

Welcome to Second Year Civil Engineering

Orientation

Toronto Metropolitan University

TODAY'S AGENDA

- Dr. Hamza, Civil Engineering Associate Chair
- Dr. Joksimovic, Civil Engineering Chair
- Curriculum
- Academic Integrity
- Optional Engineering Specializations
- Curriculum: Q & A

Dr. Joksimovic, Chair

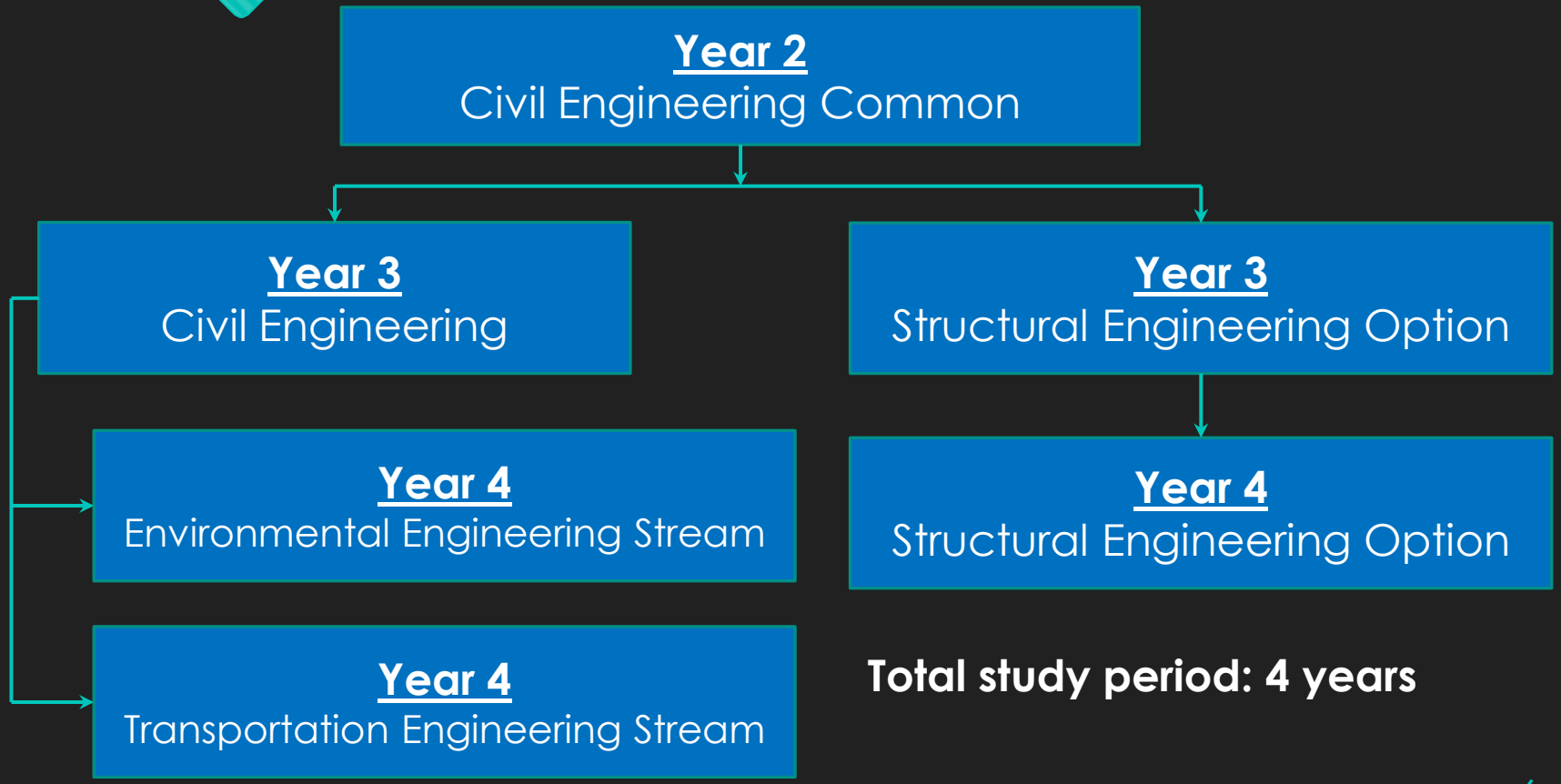
Civil Engineering at Toronto Metropolitan University

- We have a unique civil engineering program

Civil Engineering Main Areas

- **Structural**/Materials Engineering Area
- **Environmental** Engineering Area
- **Geomatics** Engineering Area
- **Transportation** Engineering Area

Program, Streams & Options



Total study period: 4 years

Note: continuing Civil or selecting Structural Engineering Option is done on competitive basis as are the Transportation and Environmental Streams

