to identify, analyze, and solve engineering problems related to railway systems.
3	Practice social, professional, and ethical requirements of engineering.
4	Explain the importance of continuing professional education and the strategies necessary for lifelong learning in the discipline.
5	Communicate railway engineering concepts, principles, and results effectively using written and verbal formats.
6	Critically evaluate advanced information using knowledge of railway systems and apply it in engineering practice.

Graduate Degree Level Expectations

Graduate Diploma in Railway Engineering

	Graduate Degree Level Expectations	Depth	and Bread	lth of Know	vledge	Re	esearch and	d Scholarsh	nip		of Applicat Knowledge		ssional Cap Autonomy	-	Level of Co	ommunuca	ntion Skills	Awaren	ness of Knov Limits	wledge
	Program Learning Outcomes	PLO1				PLO1	PLO6			PLO2		PLO3	PLO4		PLO5			PLO6		
Course No.	Course Title																			
ENGR 5111G	Railway Systems	1, 2, 3, 4				4	4			1, 2		3, 4	3, 4		3, 4			3, 4		
ENGR 5222G	Railway Safety and Signalling	1, 2, 3, 4				4	4			1, 2		3, 4	3, 4		3, 4			3, 4		
ENGR 5333G	Railway Rolling Stock	1, 2, 3, 4				4	4			1, 2		3, 4	3, 4		3, 4			3, 4		
ENGR 5444G	Railway Systems Operation and Maintenance	1, 2, 3, 4				4	4			1, 2		3, 4	3, 4		3, 4			3, 4		

Degee of Implementation:					
Introduced					
Reinforced					
Mastered					

Assessment Legend:					
1	Assignments				
2	Exam (example)				
3	Presentation				
4 Project					

Railway Engineering, Graduate Diploma

General Information

The Graduate Diploma (GDip) in Railway Engineering provides students with a comprehensive introduction to the core areas that define modern rail systems. As one of the most critical sectors of the Canadian economy, responsible for moving half of the country's exports, the rail industry continues to grow rapidly and plays a central role in decarbonizing transportation. Rail offers one of the most efficient and sustainable modes of moving both people and goods, particularly within urban environments.

Designed for recent graduates and industry professionals holding an undergraduate engineering degree, the Graduate Diploma in Railway Engineering equips learners with the foundational knowledge needed to begin or advance careers in this expanding field. Through four hybrid courses developed in collaboration with industry partners, students will gain a thorough understanding of key components of railway systems. Topics span a wide range and include rail system types, safety and regulatory frameworks, signalling and communication technologies, rolling stock, and operations and maintenance.

This program prepares graduates to meet the growing demand for engineers trained in Canada who possess practical, sector-specific expertise in railway engineering.

Admission Requirements

In addition to the general admission requirements for graduate studies, applicants must meet the following program-specific requirements:

Minimum Academic Requirements for Graduate Diploma Programs:

- Hold a four-year honours degree or its equivalent from a recognized institution in the area of engineering or a closely related subject.
- A minimum B-minus average (GPA: 2.7 on a 4.3 scale).
- Applicants that have a degree in subject areas outside of engineering or those
 who do not meet the minimum GPA requirements, but have relevant
 engineering experience will be evaluated on an individual case-by-case basis.

Graduates from any Canadian accredited undergraduate engineering program (or its equivalent) will be eligible to enrol in the GDip, including: Automotive Engineering, Civil Engineering, Electrical Engineering, Energy Engineering, Industrial Engineering, Manufacturing Engineering, Mechanical Engineering, Mechatronics Engineering, and Software Engineering.

Note, the consideration of applicants from non-engineering programs or those who do not meet the minimum GPA requirements is to provide applicants looking to reskill for the rail sector the potential opportunity to do the GDip in Railway Engineering.

Part-time studies

To facilitate access to all potential students, part-time studies are permitted. In particular, engineers in industry may wish to pursue a graduate diploma program through part-time studies.

Graduate diploma requirements_

For the graduate diploma, students must complete the four courses below for a total of 12 credits.

Note: Graduate diploma students are not permitted to take courses outside of their home program course listings for program credit. In addition, they may not take any senior fourth-year undergraduate courses from the Faculty of Engineering and Applied Science in lieu of a graduate course.

<u>Course listings</u>

- ENGR 5511G: Railway Systems
- ENGR 5522G: Railway Safety and Signalling
- ENGR 5533G: Railway Rolling Stock
- ENGR 5544G: Railway Systems Operation and Maintenance

Program learning outcomes

The following outcomes outline the knowledge and skills students will have achieved upon completion of the program.

Program Learning Outcomes - Railway Engineering, Graduate Diploma

NEW COURSE TEMPLATE

For changes to existing courses see Course Change Template

New courses must be entered into Curriculog prior to Faculty Council. Please use this template to provide the information to your Curriculog contact.

Faculty: Faculty of Engineering and Applied Science							
This new course is associated w	ith:						
Minor Program Adjustment	Major Program Modificatio	n 🛮 New Program 🔲 None					
Will this course appear anywhere other than the course							
description section of the Calen	dar?						
A new elective course for an ex Course Placement	ng program, specialization or mi	minor, listed in the program map:					
Modification		,					
	related to a New Program: New	Program proposal					
	-	ny applicable fields or specializations.]					
GDip in Railway Engineering	h	7.77					
Calendar start date: (When the c	ourse should first appear in the A	cademic Calendar 2020-2021)					
2026-2027		loadee careriaar 2020 2021,					
Registration start date: (The first	time the course will be open for	registration e.g. Fall 2020)					
Fall 2026	·	-					
Additional supporting information documentation)	on (optional; please indicate if you	u are attaching any additional					
N/A							
Subject Code: ENGR	Course Number: 5511G						
Full Course Title: Railway Systems							
Short-Form Course Title (max. 30 characters): Railway Systems							

Course Description

This course covers railway systems including the environmental needs and contributions of railway systems in a global context. The course will cover the history of railways, the requirements of regulatory authorities and the factors considered in designing railway systems, including the main economic parameters of railway systems to be considered for any project. Engineering methodologies of railway systems, including design of metro, tram, and mainline/commuter systems will be covered along with the principles for managing the operational capability of railway systems.

<u> </u>						
Credit Hours: 3						
Contact Hours – please indicate t	otal numbe	er of hours fo	r each comp	onent		
Lecture: 3	Lecture: 3					
Tutorial:			Other:			
Cross-listings						
Prerequisites for Calendar						
Prerequisites for Banner						
Co-requisites						
Prerequisites with concurrency						
(pre or co-requisite)						
Credit restrictions	ENGR 30	11U			Equiv	valency*
Recommended Prerequisites						
Course Restrictions						
Course Type	⊠ Core		lective	Core or Elect	ive	
Is the course: Undergraduate	⊠ Gradu	uate 🗌 Pi	ofessional (e	e.g. some Education co	ourses)	
Grading scheme	N (ne	ormal alpha	grade)	P (pass/fail)		
'Equivalency: Two courses are sim	ilar enough	in content tl	nat they are	considered equivalent	so studer	its can
egister in either course but they w	ill only rece	eive credit fo	one course	in their program.		
Course instructional method:						
CLS (In Class Delivery)			HVR (In Cla	ass and Online Deliver	<u></u>	х
IND (Individual Studies)			OFF (Off Si		77	
			,			
WB1 (Virtual Meet Time – Synchronous) WEB (Fully Online – Asynchronous)						<u> </u>
Not Applicable						
Feaching and assessment meth	ods.					
Assessment Methods:	ous.					
Assignments, quizzes, projects, presentations, and/or exams as determined by the course instructor.						
.earning outcomes: (for assista	nce develo	ping course	learning or	utcomes, please refe	er to the	Геаching

and Learning website, or contact them at teachingandlearning@ontariotechu.ca.)

Explain the environmental needs and challenges of railway systems.

Students who successfully complete the course should have reliably demonstrated the ability to:

Understand the regulatory framework for railway systems. Describe the main parameters of railway applications that have driven choices worldwide. Understand the roles of planners, customers, operators, maintenance stakeholders, manufacturers, subcontractors in the rail industry. Does this course contain any experiential learning components? X Yes No If yes: Х Case Study Simulated Workplace Project Consulting project/workplace project **Applied Research Field Experiences** Other Types of Experiences: We have consulted with all impacted areas: Yes \bowtie NA Process of consultation, if applicable: Have you considered the principles of Equity, Diversity, Inclusion, or Decolonization included when creating this new course? X Yes No Please explain: The Faculty of Engineering and Applied Science (FEAS) is fully committed to Equity, Diversity, and Inclusion (EDI), including in all of its courses. The material covered in this course considers the development of railway systems that serve the public, so it is critical that EDI considerations are incorporated into the development of these systems, in particular ensuring these systems are accessible for all users. For students who have accommodation needs, existing Student Accessibility Services (SAS) support will be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure For more information on how Indigenous content is defined at Ontario Tech University and how to consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protocol for Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No If yes, when? What was the advice you received from the IEAC, and how has it been included in your proposal?

Did the IEAC	ask you to ret	turn the prop	osal to them	n for review?	Yes No	
If yes, have t	hey complete	d their revie	w? 🗌 Yes	S No	□ N/A	
ancial Implica						
he course will l	oe delivered c	oncurrently v	with ENGR 30)11U, so there is	s limited financial impli	cation
-Faculty Counci	l Approval Date	es (e.g. Curricu	ılum Committ	ee, Program Con	nmittee):	

NEW COURSE TEMPLATE

For changes to existing courses see Course Change Template

New courses must be entered into Curriculog prior to Faculty Council. Please use this template to provide the information to your Curriculog contact.

Faculty: Faculty of Engineering	ng and Applied Science	
This new course is associated	d with:	
Dadin su Dus susus Adinostus	ut Dadiou Duo augus Mandifico	tion Name Description
Minor Program Adjustme		tion 🔀 New Program 🔝 None
Will this course appear anyw description section of the Ca		
description section of the ca	iciidai :	
If you answered yes to the abo	ve, please complete:	
		minor : Minor Program Adjustment
	existing program, specialization	n or minor, listed in the program map:
Course Placement		Madification Maior December
Modification	ve) related to a Major Program I	vioaification: Major Program
-	ve) related to a New Program: N	lew Program proposal
·	, c	5 , ,
	st all impacted programs includin	g any applicable fields or specializations.]
GDip in Railway Engineering		
Calendar start date: (When th	e course should first appear in th	e Academic Calendar 2020-2021)
2026-2027		
Pagistration start data: (The fi	rst time the course will be open f	for registration e.g. Fall 2020)
Fall 2026	ist time the course will be open i	Tol Tegistration e.g. Fail 2020)
1 dii 2020		
	ation (optional; please indicate if	you are attaching any additional
documentation)		
N/A		
Subject Code: ENGR	Course Number: 5522G	
Full Course Title: Railway Safety	and Signalling	
Snort-Form Course Title (max. 3	0 characters): Railway Safety and Sig	gnailing

Course Description

This course covers railway signalling systems and their role as the key device for managing the safety of railway systems. Students will learn the applicable principles and solutions employed in modern signalling systems for complex rail networks. Topics include signal technologies, safety, security, interlocking, and levels of automation.

