



Master of Engineering (MEng) in Civil Engineering Program: Course Requirements 2024 - 2025

Student Status

Full-time students in the MEng program are normally registered during the Fall and Winter terms (September to April) with a regularly scheduled break during Spring/Summer terms (May to August).

Students will be considered full-time if they enroll in minimum of 2 courses (6 units) per term during each of the Fall and Winter terms.

Academic Standing

B- is the minimum passing grade for students enrolled in graduate programs at the University of Calgary. A student who receives a C+ or lower in any course will normally be required to withdraw from the program.

Students are also required to maintain a minimum Grade Point Average (GPA) of 3.0/4.0, each year. A student whose GPA is lower than 3.0 at the time of their registration anniversary will normally be required to withdraw from the program.

University of Calgary Calendar

Please refer to the University of Calgary Graduate Calendar for more detailed information on program regulations and requirements. The Graduate Calendar is available on-line at [University of Calgary: Calendars \(ucalgary.ca\)](https://ucalgary.ca/graduate-calendar)

Created: March 2024

MEng program in the Department of Civil Engineering

Two options are available within the MEng program, each of which requires completion of 10 courses (30 units):

1. MEng in Civil Engineering (two thematic areas)
2. Specialization in Project Management

Below are suggested course schedules for each option. Please refer to the Graduate Calendar for a complete list of course requirements and options.

MEng in Civil Engineering

Theme 1: Sustainable Infrastructure & the Built Environment

YEAR 1

ENGG core	1	required	ENGG 680	Introduction to Digital Engineering	Fall
ENGG core	2	required	ENGG 684	Introduction to Project Management	Fall
ENCI core	3	required	ENCI 602	Sustainability Concepts for Civil Engineering	Fall
ENCI core	4	required	ENCI 603	Quantitative Methods for Sustainable Design	Winter
ENCI core	5	required	ENCI 604	Uncertainty, Risk & Reliability	Winter

YEAR 2

ENGG core	6	required	ENGG 687	Ethics, Law, and the Engineering Profession	Fall
Theme 1	7	suggested	ENCI 606	Building Engineering	Fall
Option (may choose ENCI 610 instead)	10	option	ENGO 603	Fundamentals of Infrastructure Asset Management and Sustainability	Fall
Theme 1	8	suggested	ENCI 605	Sustainable Infrastructure Systems	Winter
Theme 1	9	suggested	ENCI 607	Sustainable Materials for Civil Engineering	Winter
Option (may choose ENGO 603 instead)	10	option	ENCI 610	Natural Hazards; Risk and Impacts	Winter

Theme 2: Water, Climate & Environment

YEAR 1

ENGG core	1	required	ENGG 680	Introduction to Digital Engineering	Fall
ENGG core	2	required	ENGG 684	Introduction to Project Management	Fall
ENCI core	3	required	ENCI 602	Sustainability Concepts for Civil Engineering	Fall
ENCI core	4	required	ENCI 603	Quantitative Methods for Sustainable Design	Winter
ENCI core	5	required	ENCI 604	Uncertainty, Risk & Reliability	Winter

YEAR 2

ENGG core	6	required	ENGG 687	Ethics, Law, and the Engineering Profession	Fall
Theme 2	7	suggested	ENCI 609	Sustainable Waste Systems	Fall
Option (may choose ENCI 610 instead)	10	option	ENGO 603	Fundamentals of Infrastructure Asset Management and Sustainability	Fall
Theme 2	8	suggested	ENCI 608	Sustainable Water Systems	Winter
Theme 2	9	suggested	ENGG 686	Climate Change Adaptation for Engineers	Winter
Option (may choose ENGO 603 instead)	10	option	ENCI 610	Natural Hazards; Risk and Impacts	Winter

MEng in Civil Engineering with Specilaziation in Project Management

YEAR 1

ENGG core	1	required	ENGG 680	Introduction to Digital Engineering	Fall
ENGG core	2	required	ENGG 684	Introduction to Project Management	Fall
ENGG core	3	required	ENGG 687	Ethics, Law, and the Engineering Profession	Fall
ENCI core	4	required	ENCI 604	Uncertainty, Risk & Reliability	Winter
Specialization PM	5	required	ENCI 695	Project Construction Management	Winter

YEAR 2

PM Specialization	6	required	ENCI 697	Project Planning and Control	Fall
PM Specialization	7	required	ENCI 699	Law for Project Managers	Fall
Option (may choose ENGG 682 or ENGG 683 instead)	10	option	ENGO 603	Fundamentals of Infrastructure Asset Management and Sustainability	Fall
Option (may choose ENGO 603 or ENGG 683 instead)	10	option	ENGG 682	Sustainability Engineering	Fall
PM Specialization	8	required	ENCI 689	Advanced Project Management Practices and Principles	Winter
PM Specialization	9	required	ENCI 693	Project Engineering Management	Winter
Option (may choose ENGG 682 or ENGO 603 instead)	10	option	ENGG 683	Innovation and Entrepreneurship	Winter