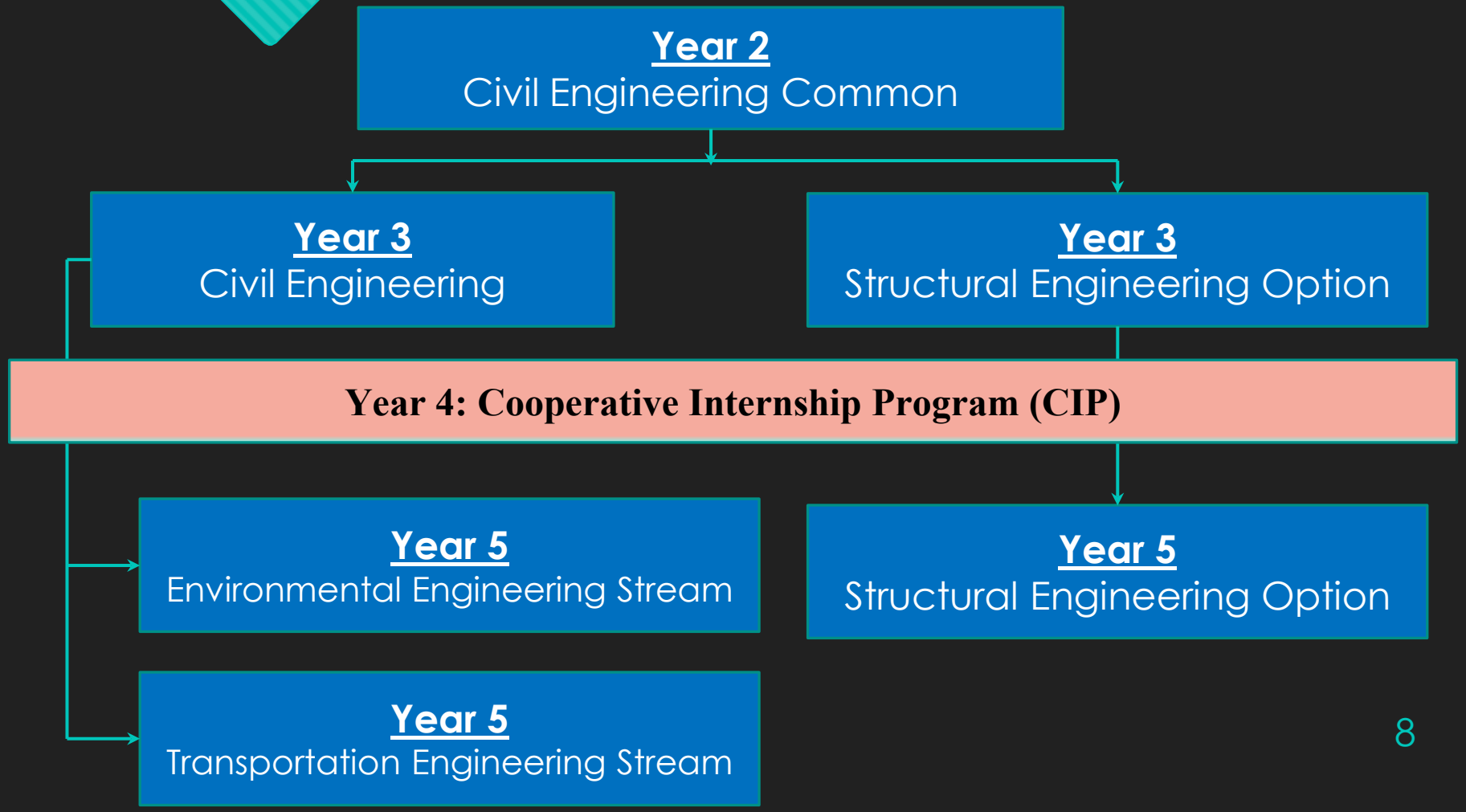
Civil Engineering Degree

A student graduating from the Civil Engineering program will earn a Bachelor of Engineering (BEng) degree in Civil Engineering.

A student graduating from the Structural Engineering option will earn a BEng in Civil Engineering with a Structural Engineering option.

Program, Streams & Options

After the third year, you can choose to take Co-Operative Internship Program



Special Graduate Program

Accelerated Master of Applied Science (MASc) Pathway

It is a pathway to undergraduate students who have demonstrated academic excellence (A-) and/or research potential by the end of the third year of their undergraduate program.

Criteria for entering 3rd Year

Will You:

Join the Structural Engineering Option

OR

Continue in the regular Civil Engineering Program

Criteria for entering 3rd year

Enrolment in the third year Civil Engineering Program or the Structural Engineering Option will be made on a competitive basis subject to **program capacity**.