Contact Hours – please indicate t	otal number of hou	s for each compon	ent			
Lecture: 3		Lab:				
Tutorial:		Other:				
Cross-listings						
Prerequisites for Calendar						
Prerequisites for Banner						
Co-requisites						
Prerequisites with concurrency (pre or co-requisite)						
Credit restrictions	ENGR 3022U		E	quivalency*		
Recommended Prerequisites						
Course Restrictions						
Course Type	⊠ Core [Elective	Core or Elective			
Is the course: Undergraduate		Professional (e.g.	some Education courses	5)		
Grading scheme	N (normal al	pha grade)	P (pass/fail)			
Equivalency: Two courses are sim egister in either course but they we course instructional method:	_	•	•	udents can		
CLS (In Class Delivery)		HYB (In Class	and Online Delivery)	Х		
IND (Individual Studies)		OFF (Off Site)				
WB1 (Virtual Meet Time – Synchro	onous)	WEB (Fully O	WEB (Fully Online – Asynchronous)			
Not Applicable						
Feaching and assessment meth	ods:					
Assessment Methods:						

Learning outcomes: (for assistance developing course learning outcomes, please refer to the Teaching and Learning <u>website</u>, or contact them at <u>teachingandlearning@ontariotechu.ca</u>.)

Students who successfully complete the course should have reliably demonstrated the ability to:

- Understand the technologies used in railway signalling.
- Design interlock systems.
- Understand the principles and design of an integrated control centre system.

Explain the levels of automation in railway systems. Does this course contain any experiential learning components?	ems.
Case Study	
Case Study	
Consulting project/workplace project Field Experiences Other Types of Experiences: We have consulted with all impacted areas: Yes NA Process of consultation, if applicable: Have you considered the principles of Equity, Diversity, Inclusion, or Decolonization increating this new course? Yes No Please explain: The Faculty of Engineering and Applied Science (FEAS) is fully committed to Equity, Diversity Inclusion (EDI), including in all of its courses. The material covered in this course consid development of railway systems that serve the public, so it is critical that EDI consideral incorporated into the development of these systems, in particular ensuring these systems accessible for all users. For students who have accommodation needs, existing Student Accessibility Services (Swill be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure For more information on how Indigenous content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
Field Experiences Other Types of Experiences: We have consulted with all impacted areas: Yes NA Process of consultation, if applicable: Have you considered the principles of Equity, Diversity, Inclusion, or Decolonization increating this new course? Yes No Please explain: The Faculty of Engineering and Applied Science (FEAS) is fully committed to Equity, Diversity of Engineering and Applied Science (FEAS) is fully committed to Equity, Diversity of Engineering and Policy of Engineering and English of the Science (FEAS) is fully committed to Equity, Diversity inclusion (EDI), including in all of its courses. The material covered in this course considered incorporated into the development of these systems, in particular ensuring these systems accessible for all users. For students who have accommodation needs, existing Student Accessibility Services (Swill be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure For more information on how Indigenous content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
Other Types of Experiences: We have consulted with all impacted areas:	
We have consulted with all impacted areas: Yes NA Process of consultation, if applicable: Have you considered the principles of Equity, Diversity, Inclusion, or Decolonization increating this new course? Yes No Please explain: The Faculty of Engineering and Applied Science (FEAS) is fully committed to Equity, Diversity, Inclusion (EDI), including in all of its courses. The material covered in this course conside development of railway systems that serve the public, so it is critical that EDI consideral incorporated into the development of these systems, in particular ensuring these systems accessible for all users. For students who have accommodation needs, existing Student Accessibility Services (Swill be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure for more information on how Indigenous content? Yes No Unsure for more information on how Indigenous Content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
Process of consultation, if applicable: Have you considered the principles of Equity, Diversity, Inclusion, or Decolonization increating this new course? Yes	
Process of consultation, if applicable: Have you considered the principles of Equity, Diversity, Inclusion, or Decolonization increating this new course? Yes	
Have you considered the principles of Equity, Diversity, Inclusion, or Decolonization increating this new course? Yes No Please explain: The Faculty of Engineering and Applied Science (FEAS) is fully committed to Equity, Dive Inclusion (EDI), including in all of its courses. The material covered in this course consid development of railway systems that serve the public, so it is critical that EDI consideral incorporated into the development of these systems, in particular ensuring these systems accessible for all users. For students who have accommodation needs, existing Student Accessibility Services (Swill be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure for more information on how Indigenous content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
Have you considered the principles of Equity, Diversity, Inclusion, or Decolonization increating this new course? Yes No Please explain: The Faculty of Engineering and Applied Science (FEAS) is fully committed to Equity, Dive Inclusion (EDI), including in all of its courses. The material covered in this course consid development of railway systems that serve the public, so it is critical that EDI consideral incorporated into the development of these systems, in particular ensuring these systems accessible for all users. For students who have accommodation needs, existing Student Accessibility Services (Swill be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure for more information on how Indigenous content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
The Faculty of Engineering and Applied Science (FEAS) is fully committed to Equity, Diversity of Engineering and Applied Science (FEAS) is fully committed to Equity, Diversity inclusion (EDI), including in all of its courses. The material covered in this course considered development of railway systems that serve the public, so it is critical that EDI consideration incorporated into the development of these systems, in particular ensuring these systems accessible for all users. For students who have accommodation needs, existing Student Accessibility Services (Swill be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure for more information on how Indigenous content is defined at Ontario Tech University at consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
The Faculty of Engineering and Applied Science (FEAS) is fully committed to Equity, Diversity of Engineering and Applied Science (FEAS) is fully committed to Equity, Diversity in Course (EDI), including in all of its courses. The material covered in this course considered development of railway systems that serve the public, so it is critical that EDI consideration incorporated into the development of these systems, in particular ensuring these systems accessible for all users. For students who have accommodation needs, existing Student Accessibility Services (Swill be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure for more information on how Indigenous content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
The Faculty of Engineering and Applied Science (FEAS) is fully committed to Equity, Diversity of Engineering and Applied Science (FEAS) is fully committed to Equity, Diversity in Course (EDI), including in all of its courses. The material covered in this course considered development of railway systems that serve the public, so it is critical that EDI consideration incorporated into the development of these systems, in particular ensuring these systems accessible for all users. For students who have accommodation needs, existing Student Accessibility Services (Swill be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure for more information on how Indigenous content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
The Faculty of Engineering and Applied Science (FEAS) is fully committed to Equity, Diversity Inclusion (EDI), including in all of its courses. The material covered in this course considered development of railway systems that serve the public, so it is critical that EDI consideral incorporated into the development of these systems, in particular ensuring these systems accessible for all users. For students who have accommodation needs, existing Student Accessibility Services (Swill be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure or more information on how Indigenous content is defined at Ontario Tech University a onsult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	luded when
Inclusion (EDI), including in all of its courses. The material covered in this course considered development of railway systems that serve the public, so it is critical that EDI considered incorporated into the development of these systems, in particular ensuring these systems accessible for all users. For students who have accommodation needs, existing Student Accessibility Services (Swill be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure or more information on how Indigenous content is defined at Ontario Tech University a onsult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
development of railway systems that serve the public, so it is critical that EDI considerar incorporated into the development of these systems, in particular ensuring these systems accessible for all users. For students who have accommodation needs, existing Student Accessibility Services (Swill be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure or more information on how Indigenous content is defined at Ontario Tech University a onsult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	•
incorporated into the development of these systems, in particular ensuring these systems accessible for all users. For students who have accommodation needs, existing Student Accessibility Services (Swill be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure for more information on how Indigenous content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
For students who have accommodation needs, existing Student Accessibility Services (Swill be available to students who require specific accommodations. Poes this course contain any Indigenous content? Yes No Unsure for more information on how Indigenous content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
For students who have accommodation needs, existing Student Accessibility Services (Swill be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure for more information on how Indigenous content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	is are
will be available to students who require specific accommodations. Does this course contain any Indigenous content? Yes No Unsure for more information on how Indigenous content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
Ooes this course contain any Indigenous content? ☐ Yes ☐ No ☐ Unsure for more information on how Indigenous content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? ☐ Yes ☐ No	AS) support
for more information on how Indigenous content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
for more information on how Indigenous content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
For more information on how Indigenous content is defined at Ontario Tech University a consult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted? Yes No	
onsult with the Indigenous Education Advisory Circle (IEAC), please refer to the Protoco Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted?	nd how to
Consultation with the Indigenous Education Advisory Circle. Has the IEAC been contacted?	
If yes, when?	
What was been been a second of the second of	
What was the advice you received from the IEAC, and how has it been included in y	our proposal:
L	

Did the IEAC ask you to return the proposal to them for review?
If yes, have they completed their review?
Financial Implications The course will be delivered concurrently with ENGR 4022U, so there is limited financial implications.
Pre-Faculty Council Approval Dates (e.g. Curriculum Committee, Program Committee):

NEW COURSE TEMPLATE

For changes to existing courses see Course Change Template

New courses must be entered into Curriculog prior to Faculty Council. Please use this template to provide the information to your Curriculog contact.

Faculty: Faculty of Engineering and Applied Science							
This new course is associated with:							
☐ Minor Program Adjustment ☐ Major Program Modification ☒ New Program ☐ None							
Will this course appear anywhe							
description section of the Calen	dar?						
_	ng program, specialization or mi	i nor : Minor Program Adjustment r minor, listed in the program map :					
A new course (core or elective)	related to a Major Program Mo	dification : Major Program					
Modification							
A new course (core or elective)	related to a New Program : New	Program proposal					
Programs impacted: [Please list a	II impacted programs including a	ny applicable fields or specializations.]					
GDip in Railway Engineering							
Calendar start date: (When the c	ourse should first appear in the A	cademic Calendar 2020-2021)					
2026-2027							
Registration start date: (The first	time the course will be onen for	registration e.g. Fall 2020)					
Fall 2027	time the course will be open for	registration e.g. rail 2020)					
1 dii 2027							
Additional supporting information	on (optional; please indicate if you	u are attaching any additional					
N/A							
Subject Code: ENGR	Course Number: 5533G						
Full Course Title: Railway Rolling St	ock						
Short-Form Course Title (max. 30 characters): Railway Rolling Stock							

Course Description

This course covers the main elements of railway rolling stock. The primary objective of all rail systems is to optimise train and passenger traffic. Rolling stock must therefore be developed in the best possible way to meet this objective. This course provides future players in the rail sector with a global vision of what is important to consider for train development. Topics include dimensioning, traction systems, braking systems, bogies, and computing and control systems. Specific topics related to passenger trains include comfort and door design.

