

# Faculty of Engineering Core Program Orientation



**DALHOUSIE**  
UNIVERSITY



# Welcome

- Degree Structure
  - Core Program
  - Programs & Placement
- Academic Standing
- Missed Work or Absence Reporting
- Important Dates





# Bachelor of Engineering Degree Structure

**Part 1: Diploma in Engineering** (aka Years 1 & 2, Lower Division, Core Program etc.)

69 credit hours

60 credits of common courses taken by all Engineering Students at Dalhousie

9 credit hours of Discipline specific electives based on Placement

All **courses must be completed** before a student can take **any** Upper Division Engineering coursework.

Expected Duration – 2 Years



**Part 2: Bachelor of Engineering in a Discipline** (aka Years 3,4, the Upper Division)

69 credit hours of program specific requirements over 4 or 5 study terms

Students pursuing the Co-Op option complete 3 work terms

Expected Duration – 2 years (non-coop) or 3 years (coop)



# Bachelor of Engineering Disciplines

We offer 6 Disciplines:

Chemical Engineering

Civil Engineering

Electrical Engineering

Environmental Engineering

Industrial Engineering

Mechanical Engineering



## **Discipline Placement**

First Year students will apply for their Fall 2025 placement between Feb 1 and April 30, 2024: <http://go.engineering.dal.ca/dc>

Placements are based on your GPA:

Engineering GPA  $\geq 3.50$  & completion of all Year 1 Courses: You receive first choice

After that, placements are competitive:

Engineering GPA  $\geq 2.00$  &  $< 3.50$ :

Placement based on EGPA and course completion (minimum of 7 courses completed by end of Winter 2024).

Engineering GPA  $< 2.00$  or  $< 7$  courses completed: Ineligible for placement

# Dalhousie University - Bachelor of Engineering - Engineering Core Program - Year 1 & 2 Curriculum

For students entering their Year 3 program in Fall 2023 or Fall 2024

YEAR ONE	Fall Year 1	
	CHEM1021	Engineering Chemistry I
	CPST1103	Technical Communications I
	ENGI1103	Engineering Design I
	ENGM1081	Computer Programming
	MATH1280	Engineering Math I
	PHYC1190	Introduction to Physics I

Winter Year 1	
CHEM1022	Engineering Chemistry II
CPST1203	Technical Communications II
ENGI1203	Mechanics I: Statics
ENGM1041	Applied Linear Algebra
MATH1290	Engineering Math II
PHYC 1290	Introduction to Physics II

Notes:

All students must apply for a Year 3 placement in an Engineering Discipline. Students following the recommended course plan must apply in the Winter term of their First Year

All students must complete all Engineering Core courses required for their placement prior to admission to their Year 3 program with a cumulative Engineering GPA  $\geq 2.00$  (Co-op requires  $\geq 2.30$ )

YEAR TWO	Fall Year 2	
	ECED2000	Electric Circuits
	ENGI2102	Thermofluid Engineering I
	ENGM2032	Applied Probability & Statistics
	ENGM2101	Applied Vector Calculus
	IENG2005	Engineering Economics
Writing I*	Writing Elective (see list)*	

Winter Year 2	
ENGI2203	Engineering Design II
ENGM2022	Applied Differential Equations
ASSC1971	Engineering and Society

## ~ Acceptable Writing 1 Courses

^CRWR 1030	FREN 1200
ENGL 1005	FREN 1200
ENGL 1015	+GERM 1025
ENGL 1025	GERM 1027
^ENGL 1030	HIST 1022
ENGL 1040	HIST 1023
ENGL 1050	^HIST 1510
+ENGL 1060	POLI 1001
FREN 1100	+RUSN 1020