Criteria for entering 3rd year

1. Enrolment Caps

Enrolment in and any Option (Structural Engineering option or Civil Engineering program) cannot exceed **60 %** of the total number of students entering third year in

Fall 2027

Criteria for entering 3rd year

2. Minimum CGPA of 2.5

To enrol in the third year Structural Engineering Option or Civil Engineering Program **of their choice:**

- Students should complete all second year courses by **May 31, 2027** with a clear academic standing and **minimum CGPA of 2.50**
- **Meet the stream criteria**

Criteria for entering 3rd year

3. Stream criteria

For Civil Engineering Program:

Achieve a minimum **grade of C –** in the first attempt in each of the following courses:

- CVL 323 – Fundamentals of Surveying
- CVL 316 – Transportation Engineering
- CVL 502 – Hydraulics Engineering

Criteria for entering 3rd year

3. Stream criteria

For Structural Engineering Option:

Achieve a minimum **grade of C –** in the first attempt in each of the following courses:

- CVL 320 – Strength of Materials I
- CVL 420 – Strength of Materials II
- CVL 434 – Geotechnical Properties of Soils

Criteria for entering 3rd year

What if ?????

If a student is missing one or more courses from the second year:

Placement in the student's preferred third year academic plan (Structural Engineering Option or Civil Engineering Program) **will be subject to space availability based on the 60 % criteria.**

Criteria for entering 3rd year

What if ?????

Student does not meet the required criteria by May 31st will be ranked according to their cumulative performance in their first attempt in the relevant courses for admission consideration to the academic plan of their first choice:

For the Civil Engineering Program:	For the Structural Engineering Option:
CVL 323, CVL 316 and CVL 502	CVL 320, CVL 420 and CVL 434