Credit Hours: 3					
Contact Hours – please indicate to	tal numbe	er of hours for	each componer	nt	
Lecture: 3		L	.ab:		
Tutorial:		(Other:		
Cross-listings					
Prerequisites for Calendar					
Prerequisites for Banner					
Co-requisites					
Prerequisites with concurrency					
(pre or co-requisite) Credit restrictions					Equivalency*
Recommended Prerequisites					-quivalency
Course Restrictions					
Course Type	⊠ Core	□ El	ective	Core or Elective	
Is the course: Undergraduate	☐ Gradu	uate Pro	ofessional (e.g. sc	ome Education courses)
Grading scheme	N (ne	ormal alpha	grade)	P (pass/fail)	
*Equivalency: Two courses are simi	lar enough	in content the	at they are consi	dered equivalent so st	udents can
register in either course but they wi	ll only rece	ive credit for	one course in the	eir program.	
Course instructional method:					
CLS (In Class Delivery)			HYB (In Class ar	nd Online Delivery)	Х
IND (Individual Studies)			OFF (Off Site)		
WB1 (Virtual Meet Time – Synchro	nous)		WEB (Fully Onli	ne – Asynchronous)	
Not Applicable	<u>-</u>		<u> </u>	<u> </u>	
Teaching and assessment metho	ods:				
Assessment Methods:					
Assignments, quizzes, projects, pre	esentations	s, and/or exam	ns as determined	by the course instruct	or.
Learning outcomes: (for assistar	re develo	ning course	learning outcor	mes inlease refer to t	he Teaching
and Learning <u>website</u> , or contact			_	· •	ine reactiffig
Students who successfully complete	te the cour	se should hav	e reliably demon	strated the ability to:	

Dimension rolling stock.

bogies.	_	cluding traction systems, braking syste	
Does this course contain any experientia	l learning con	nponents? 🛛 Yes 🔲 No	
Case Study	Х	Simulated Workplace Project	
Consulting project/workplace project		Applied Research	
Field Experiences			I
Other Types of Experiences:		1	
We have consulted with all impacted are Process of consultation, if applicable:	eas: 🗌 Yes	⊠ NA	
, 11			
Have you considered the principles of Equating this new course? Yes The Faculty of Engineering and Applied Solution (EDI), including in all of its cour development of railway systems that see incorporated into the development of the accessible for all users. For students who have accommodation will be available to students who require	No Please Science (FEAS) rses. The matrice the public, nese systems, needs, existing specific acco	explain: is fully committed to Equity, Divergerial covered in this course considerations of it is critical that EDI consideration particular ensuring these systems. g Student Accessibility Services (SAMM) mmodations.	rsity, and ers the ions are ns are
Does this course contain any Indigenous For more information on how Indigenous consult with the Indigenous Education Ad Consultation with the Indigenous Education Has the IEAC been contacted?	content is de visory Circle (IEAC), please refer to the Protocol	
If yes, when?			
What was the advice you received fr	om the IEAC,	and how has it been included in y	our proposal?

Did the IEAC	ask you to re	turn the pro	posal to the	m for review?	Yes	No
If yes, have t	ney complete	d their revie	w? Ye	es 🗌 N	lo 🗌 N/A	
ancial Implica						
he course will l	oe delivered c	oncurrently	with ENGR 4	033U, so ther	e is limited fina	ancial implication
-Faculty Counci	Annroyal Dat	as la a Curric	ulum Commi	ttee Program (Committee):	
-racuity Counci	Approvai Dati	es (e.g. Cumc	ulum Commi	itee, Program (.ommitteej.	

NEW COURSE TEMPLATE

For changes to existing courses see Course Change Template

New courses must be entered into Curriculog prior to Faculty Council. Please use this template to provide the information to your Curriculog contact.

Faculty: Faculty of Engineering a	and Applied Science	
This new course is associated w	vith:	
Minor Program Adjustment	Major Program Modificatio	n 🛮 New Program 🔲 None
Will this course appear anywhe		
description section of the Calen	ıdar?	
A new elective course for an ex Course Placement	ng program, specialization or mi	minor, listed in the program map:
	related to a New Program : New	Program proposal
·	-	ny applicable fields or specializations.]
GDip in Railway Engineering		, approace
Calendar start date: (When the c	ourse should first appear in the A	scademic Calendar 2020-2021)
2026-2027		
Registration start date: (The first	time the course will be open for	registration e.g. Fall 2020)
Fall 2026		
Additional supporting information	on (optional; please indicate if you	u are attaching any additional
N/A		
Subject Code: ENGR	Course Number: 5544G	
Full Course Title: Railway Systems (Operation and Maintenance	
Short-Form Course Title (max. 30 c	haracters): Rail Operation & Mainter	nance

Course Description

This course covers the operation and maintenance of both urban and main line railway systems. Topics include: scheduling; Operations Control Centre (OCC); maintenance options, tools, procedures and training; emergency measures; and testing and commissioning.

Credit Hours: 3					
Contact Hours – please indicate t	total numbe	er of hours	for each comp	ponent	
Lecture: 3			Lab:		
Tutorial:			Other:		
Cross-listings					
Prerequisites for Calendar					
Prerequisites for Banner					
Co-requisites					
Prerequisites with concurrency (pre or co-requisite)					
Credit restrictions	ENGR 40)44U		Ec	uivalency*
Recommended Prerequisites					
Course Restrictions					
Course Type	⊠ Core		Elective	Core or Elective	
Is the course: Undergraduate	M C == d	. \Box			
is the course ondergraduate	⊠ Gradı	uate	Professional (e.g. some Education courses)	
Grading scheme		ormal alp	ha grade)	P (pass/fail)	
Grading scheme Equivalency: Two courses are sime egister in either course but they w	N (n	ormal alp	ha grade) that they are	P (pass/fail) considered equivalent so stu	
Grading scheme Equivalency: Two courses are sime egister in either course but they w	N (n	ormal alp	ha grade) that they are for one course	P (pass/fail) considered equivalent so stu	
Grading scheme Equivalency: Two courses are simegister in either course but they we course instructional method:	N (n	ormal alp	ha grade) that they are for one course	P (pass/fail) considered equivalent so sturing their program. ass and Online Delivery)	dents can
Grading scheme Equivalency: Two courses are sime egister in either course but they we course instructional method: CLS (In Class Delivery)	N (n N (n Nilar enough Vill only rece	ormal alp	ha grade) that they are for one course HYB (In Clause) OFF (Off S	P (pass/fail) considered equivalent so sturing their program. ass and Online Delivery)	dents can
Grading scheme Equivalency: Two courses are simple gister in either course but they we course instructional method: CLS (In Class Delivery) IND (Individual Studies)	N (n N (n Nilar enough Vill only rece	ormal alp	ha grade) that they are for one course HYB (In Clause) OFF (Off S	P (pass/fail) considered equivalent so studing their program. ass and Online Delivery)	dents can
Grading scheme Equivalency: Two courses are sime egister in either course but they we course instructional method: CLS (In Class Delivery) IND (Individual Studies) WB1 (Virtual Meet Time – Synchron Not Applicable	N (n illar enough vill only rece	ormal alp	ha grade) that they are for one course HYB (In Clause) OFF (Off S	P (pass/fail) considered equivalent so studing their program. ass and Online Delivery)	dents can
Grading scheme Equivalency: Two courses are sime egister in either course but they we course instructional method: CLS (In Class Delivery) IND (Individual Studies) WB1 (Virtual Meet Time – Synchron Not Applicable	N (n illar enough vill only rece	ormal alp	ha grade) that they are for one course HYB (In Clause) OFF (Off S	P (pass/fail) considered equivalent so studing their program. ass and Online Delivery)	dents can
Grading scheme FEquivalency: Two courses are sime egister in either course but they we course instructional method: CLS (In Class Delivery) IND (Individual Studies) WB1 (Virtual Meet Time – Synchron Not Applicable Feaching and assessment methods	N (n illar enough vill only recent onous)	ormal alp	ha grade) that they are for one course HYB (In Clause) OFF (Off S	P (pass/fail) considered equivalent so studing their program. ass and Online Delivery) site) y Online – Asynchronous)	dents can
Grading scheme *Equivalency: Two courses are simple size in either course but they we course instructional method: CLS (In Class Delivery) IND (Individual Studies) WB1 (Virtual Meet Time – Synchron Not Applicable Feaching and assessment methods:	N (n illar enough vill only recentations)	ormal alp in content eive credit	ha grade) that they are for one course HYB (In Clause) OFF (Off S WEB (Fully)	P (pass/fail) considered equivalent so studing their program. ass and Online Delivery) site) y Online – Asynchronous) mined by the course instructors	X X

Describe maintenance requirements and procedures.

Implement scheduling for railway systems.

Students who successfully complete the course should have reliably demonstrated the ability to:

• Understand the operations of both urban and main line railway systems.

 Understand testing and commissio 	ning of ra	ilway systems.
Does this course contain any experientia	al learnin	ng components? ⊠ Yes □ No
If yes:		·
Case Study	Х	Simulated Workplace Project
Consulting project/workplace project		Applied Research
Field Experiences		7,550.000.000
Other Types of Experiences:		
, , ,		
We have consulted with all impacted are	eas: 🗌	Yes 🔀 NA
reating this new course? Yes The Faculty of Engineering and Applied Inclusion (EDI), including in all of its cou development of railway systems that se	No Science (rses. The rve the p	rersity, Inclusion, or Decolonization included when Please explain: FEAS) is fully committed to Equity, Diversity, and a material covered in this course considers the public, so it is critical that EDI considerations are terms, in particular ensuring these systems are
accessible for all users. For students who have accommodation will be available to students who requir		existing Student Accessibility Services (SAS) support accommodations.
onsult with the Indigenous Education Acconsultation with the Indigenous Education	s content dvisory C	is defined at Ontario Tech University and how to ircle (IEAC), please refer to the <u>Protocol for</u>
If yes, when?		
What was the advice you received fi	rom the	EAC, and how has it been included in your proposal
Did the IEAC ask you to return the p	roposal t	to them for review?

If yes, have they completed their review?	Yes	☐ No	□ N/A	
Financial Implications				
The course will be delivered concurrently with	h ENGR 4044l	J, so there is	limited financ	cial implications.
Pre-Faculty Council Approval Dates (e.g. Curriculus	m Committee.	Program Com	mittee):	



ALSTOM AMERICAS

1101, Rue Parent Saint-Bruno-de-Montarville, Québec, J3V 6E6 Phone: +1-450-4410-2020 www.alstom.com

Ontario Tech

Scott Nokleby
Professor and Associate Dean, Academic
Faculty of Engineering and Applied Science
Ontario Tech University
2000 Simcoe Street North
Oshawa, ON L1G OC5

Montréal, November 25, 2025

Re: Letter of Support for the Graduate Diploma in Railway Engineering

Dear Scott Nokleby:

On behalf of Alstom Canada, we are pleased to provide our support for the proposed Graduate Diploma (GDip) in Railway Engineering. As a global leader in smart and sustainable rail mobility, Alstom is deeply committed to advancing education on rail transportation.

