## Updated: 22/03/2023 Catalog Year: 202330 **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** course prerequisites. Course prerequisites are found in **MATH 1004 MATH 1104 CIVE 2700 ENVE 4918 / ECOR 4907** Differ ential **ENVE 3001** Multivariable Design Project (note b) Calculus for Linear Algebra for Equations & Civil Engineering the Undergraduate Calendar course descriptions, and are Calculus for Water Treatment Infinite Series for (1.0 credit) Eng. Students Eng. Students Materials Eng. Students indicated by arrows\* between courses in this program Eng. Students map. Year status in Engineering prerequisites (as noted by 2nd, 3rd, or 4th above the course box) vary year to year, **CHEM 1001 CHEM 1002** please carefully review requirements for your catalog **ENVE 4005 ENVE 4104** General Chemistry General Chemistry II Environmental Wastewater **BIOL 1103 BIOL 1104 ENVE 3004 ENVE 3002** Treatment Principles Planning & Impact Foundations of Foundations of Contaminant/ Systems Modeling & Design As sessment Biology I Biology II Pollutant Transport Academic Advising **PHYS 1004** Elective Obtaining regular academic advising and support for Introductory Complementary course planning is essential for engineering students who Electromagnetism Studies Elective & Wave Motion Elective are "off-pattern" from their program map. Contact your 2nd **ENVE 4101** Complementary program advisor: Waste Managment **ENVE 2001** Studies Elective **CIVE 2200 ENVE 3003 CIVE 4307** Process Analysis fo **ECOR 1041 ECOR 1045** Mechanics of Water Resources First year students (new and returning): Environmental Municipal Hydraulics Computation & Prod Solids I Engineering ECORSupport@carleton.ca Engineering (0.25 credit) (0.25 credit) Second year and higher students: Who to contact in CEE? **ENVE 4006 Elective ECOR 1043 ECOR 1047** Contaminant Engineering Elective Circuits Visual Comm. Hydrology (note a) (0.25 credit) (0.25 credit) 2nd 2nd **Notes ECOR 2050 MAAE 2400 ERTH 2404 CIVE 3208** Design & Analysis Thermodynamics Engineering Geotechnical **ECOR 1042 ECOR 1046** of Engineering (a) 1.0 credits in CIVE 3304, CIVE 4208, CIVE 4301, CIVE & Heat Transfer Geoscience Mechanics Data Management Mechanics Experiments (0.25 credit) 4303, CIVE 4400, ENVE 4002, ENVE 4105, ENVE 4106, (0.25 credit) Elective **ENVE 4003** ENVE 4200, ENVE 4907, ENVE 4917, MECH 4401, MECH Air Pollution & Engineering Elective 4403, MECH 4406, MECH 4407, SYSC 3200, SREE 3001 Emissions Control **ECOR 1044 ECOR 1048** (note a) or SREE 4002. Mechatronics Dynamics 2nd (0.25 credit) (0.25 credit) (b) Students must complete all first and second year **CHEM 2800 CHEM 3800 CCDP 2100 MAAE 2300** Chemistry of courses, as well as 3.5 credits of third year courses (with Foundations for Communication **ECOR 1056** Skills for • ECOR 1055 Environmental Environmenta Fluid Mechanics I the exception of Complementary Studies Elective) to Chemistry Pollutants Ena. Students Introduction to Introduction to **ECOR 4995** enroll in ENVE 4918 or ECOR 4907 (Design Project). Engineering Engineering

**ECOR 3800** 

Engineering

Economics

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

Professional

Practice

(note c)

ECOR 2995 Engineering Portfolio

(note d) (0.0 credit)

- (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 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 <a href="mailto:EngAcadSupport@carleton.ca">EngAcadSupport@carleton.ca</a> for inquiries regarding this program map. Concurrent prerequisite

Disciplines I

(0.0 credit)

**ECOR 1057** 

Engineering

Profession

(0.0 credit)

Disciplines II

(0.0 credit)

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