This is also subject to the 60% enrolment caps

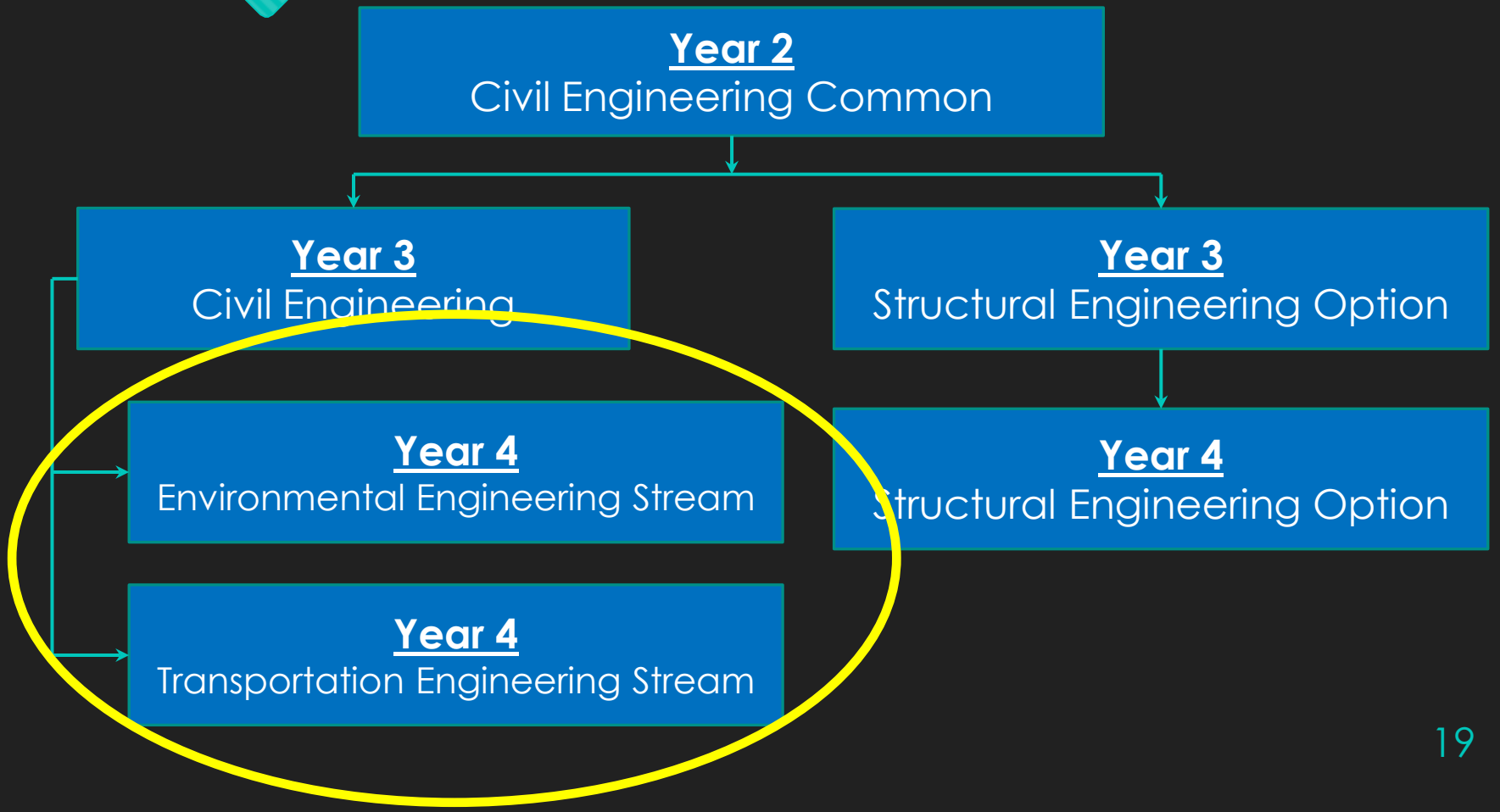
Criteria for entering 3rd year

What if ?????

More than 60% of the students want to join one option and all of them have CGPA higher than 2.5

In this case, a required CGPA higher than 2.50 may be applied to maintain the 60% enrollment cap in either the Civil Engineering Program or the Structural Engineering Option.

Environmental or Transportation Stream?



4th Year Civil Engineering Program

Environmental or Transportation Stream ?

Toronto Metropolitan University

Criteria for entering

Environmental or Transportation Stream

1. Enrolment Caps

Enrolment in and any stream (Environmental or Transportation) cannot exceed **60 %** of the total number of students entering fourth year Civil Engineering

Criteria for entering

Environmental or Transportation Stream

2. Minimum CGPA of 2.67

- Students should complete all third year courses at the end of the academic year Fall 2026/Winter 2027 with a clear academic standing and **minimum CGPA of 2.67** will be considered for admission to their preferred stream for their fourth year of the program starting in Fall 2027

In addition, students should also have completed all of the third year courses by the end of Winter 2027 semester.

Criteria for entering

Environmental or Transportation Stream

What if ?????

If a student is missing one or more courses from the third year:

Placement in the student's preferred stream **will be subject to space availability based on the 60 % criteria.**

However, successful completion of the Stream prerequisite courses is required for admission to either Stream.

Criteria for entering

Environmental or Transportation Stream

What if ?????

More than 60% of the students want to join one option and all of them have have CGPA higher than 2.67

In this case, a required CGPA higher than 2.67 may be applied to maintain the **60%** enrollment cap in either the Environmental or Transportation Engineering Stream.

Criteria for entering

Environmental or Transportation Stream

Ranking and selection of students' eligibilities for the fourth year Civil Engineering Program Streams will be finalized on May 31, 2027.

Students who do not meet the required criteria on or before May 31, 2027 will not be considered for their first Stream choice.

The choice will be based on 60% enrolment caps

Criteria for entering

Environmental or Transportation Stream

Important

- In the 7th Semester, students select either the Environmental Stream or the Transportation Stream.
- In the 8th Semester, students must continue in the same Stream.
- Students will complete ONLY ONE Stream.

Important - Prerequisites

- Prerequisite: student must successfully complete a specific course(s) prior to enrolling in an advanced course.
- Permission will NOT be given under any circumstances for students to enroll in any course(s) until you have successfully completed all of the required prerequisite courses for the course.

Advice

Before Dropping any Course(s), consider the following very carefully

- Prerequisite requirements of course(s) that you need to take in the next semester.
- Scheduling conflicts that may occur when you take courses from different years (out of phase) of the curriculum.
- Required academic criteria to enter third year

Important_Prior entering 3rd year

CEN 199 – WRITING SKILLS

- A passing grade in CEN 199 Writing Skills Test or TMU Test of English Proficiency (RTEP) is required to enroll in any third-year engineering courses.
- Students with a grade of In progress (INP) in CEN199 will not be allowed to enroll in any third-year engineering course.

Curriculum

Ryerson University

Curriculm_2nd year

(Students Admitted Fall 2020 and later)

Fall 2026 : Second Year - Third Semester

- CVL 320 Strength of Materials I
- CVL 323 Fundamentals of Surveying
- CVL 405 Probability and Statistics for Engineers
- MEC 522 Fluid Mechanics
- MTH425 Differential Equations and Vector Calculus

Curriculm_2nd year

Winter 2027 : Second Year - Fourth Semester

- CMN 432 Communication in the Engineering Professions
- CVL 316 Transportation Engineering
- CVL 420 Strength of Materials II
- CVL 423 Geology for Engineers
- CVL 434 Geotechnical Properties of Soils
- CVL 502 Hydraulics Engineering

Important

Fall Semester Courses are not Offered in the Winter Semesters. Winter semester courses are not offered in the Fall semesters.