Alstom Canada has already worked closely with the Faculty of Engineering and Applied Science at Ontario Tech in the development of its new undergraduate Railway Engineering Specialization that launched Fall 2025. The proposal to create a GDip that leverages these courses to enable recent graduates who did not have the chance to take the Railway Engineering Specialization during their undergraduate programs, as well as engineers in other industries looking to make a career change, will be of great benefit to the rail sector. The proposed four course GDip will give graduates a foundation skill set that they can use in their careers as engineers in the rail sector.

As an industry leader in the rail sector, we know first-hand the importance of having trained in Canada engineers with railway expertise. Alstom has numerous projects in the works in North America, such as Toronto's Go Expansion, New York's subway, Montreal's REM, and many others. The demand for engineers with railway expertise continues to grow yearly. The proposed GDip is another key piece in filling the talent pipeline that the rail sector in Canada needs urgently and for the long term.



We look forward to our continued partnership with Ontario Tech and the launch of the new Graduate Diploma in Railway Engineering.

Sincerely,

Edouard SPRIET

Human Resources Vice President

Alstom Americas

Contact:

Vincent-Pierre GIROUX, P.Eng., M.Sc.A. Global Director, Learning & Talent Development +1.438.357.4465

vincent-pierre.giroux@alstomgroup.com



3 December 2025

Ontario Tech University
Faculty of Engineering and Applied Science
2000 Simcoe Street North
Oshawa, ON
L1H 7K4
Canada

Attention: Dr. Scott Nokleby

Subject: Letter of Support - Graduate Diploma in Railway Engineering at Ontario Tech University

Dear Dr. Nokleby,

On behalf of Hitachi Rail, I am pleased to provide this letter of support for Ontario Tech University's proposal to establish a Graduate Diploma (GDip) in Railway Engineering.

As you know, Hitachi Rail has proudly partnered with Ontario Tech University through our recent Memorandum of Understanding to support Canada's first English-speaking undergraduate Railway Engineering Specialization. This initiative represents an important step in addressing the growing demand for skilled professionals in the rail industry and broader mobility sector.

The GDip in Railway Engineering will leverage the undergrad Railway Engineering Specialization and make it available to those already in the industry, providing new and existing engineers with access to specialized training in railway systems. By bridging academic learning with industry needs, this program will help ensure that Canada develops a workforce equipped to meet the challenges of our industry.

With over 40 years of history in Toronto, 1,300 employees in Canada, and a track record of delivering global transit projects, Hitachi Rail recognizes the importance of cultivating talent that is prepared to contribute to both local and international rail projects. The Graduate Diploma will complement the undergraduate specialization and further strengthen the pipeline of skilled engineers entering the field.

We commend Ontario Tech University for its leadership in advancing railway engineering education and look forward to continuing our collaboration to support the next generation of Canadian engineers.

Sincerely,

Did Riny

Ziad Rizk

Managing Director, Hitachi Rail Canada

Hitachi Rail GTS Canada Inc.

105 Moatfield Drive, Toronto, Ontario, M3B 0A4, Canada Tel + (1+) 416-742-3900

hitachirail.com

Appendix D – Faculty Information

Please include here only those currently at the institution and affiliated with the program. Examples in purple to be removed. Where available, link each faculty name to their Research or Profile page on the website.

Name and Faculty Status/Rank	Terminal Degree	Home Faculty/Unit	Areas of Expertise	Supervisory Privileges and Role in New Program (Note if faculty will be teaching and/or supervising in the program; indicate primary supervisor by asterisks)	Total Graduate Teaching (including New Program) (Note in bold type if faculty is a core course developer for the program)
Dr. Mohamed Youssef Professor	PhD	FEAS	Propulsion Systems for Automotive and Innovative Technologies like Hyperloop; Power Train for New Drives like Water Pumps; Railway Electromagnetic Compatibility (EMC); Railways Traction Substation Design Planning, and Commissioning; Power Electronics Applications for the Information Technology (IoT); Power Electronics Applications in the Innovative Renewable Energy Resources; Power Supply Design for the Oil/Gas; Power Systems Operation and Stability.	Graduate Faculty* Teaching core courses	3-4 courses (undergraduate/graduate level)
Dr. Yuping He Professor	PhD	FEAS	Autonomous Driving, Vehicle System Dynamics, Vehicle Chassis Design, Vehicle Active Safety Systems, Automated Design Synthesis, Modelling and Simulation, Driver- Hardware-in-the-Loop Real-	Graduate Faculty* Teaching core courses	3-4 courses (undergraduate/graduate level)

			Time Simulations, Application of Multidisciplinary Design Optimization, Mechatronic Systems		
Dr. Zia Saadatnia Assistant Professor	PhD	FEAS	Smart Structures and Materials, Nonlinear Vibration and Structural Dynamics, Energy Harvesting, Sensors and Actuators, Biomedical Devices	Graduate Faculty* Teaching core courses	3-4 courses (undergraduate/graduate level)

Appendix E: Learning Resources

School of Graduate and Post-Doctoral Studies

Quality graduate and postdoctoral education combines teaching, research, professional development, disciplinary community involvement and personal growth. It is by nature a shared responsibility between students, faculty members, the programs and a large number of support units, with overarching administration being provided by the School of Graduate and Postdoctoral Studies.

The School of Graduate and Postdoctoral Studies (SGPS) furthers the scholarly mission of the university by providing academic and administrative support to the university's postgraduate educational, research, innovation and international activities. Our responsibilities include graduate program development, graduate enrolment management, oversight of academic and quality standards, and the implementation of policies and practices that enhance graduate/postdoctoral scholarly success, career readiness and personal growth. SGPS supports prospective, new and current graduate students through many administrative services including, but not limited to, recruitment, admission, registration, funding and scholarships, orientation, professional development workshops and events, and processing of final theses, projects and papers. SGPS is a single-point-of-contact, multifunctional administrative unit tailored to the complete "life-cycle" of graduate students, providing coordinated support to students and all other stakeholders.

Faculty-Specific Support

Academic Advising (if relevant)

Please provide details on your Faculty Academic Advising Office and supports for graduate students.

Student Life

Ontario Tech University, as a relatively small campus community, has a centralized delivery model for many student supports. All undergraduate students have access to an extensive support system that ensures a quality student experience. Each Faculty may provide additional, Faculty- or program-specific supports. In addition to the outlined services below, students may also take advantage of the <u>Campus Bookstore</u>, <u>Housing and Living Resources</u> as well as the <u>Ontario Tech Student Union</u>. Further information can be found at: http://studentlife.ontariotechu.ca/.

Student Learning Centre

Ontario Tech University fosters a high level of academic excellence by working with students, undergraduate and graduate, to achieve educational success. Faculty specific academic resources are available online and include tip sheets and videos. Academic specialists offer one-on-one support services in mathematics, writing, study

skills, ESL and physics. With the additional support of peer tutors and workshops, the Student Learning Centre can also accommodate the needs of a specific course or program.

Student Accessibility Services

Ontario Tech University ensures that students with disabilities have equal opportunities for academic success. Student Accessibility Services operates under the Ontario Human Rights Code and the Accessibility for Ontarians with Disabilities Act. Services and accommodation support are provided for students with documented disabilities and include:

- Adaptive technology training
- Alternate format course material
- Learning skills support
- Testing support
- Transition support for incoming students

Student Accessibility Services also provides inclusive peer spaces, support groups, and skills workshops for students.

Career Readiness

Ontario Tech University offers comprehensive career service assistance, co-op and internship support and a variety of valuable resources to help students along their career paths, including:

- Assistance with creating effective job-search documents
- Career counselling
- Co-op and internships
- Interview preparation
- Job market information
- Job search strategies

The Career Centre hosts a variety of events during the academic year including employer information and networking sessions, job fairs and interviews conducted by leading employers.

<u>Student Engagement, Equity and Inclusion</u>, and <u>Indigenous Education and Cultural</u> Services

The university supports students' successful transition and provides opportunities to develop leadership and professional skills throughout their university career. Services provided include:

- Equity and inclusivity programming and support groups
- Indigenous Education and Cultural Services provides space and supports for students to connect with Indigenous culture and resources

- Opportunities to grow and develop leadership skills through the Ambassador and Peer Mentorship program
- Orientation and events through first year
- Peer mentoring
- Services and supports for international and exchange students
- Specialized programming for first-generation, graduate, Indigenous, international, mature, online, transfer and diploma-to-degree pathways students

Student Mental Health Services

Student Mental Health Services helps students learn how to better manage the pressures of student life. Students can:

- Access short term counselling and therapy services
- Access tools and resources online to learn about mental health and how to maintain good health and wellness
- Attend drop-in sessions
- Participate in events, activities or support groups that promote positive health and well-being
- Work with a mental health professional to address concerns

Students in distress will also be provided with support and counselling as needed. There is no cost to students and services are confidential. For those who need long-term counselling support or specialized mental health services, Ontario Tech University will provide referrals to assist the student in accessing resources in the local community or in the student's home community.

Athletics and Recreation Facilities

Ontario Tech University offers a number of recreation facilities and fitness opportunities to meet all lifestyles and needs. On-campus facilities include the state-of-the-art FLEX Fitness Centre which overlooks Oshawa Creek, five gymnasiums, a 200-metre indoor track, two aerobic/dance studios, the Campus Ice Centre, Campus Fieldhouse, a soccer pitch, a fastball diamond, squash courts and an indoor golf training centre. Students are able to participate in varsity and intramural sports as well as group fitness classes and personal training sessions.

Campus Health Centre

The Campus Health Centre provides assistance in numerous confidential health-care options including:

- A medical clinic with daily access to physician and nursing staff
- Treatment of disease, illness, and injury
- Allergy injections, immunizations, and influenza injections

- Complementary Health Services featuring acupuncture, chiropractic, custom orthotics, massage therapy, nutritional counselling, and physical therapy
- An on-site laboratory (blood work, STI testing, throat swabs, etc.)
- Gynaecological health-care and prescriptions

Student Awards and Financial Aid

Student Awards and Financial Aid (SAFA) is dedicated to helping students understand the variety of options available to finance their education. Budgeting and financial planning are essential to their success and SAFA is on hand to help create the right financial plan. Financial assistance can be in the form of bursaries, employment (both on-campus and off), parental resources, scholarships, student lines of credit and the Ontario Student Assistance Program (OSAP).

Teaching & Learning Centre

The mission of the Teaching and Learning Centre (TLC) at Ontario Tech University is to empower faculty to reach their potential as educators and to create a culture where effective teaching is valued. We champion the scholarship of teaching and implementation of pedagogy. We create valuable teaching and learning professional development experiences. We move Ontario Tech University towards being a leader in teaching excellence, ultimately leading to greater student success.

The TLC provides faculty with a range of tools and facilities to assist them in providing a rich learning experience for students. Experts at the TLC provide support in various areas including curriculum development, multimedia design, learning technology and in the overall improvement of teaching practice.

