



Master of Engineering (MEng) in Electrical 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 Electrical and Software Engineering

There are three pathways available within our MEng program, each of which requires completion of 10 courses.

1. MEng in Electrical Engineering - no specialization but themed - Sustainable Electrical Engineering
2. Specialization in Energy and Environment

<https://www.ucalgary.ca/pubs/calendar/grad/current/engineering-electrical-and-computer-enel.html>

MEng in Electrical Engineering

Theme: Sustainable Electrical Energy

YEAR 1

ENGG core	1	required	ENGG 682	Sustainability Engineering	Fall
ENEL core	2	required	ENEL 680	Applied Optimization for Sustainable Design	Fall
ENEL core	3	required	ENEL 672	Power Electronics for Renewable Energy	Winter
ENEL core	4	required	ENEL 674	Industrial and Commercial Power Systems	Winter
ENEL core	5	required	ENEL 682	Applied Machine Learning and Predictive Analytics	Winter

YEAR 2

ENEL core	6	required	ENEL 670	Power Systems Analyses Applications	Fall
Option (1 of 2)	10	option	ENEL 684	Identification for Control	Fall
ENGG core	7	required	ENGG 687	Ethics, Law and the Engineering Profession	Fall
ENEL core	8	required	ENEL 676	Distributed Energy Resources	Winter
ENEL core	9	required	ENEL 678	Graduate Project in Electrical Engineering	Winter
Option (1 of 2)	10	option	ENEL 686	Embedded Systems	Winter

MEng in Electrical Engineering with Energy & Environment Specialization

YEAR 1

Option (1 of 4)	1	option		Any ENEN 6XX course	Fall
Option (2 of 4)	2	option		Any ENEN 6XX course	Fall
ENEL core	3	required	ENEL 672	Power Electronics for Renewable Energy	Winter
ENEL core	4	required	ENEL 682	Applied Machine Learning and Predictive Analytics	Winter
ENEN core	5	required	ENEN 671	Energy and Environment	Winter

YEAR 2

ENEL core	6	required	ENEL 670	Power Systems Analyses Applications	Fall
Option (3 of 4)	7	option		Any ENEN 6XX course	Fall
ENEL core	8	required	ENEL 676	Distributed Energy Resources	Winter
ENEL core	9	required	ENEL 678	Graduate Project in Electrical Engineering	Winter
Option (4 of 4)	10	option		Any ENEN 6XX course	Winter