CIVIL ENGINEERING CURRICULUM UPDATES & ENROLLMENT UPDATES

Fall/Winter 2025/26

Enrollment Dates

- Enroll in all courses by **July 25th, 2025**
- Each student has a specific date to enroll in courses
- Your enrollment window will be assigned on April 29th
- Login to find your enrolment time. https://myonlineservices.students.yorku.ca/

WHY you should enrol by July 25, 2025:

1. Get a spot in your desired courses/technical electives
2. Allows the department to plan for the appropriate amount of labs/tutorials
3. Ensures that courses are not cancelled (courses must have a minimum number of students enrolled in order for them to be offered)

CIVIL ENGINEERING RECAP

RECAP	RATIONALE
Addition to Technical Electives: CIVL 4005 3.00 Wood Engineering Effective W2024	This course presents the fundamentals of structural wood engineering. Topics covered include an introduction of wood as a building material and a history of its use, the physical and mechanical properties of wood, the variety of contemporary structural wood products, and the design of structural wood members. Wood strength and modification factors, species, and grades are introduced. Design topics include tension and compression members, bending members, lateral load resisting members, and connections. Course content focuses heavily on wood design in the context of CSA-O86 Engineering Design in Wood and the National Building Code of Canada. An introduction to wood structural fire safety topics is included. A weekly problem analysis lab will be held where design software and measurement based technologies will be used. **Pre-requisites:** LE/CIVL 3230 4.00. CIVL 4005 3.00 will be added to the "Group A – Structures" technical elective list.

Technical Electives *NEW*

Effective FW2025

- There will be a new Technical Elective in Group C: CIVL 4025 3.00
- There will be a new Technical Elective Category - **Group F Building Science Electives**
- Effective FW2025 there will be a new Technical Elective being offered: **CIVL 4051 3.00 course title Building Science Principles and Applications**

- Enrollment in each technical elective course will be **capped at 18 students** per course
- After the cap is reached, a waitlist will be started
- Waitlisted students are not guaranteed enrollment into the course
- Make sure you enroll EARLY to get your spot!
- For CIVL Course Enrollment assistance contact:

Theresa Smellie: theresae@yorku.ca

Undergraduate Program Director: civil.upd@lassonde.yorku.ca

CIVIL ENGINEERING NEW

Change	RATIONALE
CIVL 4025 3.00 (New Course) **(Group C – Hydrotechnical)**	Drinking water engineering, which intersects water resources engineering, environmental science, human health, and the social sciences is an exciting and highly relevant field of inquiry and of professional engineering work.
GROUP F: Building Science (New Group)	With building code, energy use, and decarbonization requirements becoming more stringent due to the desire to mitigate climate change, this area of study is increasingly relevant.
CIVL 4051 3.00 (New Course)	This is the first course of a Technical Elective Group: Group F Building Science. With building code, energy use, and decarbonization requirements becoming more stringent due to the desire to mitigate climate change, this area of study is increasingly relevant.

2025/2026 Technical Electives*

Group	Course Code	Course Title	Term	Instructor
GROUP A: Structural Electives	CIVL 4001	Advanced Structural Analysis	Fall	Prof. Pantazopoulou
	CIVL 4002	Reinforced Concrete Design	Fall	Prof. Pantazopoulou
	CIVL 4003	Structural Steel Design	Winter	Prof. Isojeh
GROUP B: Geotechnical Electives	CIVL 4011	Geotechnical Modelling	Fall	Prof. Sharma
	CIVL 4013	Hydrogeology	Fall	Prof. Krol
	CIVL 4015	Frozen Ground Engineering	Fall	Prof. Atefi-Monfared
	CIVL 4016	Geological Engineering and Design	Winter	Prof. Perras
	CIVL 4031	Pavement Materials and Design	Winter	Prof. Bashir
GROUP C: Hydrotechnical Electives	CIVL 4021	Hydraulic Structures	Fall	Prof. Karimpour
	CIVL 4025	Drinking Water Engineering	Winter	Prof. Gora
GROUP D: Transportation Electives	CIVL 4034	Freight Transportation	Fall	Prof. Gingerich
GROUP E: Environmental Electives	CIVL 4041	Landfill Design	Winter	Prof. Mondal
	CIVL 4042	Environmental Impact Assessment and Sustainability	Winter	Prof. Brar
	CIVL 4043	Advanced Sanitary and Environmental Engineering	Fall	Prof. Eldyasti
	CIVL 4044	Environmental Geotechnics	Fall	Prof. Bashir
GROUP F: Building Science Electives	CIVL 4051	Building Science Principles and Applications	Winter	Prof. Zhang