In addition, the TLC funds teaching-related projects from the Teaching Innovation Fund (TIF) for proposals by faculty members aimed at developing new methods in teaching and learning. The TLC facilitates teaching awards at the University and supports faculty in their application for external awards and funding opportunities that focus on teaching and learning.

Campus Libraries

The Campus Libraries support teaching, learning, and research at Ontario Tech University with facilities, collections, and programming.

Library Collections:

- The Library's total collections budget is \$1.7 million.
- Collections include books, e-books, databases, journals, data and statistics, and multimedia materials

Support for teaching and learning:

- A dedicated librarian for each program who provides instruction, research consultations, and collection development
- Research guides for each of Ontario Tech's programs, as well as general guides for citation, copyright, and other broad topics
- Workshops and classes: custom in-class sessions, and general instruction sessions
- Three (3) online modules in Ontario Tech's learning management system, which professors can integrate seamlessly into their course shells

Research supports:

- Research consultations with subject librarians
- Extended support via the Library's virtual reference service
- Support for generative artificial intelligence: citation, copyright, and allowable use of library resources

Scholarly publishing supports:

- Research data management
- Publishing compliance with Tri-Council and other funders
- Support finding and creating open educational resources (OERs)
- Copyright advice and compliance information
- Support for authors, including reviewing author agreements
- Administration of APC waivers for faculty publishing in open access

Facilities:

- The Campus Libraries include the North Oshawa Library, which is the campus' main branch, and the Social Sciences, Humanities, and Education Library, which is located in downtown Oshawa
- The Library's locations include:
 - Extended library hours are available during peak season
 - o Groups study rooms are available for student booking
 - o Accessible workstations, and sit-stand desks
 - Computers and dual monitor workstations

Appendix F: Information Technology Resources

Ontario Tech University is a leader among North American universities in implementing and using curriculum and industry specific software in a technology-enriched learning environment (TELE). Our unique environment is adapted to each discipline based on faculty requirements and input for optimal student learning. We are committed to providing the greatest value for students' investment in education and technology while studying at Ontario Tech University.

One of the greatest advantages of Ontario Tech University's approach to TELE is that all students have equal access to the same technology, resources and services. Whether you are inside or outside of the classroom, your course-specific software allows you to work on your own or with others and enjoy seamless access to all Ontario Tech online resources. TELE supports Bring-your-own-device (BYOD) which provides you with laptop standards when acquiring the right laptop for your program and software support services onsite and online. An annual fee for TELE covers a wide range of program-specific software, technical software support, exam support and virus protection.

IT Services strives to provide quality services to students at Ontario Tech. To support these objectives, the following components are included:

Wireless network

Wireless internet connection is available in public areas and open-air locations around the Ontario Tech campus where students congregate (North Oshawa and Downtown locations).

Wired network

To ensure the success of the technology-enriched learning environment, a comprehensive data network has been installed on campus. This includes network drops in lecture halls and designated areas as well as network drops for each residence suite.

Ontario Tech students benefit from networked classrooms and learning spaces. Each ergonomically-designed space has data network connection access and electrical connections to ensure battery regeneration. In addition, classrooms include electronic projection equipment and full multimedia support.

Exam support services

IT Services provide hardware, software and technical support during examinations. IT team will be equipped with loaner laptops in the event of major technical issues.

Laptop repairs

IT Services provide on campus repairs on eligible laptop models.

IT Service Desk

The IT Service Desk is equipped with certified technicians and experienced IT professionals offering technical support services on a drop-in, call-in or email basis.

General Use Workstations (GUWs)

Ontario Tech undergraduate students are able to use general workstations available at the library and have access to Bring Your Own Device Technology-Enriched Learning Environment (BYOD TELE) model course-specific software.

Software Support

Software Support specialists are available to students on-site and online to assist in downloading/installing University software and support any other software related issues.

Printing services

Printing services are available to students in the following areas: labs, classrooms, study common areas, the Learning Commons and the Library. All Ontario Tech students receive print credits every year, more Printpacks can be purchased through the Campus Bookstore if students require additional printing services.



GRADUATE STUDIES COMMITTEE REPORT

ACTION REQUESTED:	
Recommendation	
Decision	
Discussion/Direction	
Information	
DATE: December 2	3, 2025
	Wingate, Associate Registrar and Director, Records and duling
SUBJECT: Registration	and Course Selection Policy Amendments

COMMITTEE MANDATE:

- Under the Policy Framework and the University's Act and By-Laws, Academic Council is responsible for approving Academic Policy and to make recommendations to the Board on "the establishment and terms of reference of committees to exercise the Academic Council's delegated authority" under By-law no. 2. The Graduate Studies Committee has a mandate of maintaining the academic standards set by Academic Council and to serve as the deliberative body for academic policy instruments.
- We present the attached amended Registration and Course Selection Policy for recommendation for approval by Academic Council.

MOTION:

That GSC hereby recommends to Academic Council the approval of the amended Registration and Course Selection Policy.

BACKGROUND/CONTEXT & RATIONALE:

The Registration and Course Selection Policy establishes the requirements regarding registration and course selection for undergraduate and graduate students. The proposed amendments are specifically focused on differentiating flat-fee and fee-per-credit programs and the expectation of continuous registration for graduate students.

The policy instrument currently specifies that all graduate students must maintain continuous registration. The proposed amendments seek to clarify the differences between students enrolled

in flat-fee versus fee-per-credit programs with respect to expectations regarding continuous registration. Specifically, students enrolled in flat-fee programs must be registered in each semester commencing with the semester specified in their letter of offer and continuing until graduation. Conversely, students enrolled in fee-per-credit programs are not necessarily expected to maintain continuous registration; rather they are expected to follow their course requirements as outlined in the Graduate Academic Calendar. For example: some professional Master's programs such as the Master of Financial Data Analytics (MFDA), Master of Business Analytics and Artificial Intelligence (MBAI) and Master of Education (MEd) do not require their students to pursue spring/summer courses to complete their degree on time. Students in fee-per-credit programs should consult with their program office and/or their Graduate Program Director regarding the expectations for continuous registration in their program.

In addition to these changes, editorial amendments were made to section 8.2 of the policy instrument.

RESOURCES REQUIRED:

No resources required.

CONSULTATION AND APPROVAL:

- Online Consultation: November 10, 2025 November 14, 2025
- Undergraduate Studies Committee (Discussion/Direction): December 16, 2025
- Graduate Studies Committee Deliberation: December 23, 2025
- Academic Council for approval: January 27, 2026

NEXT STEPS:

Pending recommendation by GSC, this policy will be presented to Academic Council for approval and become effective as of the date of approval.

SUPPORTING REFERENCE MATERIALS:

- ACD 1508 Registration and Course Selection Policy (Tracked Changes)
- ACD 1508 Registration and Course Selection Policy Clean Copy.docx

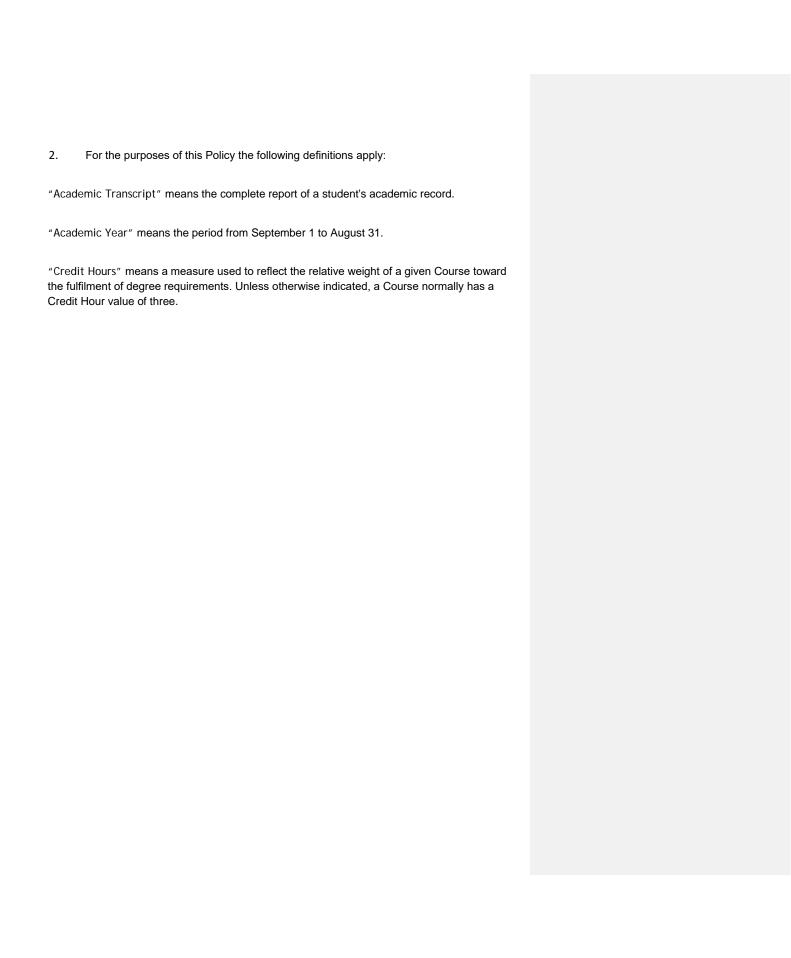
Registration and Course Selection Policy

Classification number	ACD 1508
Framework category	Academic
Approving authority	Academic Council
Policy owner	Registrar
Approval date	March 25, 2025 DRAFT FOR APPROVAL
Review date	March 2028TBD
Last updated	November 2025 March 25, 2025
Supersedes	Registration and Course Selection Policy, February 25, 2020; Academic Regulations – Undergraduate Academic Calendar 2016-2017, Academic Regulations, Graduate Academic Calendar 2019-20

Purpose

1. The purpose of this Policy is to outline the University's Registration and Course selection Framework.

Definitions



- "Corequisite" means a Course that must be taken concurrently with the Course for which it is required.
- "Course" means a unit of work in a particular subject normally extending through one Semester or Session, the completion of which carries credit toward the requirements of a degree or diploma.
- "Examination" means a form of testing intended to assess the level of students' knowledge, ability, skills, comprehension, application, analysis, and/or synthesis of the subject matter in a Course of study. This includes, but is not limited to in-person, online, take-home, practical, and laboratory Examinations. This does not include doctoral candidacy, master's or doctoral thesis examinations.
- <u>"Fee-Per-Credit Program"</u> refers to a graduate program in which students are charged tuition based on the number of credits in which they are registered in a given term.
- <u>"Flat-Fee Program" refers to a graduate program in which all students in the same program are charged the same tuition fee for course loads at or above a certain threshold of the normal course load.</u>
- "Grade Point Average (GPA)" means the weighted average of the grade points awarded on the basis of academic performance during a single Semester.
- "Prerequisite" means a Course that must be successfully completed prior to commencing a second Course for which it is required.
- "Program" means a complete set and sequence of Courses, combination of Courses, and/or other units of study, research and practice, the successful completion of which qualifies the candidate for a formal credential (degree with or without major; diploma), provided all other academic and financial requirements are met.
- "Semester" means sixty days of lectures and a final Examination period.
- "Session" means a period of approximately six consecutive weeks in the summer Semester consisting of 30 days of lectures and a final Examination period. The first half of summer Semester is designated as spring Session; the second half is designated as summer Session.
- "Time-Status" means the declared registration status of a graduate student. Graduate students can be registered full-time or part-time regardless of the number of courses in which they are registered. Time-status means full or part-time status for an Undergraduate student,

which is defined by the student's registered course load.

