Catalog Year: 202530

FALL

MATH 1005

Differential

Equations &

Infinite Series for

Eng. Students

ELEC 2501

Circuits & Signals

SYSC 2006

Foundations of Imperative

Programming

ECOR 2050

Design & Analysis

of Engineering

Experiments

BIOL 1103

Foundations of

Biology I

2nd

2nd

BIOMEDICAL & ELECTRICAL ENGINEERING Updated: 25/02/2025 **SECOND YEAR THIRD YEAR FOURTH YEAR Notes** WINTER **FALL** WINTER **FALL** WINTER Course Prerequisites and Year Status Requirements The Faculty of Engineering and Design strictly upholds **MATH 2004** course prerequisites. Course prerequisites are found in **ELEC 3105** SYSC 4907 / ECOR 4907 **ELEC 3500** Multivariable Engineering Project Electromagnetic the Undergraduate Calendar course descriptions, and are Calculus for Digital ELectronics (1.0 credit) Fields indicated by arrows* between courses in this program Eng. Students 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. 2nd **ELEC 4601** Elective Engineering Elective Microprocesso SYSC 3006 **ELEC 3909** (note c) Systems Electromagnetic Computer **ELEC 2507 Academic Advising** Organization Waves Electronics I Obtaining regular academic advising and support for course planning is essential for engineering students who are "off-pattern" from their program map. Contact your **SYSC 4203** Elective 2nd program advisor: Engineering Elective **Bioinstrumentation** & Signals (note c) 2nd SYSC 3203 SYSC 3501 First year students (new and returning): Communication ECORSupport@carleton.ca Systems Theory **ELEC 2607** Switching Circuits Second year and higher students: https://ughelp.sce.carleton.ca/ **SYSC 4405 Elective** Digital Signal Engineering Elective **Notes** Processing (note d) **SYSC 4201 SYSC 3610** Ethics, Research (a) 0.5 credits each year in BIOL 1104, BIOL 2005, BIOL Biomedical Systems Methods & 2201, BIOL 2303, BIOL 3306, BIOL 4309, BIOL 4319, Modeling & Control SYSC 2510 Standards for BME CHEM 2203, CHEM 2204 or any BIOL, BIOC or CHEM Probability, Statistics & Random Elective Elective

Science Elective

(note a)

3rd

ECOR 3800

Engineering

Economics

Elective

Engineering Elective

(note b)

Complementary

Studies Elective

ECOR 4995

Professiona

Practice (note e)

ECOR 2995 Engineering Portfolio

(note f) (0.0 credit)

- course with permission from the department.
- (b) 0.5 credits in either ELEC 3908 or SYSC 2010.
- (c) 1.0 credits in ELEC 4709, SYSC 4202, SYSC 4205, or SYSC 4206, or BIOM at the 5000-level.
- (d) 0.5 credits in ELEC or SYSC courses at the 3000-level or above, or BIOM or SYSC at the 5000-level.
- (e) ECOR 4995 can be taken in Fall term, if required due to limited elective options in Fall term.
- (f) 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 Kindly note: this program map has been designed to ease course planning and registration for engineering students; information is accurate at the time this Required prerequisite 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. Concurrent prerequisite

Elective

Science Flective

(note a)

Processes

CCDP 2100

Communication

Skills for

Eng. Students

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

FIRST YEAR

WINTER

MATH 1104

Linear Algebra for

Eng. Students

CHEM 1002

General Chemistry II

PHYS 1004

Introductory

Electromagnetism

& Wave Motion

ECOR 1031

Programming &

Data Management

ECOR 1032

Circuits &

Mechatronics

ECOR 1056

Introduction to

Engineering

Disciplines II

(0.0 credit)

FALL

MATH 1004

Calculus for

Eng. Students

CHEM 1001

General Chemistry

Elective

Complementary

Studies Elective

ECOR 1033

Statics

ECOR 1034

Dynamics

ECOR 1055

Introduction to

Engineering

Disciplines I

(0.0 credit)

ECOR 1057

Engineering

Profession

(0.0 credit)