Curriculm_2nd Year

Spring/Summer 2026 : Second Year

Confirmation of the Spring/Summer 2027 courses offerings will be announced by March 2027.

SECOND YEAR COURSES **TYPICALLY** OFFERED IN SPRING/SUMMER TRANSITION:

- CVL320, CVL420, MTH425, MEC522, CVL502, CVL316, CMN432

Important _ Prerequisites

- Prerequisite: student must successfully complete specific course(s) prior to enrolling in an advanced course.

- Permission will NOT be given under any circumstances for students to enroll in any course(s) until you have successfully completed all of the required prerequisite courses for the course.

Advice

Before Dropping any Course(s), consider the following very carefully

- Prerequisite requirements of course(s) that you need to take in the next semester.
- Scheduling conflicts that may occur when you take courses from different years (out of phase) of the curriculum.
- Required academic criteria to enter third year

Important_Prior entering 3rd year

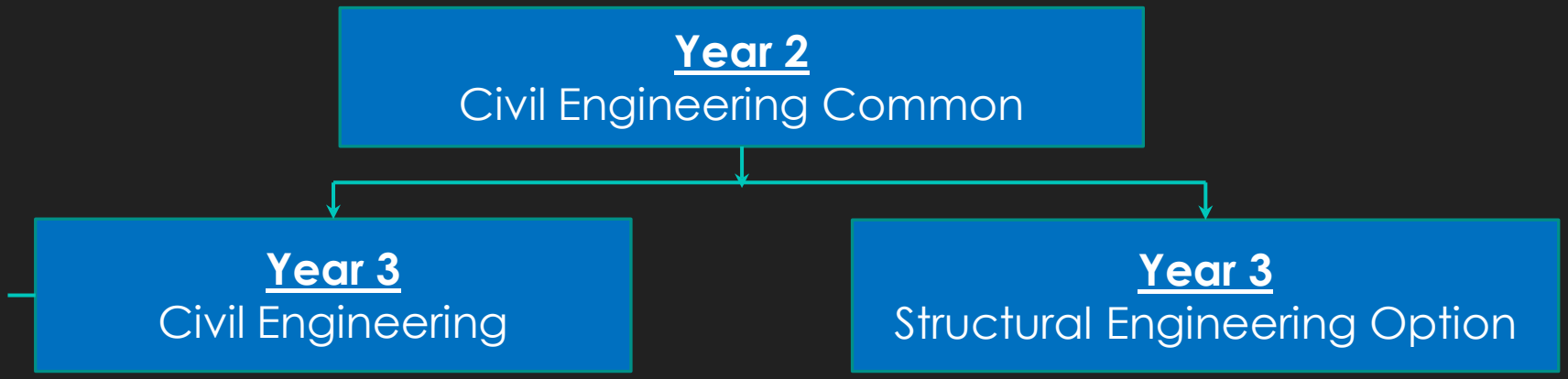
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- A passing grade in CEN 199 Writing Skills Test or TMU Test of English Proficiency (RTEP) is required to enroll in any third-year engineering courses.
- Students with a grade of In progress (INP) in CEN199 will not be allowed to enroll in any third-year engineering course.

3rd Year

Ryerson University

Curriculum_3rd year



Curriculm_3rd year

Civil Engineering Program

Focuses on four areas:

- Environmental
- Geomatics
- Structural/Materials
- Transportation Engineering

Curriculm_3rd year

Civil Engineering Program

Fall 2026 : Third Year - Fifth Semester

- CVL 352 Geomatics Measurement Techniques
- CVL 400 Hydrology and Water Resources
- CVL 500 Introduction to Structural Design
- CVL 533 Concrete Materials
- MTH510 Numerical Analysis

Liberal Studies: One course from Table A (Lower Level Liberal Studies)

Curriculm_3rd year

Civil Engineering Program

Winter 2027 : Third Year - Sixth Semester

- CVL 354 Remote Sensing and Image Analysis
- CVL 602 Municipal Engineering
- CVL 609 Civil Engineering Systems
- CVL 735 Highway Design
- CVL 742 Project Management

Liberal Studies: One course from Table B (Upper Level)

Curriculm_3rd year

Civil Engineering Program

Optional Co-op Internship Program:

Must have completed all courses from first to second year (excluding liberal studies courses) with Clear Academic Standing to participate.

FEAS Co-op Office will have information sessions. Email announcements will be sent. Time to apply: May to July.