*Please note that this list is subject to change (list will be finalized before enrollment opens)

PREPARING FOR YOUR TWO-WEEK SUMMER SURVEY COURSE RECAP

Time-sensitive: ESSE 2635 is offered in the LS term of the Summer session

- ESSE 2635 is a Summer term course **2 weeks in duration**. This two-week course usually takes place at the end of the April exam period and ends prior to the SU, S1 terms commencing. There may be **slight overlap** with the April exam schedule and start of Summer term courses. If this occurs, notify the ESSE 2635 instructor.
- ESSE 2635 is one of the pre-requisites to CIVL 3160. CIVL 3160 is one of the pre-requisite to CIVL 3260. CIVL 3260 is a core pre-requisite to transportation courses.
- The ESSE 2635 > CIVL 3160 > CIVL 3260 sequence is necessary for several 4th year courses.
- ESSE 2635 should be completed in the Summer term after 2nd year, before 3rd year.
- Check the Important Dates website for add, drop, and withdrawal deadlines corresponding to this **special Summer term course**.

CIVIL ENGINEERING RECAP

RECAP	RATIONALE
Group D / Group B Alteration: Moving CIVL 4031 3.00 Pavement Materials and Design from Group D Transportation to Group B Geotechnical	The emphasis of CIVL 4031 3.00 is on the use of soil mechanics and geotechnical engineering concepts for mechanistic design of pavement systems. One of the main pre-requisite core Year 3 courses is CIVL 3110 3.00 Soil Mechanics. The course will normally be taught by a Geotechnical faculty member. The course content is more relevant to Group B Geotechnical elective options as opposed to Group B Transportation options. Students following 2021-2022 Academic Calendars and prior can continue to count CIVL 4031 3.00 as a Group D Transportation elective if doing so ensures they do not exceed 3 courses from the same Group.

CIVIL ENGINEERING RECAP

RECAP	RATIONALE
Technical Electives: Students can follow **Group A – F** technical elective lists from their Academic Calendar and any subsequent Academic Calendar to meet their requirements. Students still need to follow the rules surrounding technical electives for their Calendar, e.g., a maximum of 3 electives from the same group.	Provides students with greater course selection and opportunities to learn information relevant to their field.
Students can complete a **maximum of 3** technical electives from one sub-discipline as opposed to 2.	An increase to the maximums provides students with greater course selection and opportunities to learn information relevant to their field.
Capstone Design Project: CIVL 4000 6.00 (not ENG 4000 6.00) – Pre-requisites: LE/ENG 2003 3.00, LE/ENG 3000 3.00, *All LE/CIVL 2XXX & 3XXX-level courses*	Pre-requisites reflect the required knowledge from both 2nd and 3rd year courses.
Replaced: CIVL 3250 3.00 with CIVL 3160 3.00	CIVL 3160 3.00 is essentially the same as CIVL 3250 3.00 except that it will be delivered during the Fall instead of the Winter.
Added: CIVL 3260 3.00 (previously a technical elective: CIVL 4032 3.00)	Changes in surface infrastructure to deliver connected and autonomous vehicles require that all civil engineering students learn how to forecast future travel demand properly to prepare future surface infrastructure accordingly. CIVL 3260 3.00 will focus on the fundamentals behind the process of forecasting future travel demand. Students following the 2018-2019 Academic Calendar will no longer need to complete Group F electives. Students following the 2017-2018 Academic Calendar (and prior) will continue to complete Group F electives as per their Calendar.
Corrected CIVL 3130 and CIVL 3230 are 4.00 credits (not 3.00 credits).	Accurately reflects the course load and contact hours.

