## **BIOMEDICAL & ELECTRICAL ENGINEERING** Catalog Year: 202230 Updated: 03/18/2022 **FIRST YEAR SECOND YEAR** THIRD YEAR **FOURTH YEAR Notes FALL FALL** WINTER WINTER **FALL** WINTER **FALL** WINTER Course Prerequisites and Year Status Requirements **MATH 1005** The Faculty of Engineering and Design strictly **MATH 2004 MATH 1004 MATH 1104 ELEC 3105 SYSC 4907** Differential **ELEC 3500** Multivariable upholds course prerequisites. Course prerequisites Calculus for Linear Algebra for Engineering Project Equations & Electromagnetic Calculus for Digital ELectronics Eng. Students Infinite Series for (1.0 credit) Eng. Students Fields are found in the Undergraduate Calendar course Eng. Students Eng. Students descriptions, and are indicated by arrows\* between courses in this program map. Year status in Engineering prerequisites (as noted by 2nd **CHEM 1001 CHEM 1002** 2nd, 3rd, or 4th above the course box) vary year to General Chemistry General Chemistry II **SYSC 3006 ELEC 3909 ELEC 4601 Elective** year, please carefully review requirements for your **ELEC 2501 ELEC 2507** Computer Electromagnetic Engineering Elective Circuits & Signals Electronics I catalog year. Organization Waves (note c) Systems **Academic Advising PHYS 1004** Elective Introductory Complementary Electromagnetism Obtaining regular academic advising and support Studies Elective & Wave Motion 2nd 2nd 2nd for course planning is essential for engineering **SYSC 2006** students who are "off-pattern" from their program **SYSC 3203** SYSC 3501 **SYSC 4203 Elective ELEC 2607** Foundations of **ECOR 1041** ECOR 1045 Communication Bioelectrical Bioinstrumentation Engineering Elective map. Contact your program advisor: Imperative Switching Circuits Computation & Prod Theory & Signals (note c) Programming (0.25 credit) (0.25 credit) First year students (new and returning): ECORSupport@carleton.ca **ECOR 1043 ECOR 1047** Visual Comm Second year and higher students: 2nd 2nd (0.25 credit) (0.25 credit) 2nd https://ughelp.sce.carleton.ca/ **ECOR 2050** SYSC 2510 **SYSC 4201 SYSC 4405** SYSC 3610 Elective Design & Analysis Probability. Ethics, Research **ECOR 1046** Biomedical Systems Digital Signal Engineering Elective **ECOR 1042** of Engineering Statistics & Randor Methods & Notes Modeling & Control Processing (note d) Data Management Mechanics Experiments Standards for BME Processes (a) 0.5 credits each year in BIOL 1104, BIOL 2005, BIOL (0.25 credit) (0.25 credit) 2201, BIOL 2303, BIOL 3306, BIOL 4309, BIOL 4319, CHEM 2203, CHEM 2204 or any BIOL, BIOC or CHEM **ECOR 1048 ECOR 1044** course with permission from the department. 3rd (0.25 credit) (0.25 credit) **CCDP 2100** (b) 0.5 credits in either ELEC 3908, SYSC 2004, or SYSC **BIOL 1103** Elective **ECOR 3800** Elective Elective Communication Foundations of Science Elective Science Elective Complementary Engineering 2010. **ECOR 1056** ECOR 1055 Skills for Studies Elective Biology I (note a) Economics (note a) Eng. Students Introduction to Introduction to Engineering Engineering (c) 1.0 credits in ELEC 4709, SYSC 4202 or SYSC 4205 or Disciplines I Disciplines II (0.0 credit) (0.0 credit) BIOM at the 5000-level

Elective

Engineering Elective

(note b)

(d) 0.5 credits in ELEC or SYSC courses at the 3000-level or above or BIOM at the 5000-level.

**ECOR 4995** 

Professional

Practice

(note e)

**(e)** ECOR 4995 can be taken in Fall term, if required due to limited elective options in Fall term.

\*Arrow Legend

Required 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 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.

**ECOR 2995** 

Engineering

Portfolio

(0.0 credit)

**ECOR 1057** 

Engineering

Profession

(0.0 credit)

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