**Prohibited Courses:** ENGL 1100, SUST 1000 & SCIE 1111

+ recommended course

^ 6 credit hour course - cannot be taken if following normal courseload

Not all courses are available in any given term

YEAR TWO		+3 Specific Discipline Courses (as below)					
		Chemical	Civil	Environmental	Electrical	Mechanical	Industrial*
CHEE2201	Introduction to Chemical Eng.	Required					Do Any 2
CHEE2203	Organic Chemistry	Required					Do Any 2
ECED2001	Circuit Analysis				Required		Do Any 2
ECED2200	Digital Circuits				Required		Do Any 2
ENGI2103	Thermofluid Engineering II	Required	Required	Required		Required	Do Any 2
ENGI2204	Mechanics of Materials		Required	Required		Required	Do Any 2
MECH2400	Mechanics II: Dynamics					Required	Do Any 2
ENGM2283	Data Structures & Algorithms				Required		Do Any 2
IENG2201	Modelling and Optimization						Required
MINE2200	Geology for Engineers		Required	Required			Do Any 2

Notes:

MINE2200 may be renamed CIVL2200. Courses are equivalent

MECH2400 was formerly ENGI2400. Courses are equivalent.

ASSC1971 was formerly HIST 1971. Courses are equivalent.

For Years 3, 4 (or 5) curriculum, please refer to the Undergraduate Academic Calendar

\*For students entering Industrial Engineering in the Fall of 2025: Students will need to complete IENG 2201, A Python Programming Course and a Complementary Studies Elective

## Academic Assessment

Occurs only after 24 attempted hours\* in the lower division – For most students will occur in Winter 2024.

\*Does not include “W” or “ILL”

\*Does not include Repeat-E

If Cumulative GPA  $\geq 2.00$  result is Good Standing

If Cumulative GPA  $< 2.00$  &  $\geq 1.70$  result is Academic Probation

If Cumulative GPA  $< 1.70$  result is Academic Dismissal

You can also be dismissed for failing a required course twice

## Know your Academic dates

- [https://www.dal.ca/academics/important\\_dates.html](https://www.dal.ca/academics/important_dates.html)
- Tuition payment due dates
- Last day to drop a class for full refund
- Last day to drop a class without a “W” grade
- Last day to drop a class with a “W” grade
- If you miss these deadlines the consequences can be significant
- No requests for late drops/withdrawals will be considered



# Missed Work or Absence Reporting

- For any Faculty of Engineering course if you miss any graded course component you must submit a Missed Work or Absence Report. (First year requiring MWA: CPST 1103/1203, ENGI 1103/1203, ENGM 1081/1041, and MATH 1280/MATH1290)
- Your instructor will not accommodate your missed work or assessment without an approved MWA

<http://forms.engineering.dal.ca>

The screenshot shows the website for the Undergraduate Studies Office, Faculty of Engineering. The navigation menu includes Home, Programs, Future Students, Current Students (highlighted), Discipline Choice, Contact Us, and Employment. The breadcrumb trail is Dal.ca Home > Faculty of Engineering > Current Students > Forms. The main heading is 'Forms' in a yellow box, followed by the sub-heading 'Student Missed Work or Assessment Reporting'.

## Student Missed Work or Assessment Reporting

If, as a student, you are unable to complete an assignment or an assessment in any Undergraduate Faculty of Engineering course as a result of serious illness or unforeseen





# Academic Advising

## When Should I See an Academic Advisor?

- Have questions about your academics
- Need guidance on your course planning and registration
- Need information about Dal processes
- Want to create a plan to achieve your goals.
- Need help problem solving
- Have career development questions
- For coaching and support when you need it
- For referrals to appropriate supports and resources

- ▶ Academic Advisor, Bissett Student Success Centre – [advising@dal.ca](mailto:advising@dal.ca)
- ▶ Or [Engineering@dal.ca](mailto:Engineering@dal.ca)
- ▶ Or – Walk-Ins with Jason - Tuesdays, 12:30 -3:30pm Dunn 331 (September 19 to Dec 5 [excluding Fall study break])





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## Jason's Tips

- Time Management, Self-Motivation, and Goal Setting are as important to learn as Calculus
- Beware the first two weeks – workload is not representative of what is coming.
- Read thy syllabi! (And understand them!)
- Have a problem? Ask early, ask often and make sure you get an answer.
- Employment: Work as little as you can afford to during the term if you are taking a full course load.
- Read the most relevant portions of the Undergraduate Academic Calendar – Academic Regulations and the sections on your program.  
<https://academiccalendar.dal.ca>



# Questions

engineering@dal.ca

We're here to help