Program Map

FIRST YEAR

FALL
- **MATH 1004** — Calculus for Eng. Students
- **MATH 1104** — Linear Algebra for Eng. Students
- **Elective** — Basic Science Elective
- **ECOR 1031** — Programming & Data Management
- **ECOR 1032** — Circuits & Mechatronics
- **ECOR 1055** — Introduction to Engineering Disciplines I **(0.0 credit)**
- **ECOR 1057** — Engineering Profession **(0.0 credit)**

WINTER
- **Elective** — Complementary Studies Elective
- **PHYS 1004** — Introductory Electromagnetism & Wave Motion
- **CHEM 1101** — Chemistry for Eng. Students
- **ECOR 1033** — Statics
- **ECOR 1034** — Dynamics
- **ECOR 1056** — Introduction to Engineering Disciplines II **(0.0 credit)**

SECOND YEAR

FALL
- **MATH 1005** — Differential Equations & Infinite Series for Eng. Students
- **ELEC 2501** — Circuits & Signals [2nd]
- **ELEC 2607** — Switching Circuits [2nd]
- **SYSC 2006** — Foundations of Imperative Programming [2nd]
- **MAAE 2400** — Thermodynamics & Heat Transfer [2nd]

WINTER
- **MATH 2004** — Multivariable Calculus for Eng. Students
- **ELEC 2507** — Electronics I [2nd]
- **ELEC 2602** — Electric Machines and Power [2nd]
- **ENVE 2001** — Process Analysis for Environmental Engineering [2nd]
- **MAAE 2300** — Fluid Mechanics I [2nd]

THIRD YEAR

FALL
- **ELEC 3508** — Power Electronics
- **ELEC 3602** — Electrical Power Systems [2nd]
- **SYSC 3006** — Computer Organization [2nd]
- **SREE 3001** — Sustainable & Renewable Energy Sources [2nd]
- **CCDP 2100** — Communication Skills for Eng. Students [2nd]
- **ECOR 3800** — Engineering Economics [3rd]

WINTER
- **ELEC 3105** — Electromagnetic Fields [2nd]
- **SYSC 3600** — Systems & Simulation [2nd]
- **SREE 3002** — Electrical Distribution Systems
- **SREE 3003** — Sustainable & Renewable Electricity Generation
- **ECOR 2050** — Design & Analysis of Engineering Experiments [2nd]

FOURTH YEAR

FALL
- **SREE 4907 / ECOR 4907** — Energy Engineering Project (note b) **(1.0 credit)** [4th]
- **ELEC 4601** — Micro-processors
- **SYSC 4505** — Automatic Control Systems
- **SYSC 4602** — Computer Communication [3rd]
- **SREE 4001** — Efficient Energy Conversion [4th]
- **ECOR 4995** — Professional Practice (note c) [4th]
- **ECOR 2995 Engineering Portfolio** (note d) **(0.0 credit)**

WINTER
- **ELEC 4703** — Solar Cells & Applications [4th]
- **SREE 4002** — Modelling and Analysis of Energy Systems: Risk, Reliability and Economics [4th]
- **Elective** — Engineering Elective (note a)
- **Elective** — Complementary Studies Elective

Notes

Course Prerequisites and Year Status Requirements

The Faculty of Engineering and Design strictly upholds course prerequisites. Course prerequisites are found in the Undergraduate Calendar course descriptions, and are indicated by arrows* between courses in this program map.

Year status in Engineering prerequisites (as noted by 2nd, 3rd, or 4th above the course box) vary year to year, please carefully review requirements for your catalog year.

Academic Advising

Obtaining regular academic advising and support for course planning is essential for engineering students who are "off-pattern" from their program map. Contact your program advisor:

First year students (new and returning): ECORSupport@carleton.ca

Second year and higher students: https://www.doe.carleton.ca/ugtickets/

Notes

(a) 0.5 credits in any 4000-level Engineering course for which all prerequisites have been satisfied.

(b) Students must complete all first and second year courses, as well as 3.5 credits of third year courses (with the exception of Complementary Studies Elective) to enroll in SREE 4907 or ECOR 4907 (Design Project).

(c) ECOR 4995 may be taken in Winter term, if required due to limited elective options in Winter term.

(d) Please review Engineering Portfolio submission and registration instructions. Students register for ECOR 2995 once 4th year status is achieved, either before or concurrent with ECOR 4995.

*Arrow Legend
→ Required prerequisite
⇢ Concurrent prerequisite

Kindly note: this program map has been designed to ease course planning and registration for engineering students; information is accurate at the time this document is produced. Prerequisites, course titles, course offerings, and course schedule patterns are based on the academic year in which this map was prepared and are subject to change. Please contact EngAcadSupport@carleton.ca for inquiries regarding this program map.

**Please run your audit after making any registration changes to verify they have been applied successfully