BIOMEDICAL & ELECTRICAL ENGINEERING Updated: 29/02/2024 Catalog Year: 202430 **FOURTH YEAR FIRST YEAR SECOND YEAR THIRD YEAR Notes FALL WINTER FALL** WINTER **FALL WINTER FALL** WINTER Course Prerequisites and Year Status Requirements The Faculty of Engineering and Design strictly upholds **MATH 1005 MATH 2004** SYSC 4907 / ECOR 4907 course prerequisites. Course prerequisites are found in **MATH 1004 MATH 1104 ELEC 3105** Differ ential **ELEC 3500** Multivariable Engineering Project Calculus for Linear Algebra for Equations & Electromagnetic the Undergraduate Calendar course descriptions, and are Digital ELectronics Calculus for (1.0 credit) Infinite Series for Eng. Students Eng. Students Fields Eng. Students 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 2nd **CHEM 1001 CHEM 1002 ELEC 4601 Elective** carefully review requirements for your catalog year. General Chemistry General Chemistry II Engineering Elective SYSC 3006 **ELEC 3909 ELEC 2501 ELEC 2507** Systems (note c) Computer Electromagnetic **Academic Advising** Circuits & Signals Organization Waves Obtaining regular academic advising and support for **PHYS 1004** course planning is essential for engineering students who Elective Introductory Complementary are "off-pattern" from their program map. Contact your Electromagnetism SYSC 4203 Elective Studies Elective & Wave Motion program advisor: 2nd 2nd 2nd **Riginstrumentation** Engineering Elective & Signals (note c) First year students (new and returning): **SYSC 2006 SYSC 3203** SYSC 3501 **ELEC 2607** ECORSupport@carleton.ca Foundations of **ECOR 1041 ECOR 1045** Bioelectrical Communication Imperative Switching Circuits Computation & Prop Systems Theory Programming (0.25 credit) (0.25 credit) Second year and higher students: https://ughelp.sce.carleton.ca/ **SYSC 4405** Elective **ECOR 1043 ECOR 1047** Digital Signal Engineering Elective Circuits Visual Comm Processing **Notes** (note d) (0.25 credit) (0.25 credit) 2nd 2nd 2nd **ECOR 2050** SYSC 2510 SYSC 4201 (a) 0.5 credits each year in BIOL 1104, BIOL 2005, BIOL SYSC 3610 Design & Analysis Ethics, Research Probability. Biomedical Systems 2201, BIOL 2303, BIOL 3306, BIOL 4309, BIOL 4319, **ECOR 1042 ECOR 1046** ofEngineering Statistics & Randon Modelina & Control Data Management Mechanics CHEM 2203, CHEM 2204 or any BIOL, BIOC or CHEM Experiments Processes Standards for BME (0.25 credit) (0.25 credit) Elective Elective course with permission from the department. Science Elective Complementary Studies Elective (note a) (b) 0.5 credits in either ELEC 3908 or SYSC 2010. **ECOR 1044 ECOR 1048** Dynamics Mechatronics 3rd (0.25 credit) (0.25 credit) (c) 1.0 credits in ELEC 4709, SYSC 4202, SYSC 4205, or **CCDP 2100** SYSC 4206, or BIOM at the 5000-level. **BIOL 1103** Elective **ECOR 3800** Communication Foundations of Science Elective Engineering • ECOR 1055 **ECOR 1056** Skills for Biology I (note a) Economics Ena. Students (d) 0.5 credits in ELEC or SYSC courses at the 3000-level Introduction to Introduction to **ECOR 4995** Engineering Engineering or above, or BIOM or SYSC at the 5000-level.

Elective

Engineering Elective

(note b)

*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.

Disciplines I

(0.0 credit)

ECOR 1057

Engineering

Profession

(0.0 credit)

Disciplines II

(0.0 credit)

Concurrent prerequisite

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

(e) ECOR 4995 can be taken in Fall term, if required due

(f) Please review Engineering Portfolio submission and

once 4th year status is achieved, either before or

registration instructions. Students register for ECOR 2995

to limited elective options in Fall term.

concurrent with ECOR 4995.

Professional

Practice

(note e)

ECOR 2995 Engineering Portfolio

(note f) (0.0 credit)