Curriculm_3rd year

Structural Engineering Option

Curriculm_3rd year

Structural Engineering Option

Fall 2026 : Third Year - Fifth Semester

- CVL 313 Structural Analysis
- CVL 500 Introduction to Structural Design
- CVL 533 Concrete Materials
- CVL 600 Foundation Engineering
- MTH510 Numerical Analysis

Liberal Studies: One course from Table A (Lower Level Liberal Studies)

Curriculm_3rd year

Structural Engineering Option

Winter 2027 : Third Year - Sixth Semester

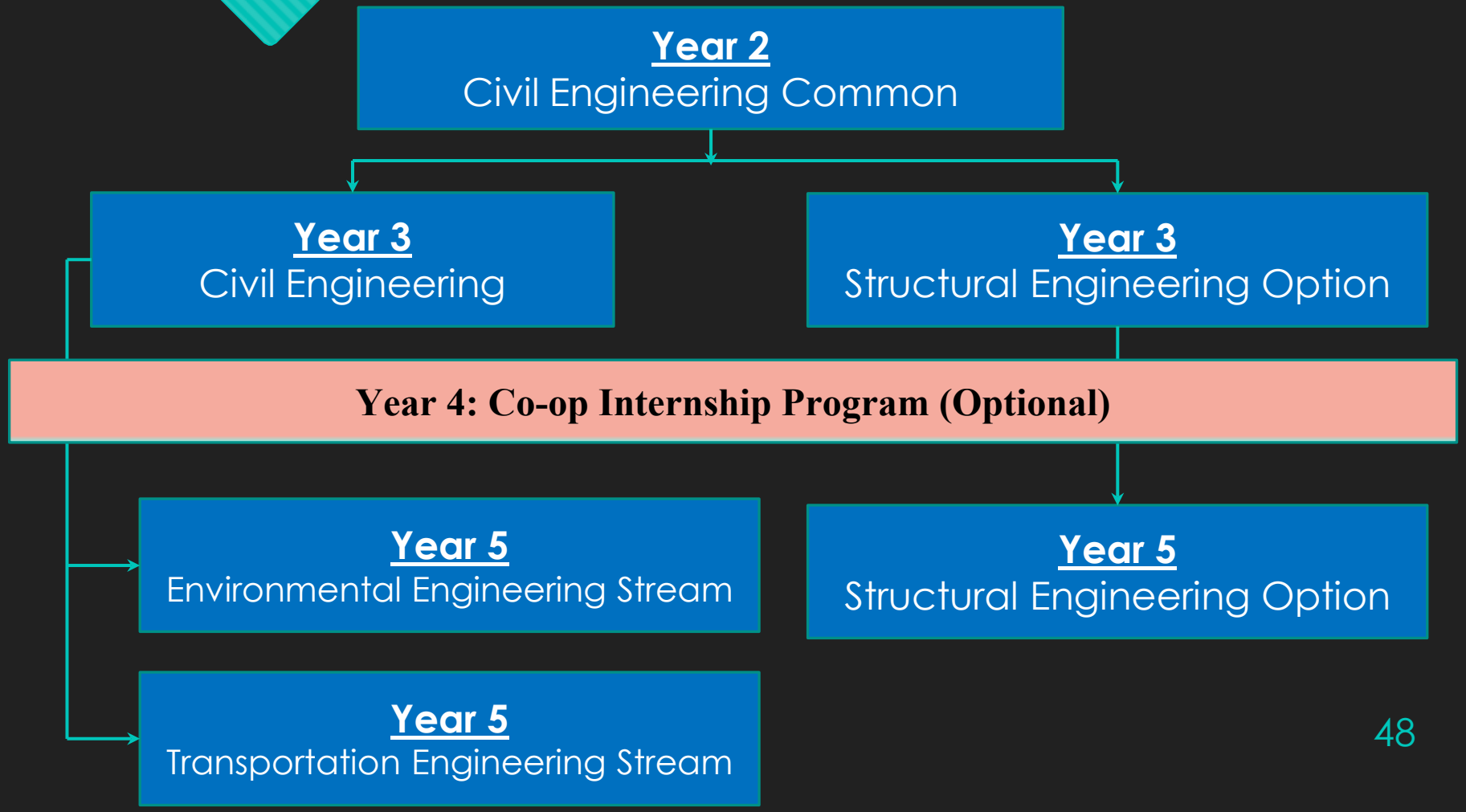
- CVL 312 Computer Aided Structural Analysis
- CVL 410 Structural Concrete Design I
- CVL 411 Structural Steel Design
- CVL 609 Civil Engineering Systems
- CVL 742 Project Management

Liberal Studies: One course from Table B (Upper Level)

