



Master of Engineering (MEng) in Civil Engineering Program Course Requirements 2023-2024

Student Status

Graduate calendar states that students in course-based credentials (i.e., certificates, diplomas, or master's degrees) will be considered full-time if they enroll in 6 units or more per term during each of the Fall and Winter Terms and 3 units or more per term during each of the Spring and Summer Terms.

Full-time students in the MEng (course-based) program are registered during the fall and winter terms (September to April) with a regularly scheduled break during Spring/Summer terms (May to August). To maintain the full-time status, students need to be enrolled in minimum 2 courses (6 Units) per fall and winter terms.

Course based MEng programs in the Department of Civil Engineering

Two options are available within our MEng program, each of which require completion of 10 courses.

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

<https://grad.ucalgary.ca/future-students/explore-programs/civil-engineering-meng-course>

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	required	ENCI 606	Building Engineering	Fall
Option (1 of 2)	10	option	ENGO 603	Fundamentals of Infrastructure Asset Management and Sustainability	Fall
Theme 1	8	required	ENCI 605	Sustainable Infrastructure Systems	Winter
Theme 1	9	required	ENCI 607	Sustainable Materials for Civil Engineering	Winter
Option (1 of 2)	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	required	ENCI 609	Sustainable Waste Systems	Fall
Option (1 of 2)	10	option	ENGO 603	Fundamentals of Infrastructure Asset Management and Sustainability	Fall
Theme 2	8	required	ENCI 608	Sustainable Water Systems	Winter
Theme 2	9	required	ENGG 686	Climate Change Adaptation for Engineers	Winter
Option (1 of 2)	10	option	ENCI 610	Natural Hazards; Risk and Impacts	Winter

MEng in Civil Engineering with Project Management Specialization

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

Specialization PM	6	required	ENCI 697	Project Planning and Control	Fall
Specialization PM	7	required	ENCI 699	Law for Project Managers	Fall
Option (1 of 3)	10	option	ENGO 603	Fundamentals of Infrastructure Asset Management and Sustainability	Fall
Option (1 of 3)	10	option	ENGG 682	Sustainability Engineering	Fall
Specialization PM	8	required	ENCI 689	Advanced Project Management Practices and Principles	Winter
Specialization PM	9	required	ENCI 693	Project Engineering Management	Winter
Option (1 of 3)	10	option	ENGG 683	Innovation and Entrepreneurship	Winter