Scope and authority

- 3. This Policy applies to all Course selections for undergraduate and graduate students.
- 4. The Registrar, or successor thereof, is the Policy Owner and is responsible for overseeing the implementation, administration and interpretation of this Policy.
- The Dean of Graduate and Postdoctoral Studies is responsible for overseeing the implementation, administration and interpretation of this Policy as they pertain to graduate students.

Policy

The following outlines the requirements regarding registration and Course selection for undergraduate and graduate students.

6. Course Selection

- 6.1 Requirements for Programs of study are listed in the faculty or Program sections of the academic calendar. Students should become familiar with the Program and/or degree requirements and plan their Programs accordingly.
- 6.2 Academic advice is available to undergraduate students who experience difficulty when selecting Courses.
- 6.3 All candidates pursuing a graduate degree or diploma shall enrol in an advanced course of study.
- 6.4 Graduate students must consult with their graduate program director, faculty advisor or research supervisor as part of the planning process.
- 6.5 All Courses in the student's Program must be approved by the graduate program director.
- 6.6 Graduate students may take graduate Courses outside their Program with permission from the student's supervisor (if applicable), graduate program director for the Program and the graduate program director for the Course. Graduate students may be charged fees in addition to their regular Program fee for such Courses.
- 6.7 Graduate students cannot take Courses for credit in addition to the Course requirements for their graduate Program.
- 6.8 Not all Courses are offered in any one Semester, Session, or Academic Year. Elective offerings may vary from Semester to Semester.

7. Prerequisites and Corequisites

- 7.1 Some Courses have Prerequisites or Corequisites.
- 7.2 An undergraduate student may have Prerequisites and Corequisites waived with the permission of the faculty.
- 7.3 A graduate student may have Prerequisites or Corequisites waived with the permission of the graduate program director.
- 7.4 Any student who requests such a waiver is responsible to ensure that they are adequately prepared to proceed with the level of study required in the Course.
- 7.5 Inadequate preparation is not a basis for appeal of a final grade in a Course

	for which a student requested a waiver of Prerequisite or Corequisite.		
8.	Repeating Courses		
	8.1	Undergraduate students	

- a. Undergraduate students are not allowed to repeat the same Course, or its equivalent, more than two times.
- b. All instances of a Course will appear on the Academic Transcript. Only the grade achieved on the most recent attempt will be included in the calculation of the student's Grade Point Average.
- c. Students who have failed a third attempt of a Program required Course will be dismissed from the Program.

8.2 Graduate students

- a) Graduate students who fail a course are required to repeat the Course or an approved alternate within three active semesters after receiving the final
- b) Students who do not successfully complete the Course within three active semesters or fail a second Course will be eligible for dismissal from the University.

Graduate students who fail one Course are required to repeat the Course or an approved alternative within 12 months of receiving the failing grade.

If the failed Course is designated as a mandatory Course in the Program, students must retake the same Course.

- If the failed Course is an elective Course, students may be able to take an alternative elective Course approved by the graduate program director.
- Students who have a second failure are dismissed from the University.

the

c) All instances of a Course appear on the Academic Transcript. Only grade achieved on the most recent attempt, or an approved alternative Course, is used to calculate the student's GPA.

e.d) Repeating Courses impacts graduate student academic standing. This is outlined in "Graduate Student Grading System, Research Progress and Academic Standing Policy",

Formatted: Indent: Left: 1.38", No bullets or numbering

Formatted: Font: (Default) Arial, Font color: Black

Formatted: No bullets or numbering

Formatted: Font: (Default) Arial, Font color: Black

Formatted: Indent: Left: 1.38", No bullets or numbering

Formatted: Font: (Default) Arial, Font color: Black

9. **Auditing Courses**

- 9.1 Undergraduate and graduate students may audit a Course(s) in accordance with the Policy on Auditing an Undergraduate and Graduate Course
- 9.2 Audited Courses will not appear on a student's Academic Transcript.

10. Curriculum Substitution

- 10.1 Undergraduate students wishing to substitute one Course for another in a set of Program requirements may request permission to do so from the dean of the faculty or designate. Requests are referred to the appropriate Faculty Council for decision.
- 10.2 Any changes to a graduate student's Program must be approved by the graduate program director.
- 11. Letters of Permission for Undergraduate Students
 - 11.1 Students wishing to take a Course at another institution must apply for and receive a letter of permission from the University in advance of their application to the visiting institution.
 - 11.2 A letter of permission ensures that the Courses to be taken at the host institution will be recognized for credit at the University and are applicable to the student's Program of

study.

11.3 For application instructions, eligibility requirements, and restrictions, students should visit ontariotechu.ca/lop.

12. Graduate Student Course and Research Exchanges

- 12.1 Graduate students may apply to take Courses at other universities within and outside Canada and may request for credits earned to be transferred to their graduate Program at the University.
- 12.2 Graduate students from other universities within and outside Canada may apply to take Courses at the University that can be applied to their graduate work at the institution at which they are registered.
- 12.3 For application instructions, eligibility requirements, and restrictions, students should review the relevant section of the Graduate Academic Calendar or policy.

13. Registration Changes

13.1 Course Changes

The academic schedule for each Academic Year will outline predetermined dates for the following for each Semester and/or Session:

- a. Last day to add Courses.
- Last day to drop Courses and receive a 100 per cent refund of tuition fees.
- Last day to drop Courses and receive a 50 per cent refund of tuition fees. Dropping Courses on or prior to this date can be done without academic consequences.
- Dropping Courses after this date, and up to the last day to drop Courses, will result in a W being placed on the student's record indicating withdrawal.
- The W will not affect the Grade Point Average (GPA). However, a large number of W grades may affect the way an Academic Transcript is viewed by graduate schools or potential employers.
 - d. Last day to drop Courses.
- Withdrawal deadlines are not the same as the refund deadlines. Students should consult the University's academic schedule and Fees and Charges policies when considering withdrawal.

13.2 Graduate Student Registration Change Requests

The academic schedule for each Academic Year will outline predetermined dates for graduate students to submit:

- a. Request for Program change;
- b. Request to change Time-Status; or
- c. Requests for Leave of Absence

14. Voluntary Withdrawal

- 14.1 Withdrawal from a Course can have implications for a student's academic Program, student aid and awards eligibility and full-time status.
- 14.2 A dropped Course does not count toward degree requirements and cannot be used to satisfy Prerequisites for further Courses. In addition, the Course that is dropped may not be available in the next Semester or Session. Students are advised to consider all Course changes carefully or consult an advisor or graduate program director.
- 14.3 Students are reminded that non-attendance in a Course is not equivalent to withdrawal. Students who cease to attend a Course but do not formally withdraw will be academically and financially responsible for that Course.
- 15. Request for Consideration for Late Withdrawal from a Course(s) for Undergraduate Students
 - 15.1 Students may submit a request to the Registrar's office to consider a late withdrawal from a Course(s) due to extenuating circumstances beyond their control (such as medical reasons, death in the family, etc.).
 - 15.2 All relevant supporting documentation must accompany the request.
 - 15.3 Such requests must be submitted in writing no later than 10 working days after the commencement of the subsequent Semester (including fall, winter or summer Semester) in which the student is enrolled.
- 16. Continuous Registration for Graduate Students
 - 16.1 Students enrolled in flat-fee programs must be registered in each Semester (including fall, winter and summer Semester) commencing with the Semester specified in their letter of offer and continuing until graduation.

 Students enrolled in fee-per-credit programs must consult with their program office or graduate program director regarding the expectations for continuous registration in their program.
 - 16.2 Students enrolled in flat-fee programs are automatically registered in a graduate continuance Course until graduation, withdrawal or Program termination. Students must actively register for all other Program Courses. Students who do not formally register in a course cannot attend classes, access Course materials on the learning management system, submit assignments for evaluation or be assigned a grade in that Course.

- 16.3 If a student enrolled in a flat-fee program fails to maintain continuous registration in a Program or to register after the expiry of an approved leave of absence, the student's status is changed to inactive for up to one year.
- 16.4 Students who wish to re-register within the one year period may apply for reinstatement. If reinstatement is approved, students are required to pay all fees owing as well as any reinstatement fees that are in effect at the time of reinstatement.
- 16.5 If the student fails to register for three consecutive Semesters, their file is closed and the student is withdrawn from the Program.
- 16.6 Should a student who has been withdrawn wish to continue their graduate studies, the student must apply for readmission. Readmission to the University and/or the student's

original Program is not guaranteed.

17. Concurrent Registration

- 17.1 Undergraduate students may not be enrolled concurrently in more than one Program at any institution unless the Programs are formally structured and approved for concurrent registration.
- 17.2 Graduate students may not be enrolled concurrently in two Programs unless the Programs are formally structured and approved for concurrent registration.

18. Absences from Studies for Graduate Students

- 18.1 Graduate students are expected to be uninterruptedly registered in their designated-Program of study in order to support the timely completion of their degree. However, the University recognizes that under certain circumstances students may need to absent themselves from regular study while maintaining their relationship with the University.
- 18.2 Such circumstances must have sufficient cause and an official leave of absence must be requested through the School of Graduate and Postdoctoral Studies and approved by the Dean of Graduate and Postdoctoral Studies.
- 18.3 Acceptable circumstances include the following:
 - Exceptional circumstances, including medical, extraordinary demands of employment and compassionate circumstances.
 - Maternity leave, which is available to students during or following a pregnancy.
 - c. Parental leave, which is available to students who face extraordinary demands in parental responsibilities or whose duties require that they be absent from their studies for a period of time.
- 18.4 A leave normally begins on the first day of the Semester for a period of one, two or three academic Semesters. Normally, retroactive leaves of absences will not be granted.
- 18.5 During the period of leave, the following conditions apply:
 - a. Students are not registered or required to pay fees.
 - b. Students may not undertake any academic or research work, or use any of the University's facilities.

- c. Students are not eligible to receive scholarships or assistantships from the University. In the case of other graduate student awards, the regulations of the particular granting agency apply.
- d. Except for parental leave or in exceptional circumstances, it is not expected that a student will be granted more than one leave under the terms of this policy. The time limits for completing the degree Program will be extended by the duration of the leave taken (i.e., one, two or three Semesters, as appropriate).
- e. Leave of absence forms will not be processed for students who have outstanding fees. Students must inform the University immediately upon return.

