



## Master of Engineering (MEng) in Electrical 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

## Course based MEng programs in the Department of Electrical and Software Engineering

There are two pathways available within MEng program (except MEng Software), which requires completion of 10 courses (30 units):

1. MEng in Electrical Engineering without specialization; Sustainable Electrical Engineering theme.
2. Specialization in Energy and Environment.

### MEng in Electrical Engineering

#### Theme: Sustainable Electrical Energy

#### YEAR 1

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

#### YEAR 2

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

## MEng in Electrical Engineering with Energy & Environment Specialization

### YEAR 1

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

### YEAR 2

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