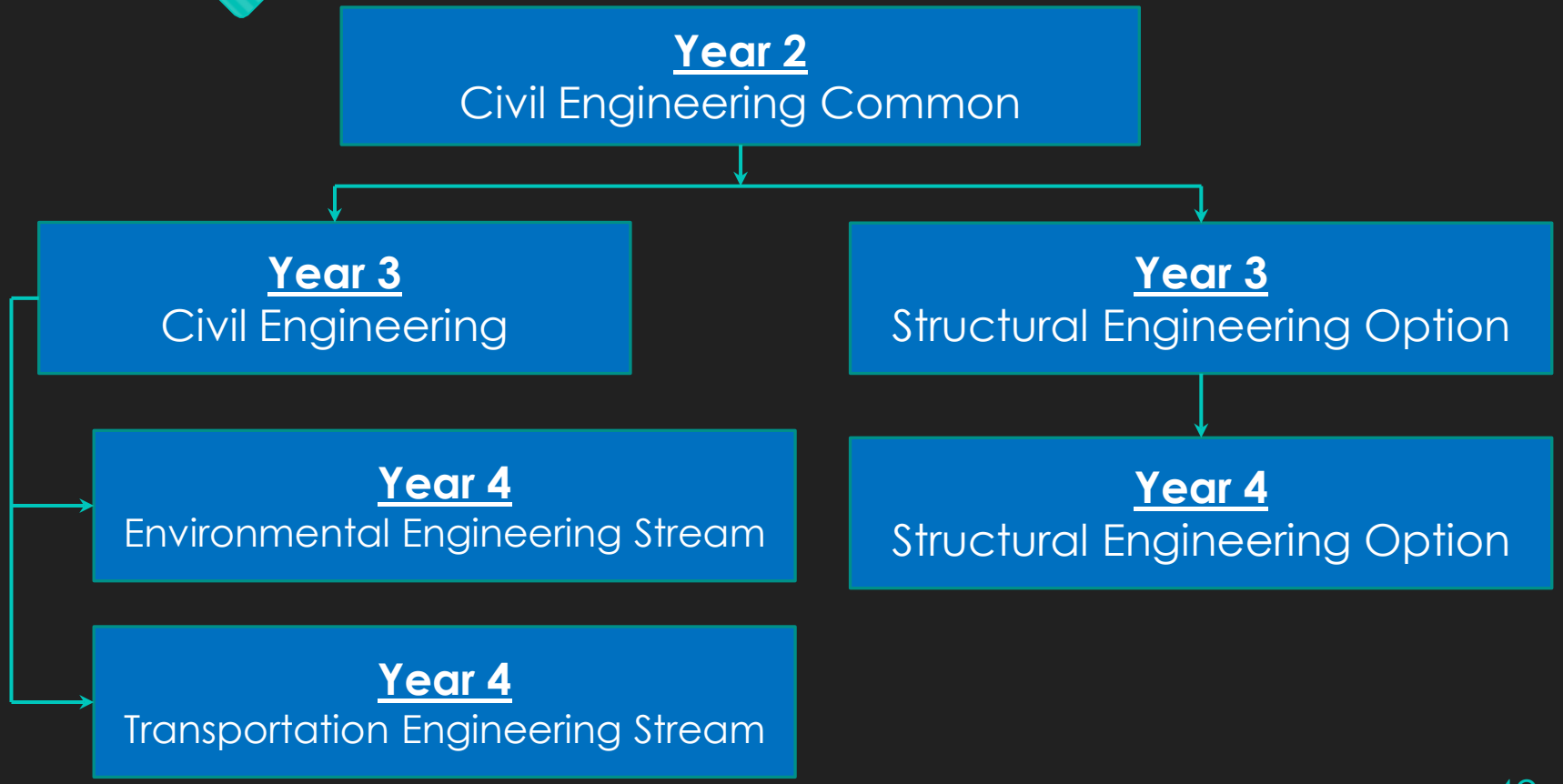
4th Year

Ryerson University

Program, Streams & Options



Program, Streams & Options



Curriculm - 4th year

Environmental Stream

Fall 2026 : Fourth Year - Seventh Semester

- CVL 650: Satellite Geodesy
- CVL 903: Water Resources Engineering
- CVL 920: Water and Wastewater Treatment

❖ CVL 71A/B Environmental Capstone Design Project
(Two term course. Must continue with same project in W27)

Liberal Studies: One course from the following:

ENG503, GEO702, HST701, PHL709, or POL507

Curriculm - 4th year

Environmental Stream

Winter 2027 : Fourth Year - Eighth Semester

- CEN 800 Law and Ethics in Engineering Practice
- CVL 300 Environmental Science and Impact Assessment
- CVL 736 Geospatial Information Systems
- CVL 901 Municipal Solid Waste Management

- CVL 71A/B Environmental Capstone Design Project

Curriculm - 4th year

Transportation Stream

Fall 2026 : Fourth Year - Seventh Semester

- CVL 650 : Satellite Geodesy
- CVL 902: Traffic Operations and Management
- CVL 910: Transportation Planning

- CVL 72A/B Transportation Capstone Design Project

(Two term course. Must continue with same project in W27)