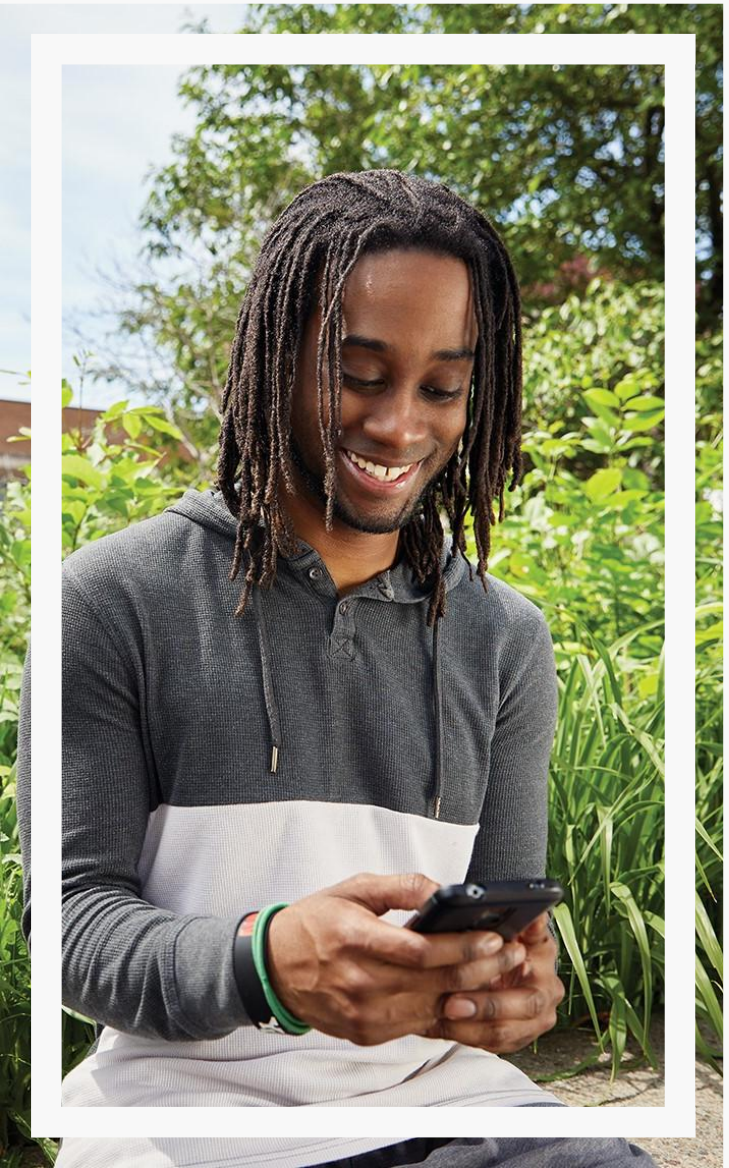
Co-op Work & Study Sequence Example 1

Elisa, Civil Engineering, 20 months

	Fall	Winter	Summer
Year 2	Applied to Co-op	Study term Admitted to Co-op Searched for first Co-op term	Work Period 1 ExxonMobil-Esso Canada (W1) Mine Technical Engineering Student
Year 3	Work Period 1 ExxonMobil-Esso Canada (W2) Mine Technical Engineering Student	Work Period 1 ExxonMobil-Esso Canada (W3) Mine Technical Engineering Student	Work Period 1 ExxonMobil-Esso Canada (W4) Mine Technical Engineering Student
Year 4	Study term	Study term	Work Period 2 Research Assistant, Lassonde Undergraduate Research Award-LURA (W4)
Year 5	Study term	Study term	Graduate

Co-op Work & Study Sequence Example 2

Lucas; Civil Engineering, 16 months



	Fall	Winter	Summer
Year 2	Applied to Co-op	Admitted to Co-op Searched for first Co-op term	Unsuccessful in securing 1st work term; searched for Fall start
Year 3	Work Period 1 Kenaidan (W1) Project Coordinator	Work Period 1 Kenaidan (W2) Project Coordinator	Work Period 1 Kenaidan (W3) Project Coordinator
Year 4	Study term	Study term	Work Period 2 City of Toronto (W4) Technical Trainee
Year 5	Study term	Study term	Graduate