19. Time Status for Undergraduate Students

- 19.1 Each Program has associated with it a number of Credit Hours that constitute a full Course load. In many Programs, this number is 15 per Semester or 30 per Academic Year.
- 19.2 Students will be considered full-time if they are registered in a Course load of nine Credit Hours or more.
 - a. Full-time status may have an impact on such things as student aid and awards eligibility, fees, income tax credits, athletic eligibility and other areas.
- 19.3 Students are considered part-time status if they are registered in a Course load of less than nine Credit Hours.

20. Time-Status for Graduate Students

- 20.1 Students are required to register as full-time or part-time students at the time of admission and registration.
- 20.2 With permission from the graduate program director, students may change their status from full-time to part-time, or vice versa, by completing a Change in Full-time or Part-time Status form and submitting it to the School of Graduate and Postdoctoral Studies for approval by the Dean of Graduate and Postdoctoral Studies.
- 20.3 A change in status may have an impact on student aid and awards eligibility, fees, income tax credits and other areas.
- 20.4 Full-time status

Graduate students are considered full-time if they meet the following criteria:

- a. Pursue their studies as a full-time occupation.
- b. Formally identify themselves as full-time students on all documentation.
- Maintain regular contact with their faculty advisor or research supervisor, if applicable, and be geographically available and visit the campus regularly.
- 20.5 Part-time status

Graduate students who do not meet the above criteria are deemed part-time students. Part-time students may have Course load restrictions. Students should consult the individual faculty with regard to the availability of part-time studies within their Program.

Monitoring and review

21. This Policy will be reviewed as necessary and at least every three years. The Registrar, or successor thereof, is responsible to monitor and review this Policy.

Relevant legislation

22. This section intentionally left blank

Related policies, procedures & documents

23. Undergraduate Fees

and Charges Policy

Graduate Fees and

Charges Policy

Graduate Academic

Calendar

Undergraduate

Academic Calendar

Registration and Course Selection Policy

Classification number	ACD 1508
Framework category	Academic
Approving authority	Academic Council
Policy owner	Registrar
Approval date	DRAFT FOR APPROVAL
Review date	TBD
Last updated	November 2025
Supersedes	Registration and Course Selection Policy, February 25, 2020; Academic Regulations – Undergraduate Academic Calendar 2016-2017, Academic Regulations, Graduate Academic Calendar 2019-20

Purpose

1. The purpose of this Policy is to outline the University's Registration and Course selection Framework.

Definitions

2. For the purposes of this Policy the following definitions apply:

"Academic Transcript" means the complete report of a student's academic record.

"Academic Year" means the period from September 1 to August 31.

"Credit Hours" means a measure used to reflect the relative weight of a given Course toward the fulfilment of degree requirements. Unless otherwise indicated, a Course normally has a Credit Hour value of three.

- "Corequisite" means a Course that must be taken concurrently with the Course for which it is required.
- "Course" means a unit of work in a particular subject normally extending through one Semester or Session, the completion of which carries credit toward the requirements of a degree or diploma.
- "Examination" means a form of testing intended to assess the level of students' knowledge, ability, skills, comprehension, application, analysis, and/or synthesis of the subject matter in a Course of study. This includes, but is not limited to in-person, online, take-home, practical, and laboratory Examinations. This does not include doctoral candidacy, master's or doctoral thesis examinations.
- "Fee-Per-Credit Program" refers to a graduate program in which students are charged tuition based on the number of credits in which they are registered in a given term.
- "Flat-Fee Program" refers to a graduate program in which all students in the same program are charged the same tuition fee for course loads at or above a certain threshold of the normal course load.
- "Grade Point Average (GPA)" means the weighted average of the grade points awarded on the basis of academic performance during a single Semester.
- "Prerequisite" means a Course that must be successfully completed prior to commencing a second Course for which it is required.
- "Program" means a complete set and sequence of Courses, combination of Courses, and/or other units of study, research and practice, the successful completion of which qualifies the candidate for a formal credential (degree with or without major; diploma), provided all other academic and financial requirements are met.
- "Semester" means sixty days of lectures and a final Examination period.
- "Session" means a period of approximately six consecutive weeks in the summer Semester consisting of 30 days of lectures and a final Examination period. The first half of summer Semester is designated as spring Session; the second half is designated as summer Session.
- "Time-Status" means the declared registration status of a graduate student. Graduate students can be registered full-time or part-time regardless of the number of courses in which they are registered. Time-status means full or part-time status for an Undergraduate student,

which is defined by the student's registered course load.

Scope and authority

- 3. This Policy applies to all Course selections for undergraduate and graduate students.
- 4. The Registrar, or successor thereof, is the Policy Owner and is responsible for overseeing the implementation, administration and interpretation of this Policy.
- 5. The Dean of Graduate and Postdoctoral Studies is responsible for overseeing the implementation, administration and interpretation of this Policy as they pertain to graduate students.

Policy

The following outlines the requirements regarding registration and Course selection for undergraduate and graduate students.

6. Course Selection

- 6.1 Requirements for Programs of study are listed in the faculty or Program sections of the academic calendar. Students should become familiar with the Program and/or degree requirements and plan their Programs accordingly.
- 6.2 Academic advice is available to undergraduate students who experience difficulty when selecting Courses.
- 6.3 All candidates pursuing a graduate degree or diploma shall enrol in an advanced course of study.
- 6.4 Graduate students must consult with their graduate program director, faculty advisor or research supervisor as part of the planning process.
- 6.5 All Courses in the student's Program must be approved by the graduate program director.
- 6.6 Graduate students may take graduate Courses outside their Program with permission from the student's supervisor (if applicable), graduate program director for the Program and the graduate program director for the Course. Graduate students may be charged fees in addition to their regular Program fee for such Courses.
- 6.7 Graduate students cannot take Courses for credit in addition to the Course requirements for their graduate Program.
- 6.8 Not all Courses are offered in any one Semester, Session, or Academic Year. Elective offerings may vary from Semester to Semester.

7. Prerequisites and Corequisites

- 7.1 Some Courses have Prerequisites or Corequisites.
- 7.2 An undergraduate student may have Prerequisites and Corequisites waived with the permission of the faculty.
- 7.3 A graduate student may have Prerequisites or Corequisites waived with the permission of the graduate program director.
- 7.4 Any student who requests such a waiver is responsible to ensure that they are adequately prepared to proceed with the level of study required in the Course.
- 7.5 Inadequate preparation is not a basis for appeal of a final grade in a Course

for which a student requested a waiver of Prerequisite or Corequisite.

- 8. Repeating Courses
 - 8.1 Undergraduate students

- a. Undergraduate students are not allowed to repeat the same Course, or its equivalent, more than two times.
- b. All instances of a Course will appear on the Academic Transcript. Only the grade achieved on the most recent attempt will be included in the calculation of the student's Grade Point Average.
- c. Students who have failed a third attempt of a Program required Course will be dismissed from the Program.

8.2 Graduate students

- a) Graduate students who fail a course are required to repeat the Course or an approved alternate within three active semesters after receiving the final grade.
- b) Students who do not successfully complete the Course within three active semesters or fail a second Course will be eligible for dismissal from the University.
- c) All instances of a Course appear on the Academic Transcript. Only the grade achieved on the most recent attempt, or an approved alternative Course, is used to calculate the student's GPA.
- d) Repeating Courses impacts graduate student academic standing. This is outlined in "Graduate Student Grading System, Research Progress and Academic Standing Policy".

9. Auditing Courses

- 9.1 Undergraduate and graduate students may audit a Course(s) in accordance with the Policy on Auditing an Undergraduate and Graduate Course
- 9.2 Audited Courses will not appear on a student's Academic Transcript.

10. Curriculum Substitution

- 10.1 Undergraduate students wishing to substitute one Course for another in a set of Program requirements may request permission to do so from the dean of the faculty or designate. Requests are referred to the appropriate Faculty Council for decision.
- 10.2 Any changes to a graduate student's Program must be approved by the graduate program director.

11. Letters of Permission for Undergraduate Students

- 11.1 Students wishing to take a Course at another institution must apply for and receive a letter of permission from the University in advance of their application to the visiting institution.
- 11.2 A letter of permission ensures that the Courses to be taken at the host institution will be recognized for credit at the University and are applicable to the student's Program of

study.

11.3 For application instructions, eligibility requirements, and restrictions, students should visit ontariotechu.ca/lop.

12. Graduate Student Course and Research Exchanges

- 12.1 Graduate students may apply to take Courses at other universities within and outside Canada and may request for credits earned to be transferred to their graduate Program at the University.
- 12.2 Graduate students from other universities within and outside Canada may apply to take Courses at the University that can be applied to their graduate work at the institution at which they are registered.
- 12.3 For application instructions, eligibility requirements, and restrictions, students should review the relevant section of the Graduate Academic Calendar or policy.

13. Registration Changes

13.1 Course Changes

The academic schedule for each Academic Year will outline predetermined dates for the following for each Semester and/or Session:

- a. Last day to add Courses.
- b. Last day to drop Courses and receive a 100 per cent refund of tuition fees.
- c. Last day to drop Courses and receive a 50 per cent refund of tuition fees. Dropping Courses on or prior to this date can be done without academic consequences.
- Dropping Courses after this date, and up to the last day to drop Courses, will result in a W being placed on the student's record indicating withdrawal.
- The W will not affect the Grade Point Average (GPA). However, a large number of W grades may affect the way an Academic Transcript is viewed by graduate schools or potential employers.
 - d. Last day to drop Courses.
- Withdrawal deadlines are not the same as the refund deadlines. Students should consult the University's academic schedule and Fees and Charges policies when considering withdrawal.

13.2 Graduate Student Registration Change Requests

The academic schedule for each Academic Year will outline predetermined dates for graduate students to submit:

- a. Request for Program change;
- b. Request to change Time-Status; or
- c. Requests for Leave of Absence

14. Voluntary Withdrawal

- 14.1 Withdrawal from a Course can have implications for a student's academic Program, student aid and awards eligibility and full-time status.
- 14.2 A dropped Course does not count toward degree requirements and cannot be used to satisfy Prerequisites for further Courses. In addition, the Course that is dropped may not be available in the next Semester or Session. Students are advised to consider all Course changes carefully or consult an advisor or graduate program director.
- 14.3 Students are reminded that non-attendance in a Course is not equivalent to withdrawal. Students who cease to attend a Course but do not formally withdraw will be academically and financially responsible for that Course.
- 15. Request for Consideration for Late Withdrawal from a Course(s) for Undergraduate Students
 - 15.1 Students may submit a request to the Registrar's office to consider a late withdrawal from a Course(s) due to extenuating circumstances beyond their control (such as medical reasons, death in the family, etc.).
 - 15.2 All relevant supporting documentation must accompany the request.
 - 15.3 Such requests must be submitted in writing no later than 10 working days after the commencement of the subsequent Semester (including fall, winter or summer Semester) in which the student is enrolled.
- 16. Continuous Registration for Graduate Students
 - 16.1 Students enrolled in flat-fee programs must be registered in each Semester (including fall, winter and summer Semester) commencing with the Semester specified in their letter of offer and continuing until graduation. Students enrolled in fee-per-credit programs must consult with their program office or graduate program director regarding the expectations for continuous registration in their program.
 - 16.2 Students enrolled in flat-fee programs are automatically registered in a graduate continuance Course until graduation, withdrawal or Program termination. Students must actively register for all other Program Courses. Students who do not formally register in a course cannot attend classes, access Course materials on the learning management system, submit assignments for evaluation or be assigned a grade in that Course.