Liberal Studies: One course from the following:

ENG503, GEO702, HST701, PHL709, or POL507

Curriculm - 4th year

Transportation Stream

Winter 2027 : Fourth Year - Eighth Semester

- CEN 800 Law and Ethics in Engineering Practice
- CVL 300 Environmental Science and Impact Assessment
- CVL 736 Geospatial Information Systems
- CVL 914 Pavement Materials and Design

- CVL 72A/B Environmental Capstone Design Project

Curriculm - 4th year

Structural Engineering Option

Fall 2026 : Fourth Year - Seventh Semester

- CVL 904 Structural Concrete Design II
- CVL 905 Bridge Design and Construction
- CVL 908 Structural Building Systems

CVL 70A/B Structural Capstone Design Project*
*Two term course. Must continue with same project in winter semester.

Liberal Studies: One course from the following:
ENG503, GEO702, HST701, PHL709, POL507.

Curriculm - 4th year

Structural Engineering Option

Winter 2027 : Fourth Year - Eighth Semester

- CEN 800 Law and Ethics in Engineering Practice
- CVL 300 Environmental Science and Impact Assessment
- CVL 906 Renovation/Repair of Existing Structures
- CVL 914 Pavement Materials and Design

- CVL 70A/B Structural Capstone Design Project*
- *(must continue with same project started in F26).

Some Resources
&
Key Information

Toronto Metropolitan University

CIVIL ENGINEERING STUDENTS RESOURCES

- Fall 2026/Winter 2027 Undergraduate Calendar
- Department of Civil Engineering website:
  www.torontomu.ca/civil

(SLS) - STUDENT LEARNING SUPPORT

Online Support:

- www.torontomu.ca/studentlearningsupport
- Email: sls@torontomu.ca
- Tel: 416-979-5290

(SLS) - STUDENT LEARNING SUPPORT

Group of services and programs aimed at helping students engage more effectively in their academic studies. SLS teaches essential academic skills and study techniques that help students to more effectively express their intelligence, apply their knowledge and communicate their ideas.

STUDENT LEARNING SUPPORT – SOME SUPPORT AREAS

- Academic Accommodation Support
- Study Skills and Transition Support
- English Language Support and Writing Support
- Math Support
- Tri-Mentoring Program

ACADEMIC INTEGRITY

Toronto Metropolitan University students are expected to have excellent personal and academic ethics and values.

Being a member of the TMU Community means you must uphold the academic integrity values of honesty, trust, fairness, respect, responsibility, courage as well as trustworthiness.

Most Common Examples of Academic Misconduct

- Plagiarism
- Cheating
- Misrepresentation of personal identity or performance
- Submission of false information
- Contributing to academic misconduct
- Damaging, tampering or interfering with the scholarly environment

Some Penalties and Consequences

- Grade reduction which can include a "zero" on the work.
- Grade of "F" in the course may be applied.
- Disciplinary Notification (DN) on academic record.
- Course-grade reduction greater than a grade of "zero" on the work but less than an "F" in the course.
- Disciplinary Suspension (DS).
- Disciplinary Withdrawal (DW).
- Expulsion: Permanent removal from TMU.

SOME SENATE POLICIES

- Policy 159: Academic Accommodation of Students With Disabilities
- Policy 60: Academic Integrity
- Policy 61: Student Code of Non-Academic Conduct
- Policy 46: Undergraduate Grading, Promotion & Academic Standing
- Policy 167: Academic Consideration
- Policy 168: Undergraduate Grade and Standing Appeals
- Policy 135: Final Examinations Policy
- Policy 50: Accommodation of Student Religious, Aboriginal and Spiritual Observance

SENATE POLICY # 157

- Establishment and Use of TMU Student Email Accounts
- Official University Communication
- Students are required to monitor and retrieve messages and information issued to them by the University via TMU online systems on a frequent and consistent basis.
- Students have the responsibility to recognize that certain communications may be time-critical.

ACADEMIC ADVISEMENT REPORT

Tool for Undergraduate Degree Students that shows all the courses that you have taken or are enrolled and the courses you still need to take for graduation.

The report is available through your servicehub account.

Step by step instructions for accessing your Advisement Report:

Available online through the Servicehub Support website

MANAGEMENT SCIENCES (OSMS)

- Gain a solid foundation in management science courses, specifically tailored to better prepare you for a career in engineering or applied science management or for graduate studies in management related specializations (e.g. MBA).
- Courses are only offered in the Spring (May-July) term.
- Contact: First Year Engineering Office
  firstyeareng@torontomu.ca

Questions or Concerns?
……where to find us….

Toronto Metropolitan University

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Toronto Metropolitan University

Best Wishes for a Very Successful Year!

Toronto Metropolitan University