- 16.3 If a student enrolled in a flat-fee program fails to maintain continuous registration in a Program or to register after the expiry of an approved leave of absence, the student's status is changed to inactive for up to one year.
- 16.4 Students who wish to re-register within the one year period may apply for reinstatement. If reinstatement is approved, students are required to pay all fees owing as well as any reinstatement fees that are in effect at the time of reinstatement.
- 16.5 If the student fails to register for three consecutive Semesters, their file is closed and the student is withdrawn from the Program.
- 16.6 Should a student who has been withdrawn wish to continue their graduate studies, the student must apply for readmission. Readmission to the University and/or the student's

original Program is not guaranteed.

17. Concurrent Registration

- 17.1 Undergraduate students may not be enrolled concurrently in more than one Program at any institution unless the Programs are formally structured and approved for concurrent registration.
- 17.2 Graduate students may not be enrolled concurrently in two Programs unless the Programs are formally structured and approved for concurrent registration.
- 18. Absences from Studies for Graduate Students
 - 18.1 Graduate students are expected to be uninterruptedly registered in their designated Program of study in order to support the timely completion of their degree. However, the University recognizes that under certain circumstances students may need to absent themselves from regular study while maintaining their relationship with the University.
 - 18.2 Such circumstances must have sufficient cause and an official leave of absence must be requested through the School of Graduate and Postdoctoral Studies and approved by the Dean of Graduate and Postdoctoral Studies.
 - 18.3 Acceptable circumstances include the following:
 - a. Exceptional circumstances, including medical, extraordinary demands of employment and compassionate circumstances.
 - b. Maternity leave, which is available to students during or following a pregnancy.
 - c. Parental leave, which is available to students who face extraordinary demands in parental responsibilities or whose duties require that they be absent from their studies for a period of time.
 - 18.4 A leave normally begins on the first day of the Semester for a period of one, two or three academic Semesters. Normally, retroactive leaves of absences will not be granted.
 - 18.5 During the period of leave, the following conditions apply:
 - a. Students are not registered or required to pay fees.
 - b. Students may not undertake any academic or research work, or use any of the University's facilities.

- c. Students are not eligible to receive scholarships or assistantships from the University. In the case of other graduate student awards, the regulations of the particular granting agency apply.
- d. Except for parental leave or in exceptional circumstances, it is not expected that a student will be granted more than one leave under the terms of this policy. The time limits for completing the degree Program will be extended by the duration of the leave taken (i.e., one, two or three Semesters, as appropriate).
- e. Leave of absence forms will not be processed for students who have outstanding fees. Students must inform the University immediately upon return.

- 19. Time Status for Undergraduate Students
 - 19.1 Each Program has associated with it a number of Credit Hours that constitute a full Course load. In many Programs, this number is 15 per Semester or 30 per Academic Year.
 - 19.2 Students will be considered full-time if they are registered in a Course load of nine Credit Hours or more.
 - a. Full-time status may have an impact on such things as student aid and awards eligibility, fees, income tax credits, athletic eligibility and other areas.
 - 19.3 Students are considered part-time status if they are registered in a Course load of less than nine Credit Hours.
- 20. Time-Status for Graduate Students
 - 20.1 Students are required to register as full-time or part-time students at the time of admission and registration.
 - 20.2 With permission from the graduate program director, students may change their status from full-time to part-time, or vice versa, by completing a Change in Full-time or Part-time Status form and submitting it to the School of Graduate and Postdoctoral Studies for approval by the Dean of Graduate and Postdoctoral Studies.
 - 20.3 A change in status may have an impact on student aid and awards eligibility, fees, income tax credits and other areas.
 - 20.4 Full-time status

Graduate students are considered full-time if they meet the following criteria:

- a. Pursue their studies as a full-time occupation.
- b. Formally identify themselves as full-time students on all documentation.
- c. Maintain regular contact with their faculty advisor or research supervisor, if applicable, and be geographically available and visit the campus regularly.
- 20.5 Part-time status

Graduate students who do not meet the above criteria are deemed part-time students. Part-time students may have Course load restrictions. Students should consult the individual faculty with regard to the availability of part-time studies within their Program.

Monitoring and review

21. This Policy will be reviewed as necessary and at least every three years. The Registrar, or successor thereof, is responsible to monitor and review this Policy.

Relevant legislation

22. This section intentionally left blank

Related policies, procedures & documents

23. Undergraduate Fees

and Charges Policy

Graduate Fees and

Charges Policy

Graduate Academic

Calendar

Undergraduate

Academic Calendar



ACADEMIC COUNCIL GRADUATE STUDIES COMMITTEE (GSC)

Minutes of the Public Session of the November 25, 2025 Meeting via Videoconference 9:00 a.m. - 9:18 a.m.

Graduate Studies Committee Agenda & Materials 2025-2026

Present:

Pejman Mirza-Babaei, Chair Jennifer Abbass Dick JoAnne Arcand Akramul Azim Dario Bonetta Carla Cesaroni Krystina Clarke Amanda Cooper Nicola Crow Catherine Davidson Leigh Harkins Shahram Heydari Sayyed Ali Hosseini Amirkianoosh Kiani Karolina Krystyniak Xianke Lin Holly MacPherson Olga Marques Kimberley McCartney Carolyn McGregor Diana Petrarca Andrea Slane Nick Wattie Ken Wilson Adam Wingate

Regrets:

Franco Gaspari Les Jacobs Hossam Kishawy Lori Livingston Faisal Qureshi Carol Rodgers
Peter Stoett
Akira Tokuhiro
Lennaert van Veen

Staff:

Kirstie Ayotte (Secretary)

1. Call to Order and Land Acknowledgement

The Chair called the Public session of the Graduate Studies Committee (GSC) meeting to order at 9:03 a.m. and K. Wilson provided their personal Land Acknowledgement.

2. Approval of Agenda

Upon a motion duly made by S. Heydari and seconded by N. Wattie, the GSC Agenda was approved as presented, including approving and receiving the Consent Agenda and its contents

3. Chair's Remarks

The Chair opened the meeting by reminding Members that volunteers were still needed to present the Land Acknowledgement at future meetings. He provided staffing updates, confirming that SGPS has completed several recent searches. Samantha Stahlke has joined as Executive Assistant, Mehdi Hossein-



Nejad will begin as Associate Dean on January 1, 2026, and Andrea Kassaris will join on December 1, 2025 in a limited term role supporting program development, academic affairs, and thesis exam processes.

The Chair also highlighted that the December GSC meeting has been rescheduled to December 18, 2025 and emphasized the importance of attendance.

Additional updates noted the strong turnout at this year's internal recruitment events and ongoing work to support domestic recruitment and potential admission pathways for current students. The Chair reminded Members of the upcoming Graduate Showcase events and he provided a brief overview of the SGPS Summit on December 11, 2025.

4. Major Program Modification (Recommendation)

4.1 Faculty of Social Science and Humanities: Master of Arts in Social Practice and Innovation* (M)

A. Slane noted that the program started this September with their third cohort of students and that it is aiming to stay flexible by offering options for working students, and those seeking a one year route instead of a 16 month structure. She advised that requirements remain unchanged, and the proposed updates are minor refinements based on two cycles of course delivery. She also advised that the part-time option was approved last year, and these changes enable its implementation.

Upon a motion duly made by O. Marques and seconded by J. Arcand, the GSC hereby recommends to Academic Council the approval of the Major Program Modification to the Master of Arts in Social Practice and Innovation program to establish defined program maps for part-time and full-time accelerated students, to permit undergraduate enrollment in targeted MSPI courses, and to update course descriptions.

5. Consent Agenda* (M)

The Chair confirmed that the contents of the Consent Agenda were approved and received under Agenda Item # 2.

5.1 Public Minutes of the Meeting of September 23, 2025 * (M)

5.2 Minor Curricular Changes:

Reinstate a Closed Course: SSCI - 5080G

5.3 Associate Graduate Faculty

- Automotive Engineering, Samuel Yousefi, Faculty of Engineering and Applied Science
- Business Analytics and Al, Karthik Sankaranarayanan, Faculty of Business and Information Technology
- Computer Science, Zahra Atf, Faculty of Business and Information Technology
- Computer Science, Ian Garrett, Faculty of Business and Information Technology
- Computer Science, Karthik Sankaranarayanan, Faculty of Business and Information Technology



- Education, Anna Rodrigues, Frazer Faculty of Education
- Electrical and Computer Engineering, Praveen Jain, Faculty of Engineering and Applied Science
- Financial Data Analytics, Karthik Sankaranarayanan, Faculty of Business and Information Technology
- Forensic Psychology, Michael Seto, Faculty of Social Science and Humanities
- Mechanical Engineering, Samuel Yousefi, Faculty of Engineering and Applied Science
- Mechatronics Engineering, Samuel Yousefi, Faculty of Engineering and Applied Science
- Modelling and Computational Science, Christopher Collins, Faculty of Science
- Applied Bioscience, Jonathan Midwood, Faculty of Science
- Computer Science, Amit Maraj, Faculty of Business and Information Technology
- Cybersecurity, Amit Maraj, Faculty of Business and Information Technology
- Cybersecurity, Ruba Alomari, Faculty of Business and Information Technology
- Education, Tyler Frederick, Frazer Faculty of Education
- Electrical and Computer Engineering, Langis Roy, Faculty of Engineering and Applied Science
- Engineering Management, Dima Jawad, Faculty of Engineering and Applied Science
- Health Sciences, Tyler Frederick, Faculty of Social Science and Humanities
- Health Sciences, Imran Khan Niazi, Faculty of Health Sciences
- Information Technology Security, Ruba Alomari, Faculty of Business and Information Technology
- Materials Science, Hossam Gaber, Faculty of Engineering and Applied Science
- Nursing, Shirley Quach, Faculty of Health Sciences
- Nursing, Reshma Prashad, Faculty of Health Sciences

Graduate Faculty

- Computer Science, Muhammad Usman, Faculty of Science
- Applied Bioscience, Ken Wilson, Faculty of Science
- Information Technology Security, Peter Lewis, Faculty of Business and Information Technology

6. Other Business

None Noted.

7. Adjournment (M)

There being no other business, and upon a motion duly made by A. Slane, the Public session of the GSC Meeting adjourned at 9:18 a.m.

Kirstie Ayotte, Assistant University Secretary



