## **AEROSPACE ENGINEERING - STREAM D** Updated: 09/22/2022 Catalog Year: 202230 **FIRST YEAR SECOND YEAR** THIRD YEAR **FOURTH YEAR Notes FALL** WINTER **FALL** 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 MATH 3705 AERO 3002 MAAE 4907** Differential Multivariable upholds course prerequisites. Course prerequisites Engineering Design Project (note b) Calculus for Linear Algebra for Equations & Mathematica Aerospace Design Calculus for Eng. Students Infinite Series for & Practice (1.0 credit) Eng. Students Methods I 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 **CHEM 1101** Elective 2nd 2nd Basic Science Chemistry for 2nd, 3rd, or 4th above the course box) vary year to Eng. Students Elective **AERO 2001 MAAE 2202 ELEC 4509** year, please carefully review requirements for your **AERO 3240 AERO 3841 AERO 4842** Aerospace Mechanics of Communications Engineering Spacecraft Design Orbital Mechanics Spacecraft Design I catalog year. Solids I Links Graphical Design **Academic Advising PHYS 1004** Elective Introductory Complementary Electromagnetism Obtaining regular academic advising and support Studies Elective & Wave Motion 2nd 2nd for course planning is essential for engineering **AERO 4446 AERO 4442** students who are "off-pattern" from their program **MAAE 2101 MAAE 3004 MAAE 2300 MAAE 3300** Heat Transfer for Transatmospheric **ECOR 1045** ECOR 1041 Dynamics of map. Contact your program advisor: Spacecraft Fluid Mechanics I Fluid Mechanics II Aerospace Computation & Prog Dynamics Machinery Propulsion Applications (0.25 credit) (0.25 credit) First year students (new and returning): ECORSupport@carleton.ca **ECOR 1047 ECOR 1043** Visual Comm. Circuits Second year and higher students: (0.25 credit) (0.25 credit) 2nd 2nd 3rd 2nd maeadvising@cunet.carleton.ca **ECOR 2050 MAAE 2400 MAAE 3500 AERO 4540 ELEC 3909 Elective** Design & Analysis **ECOR 1046** ECOR 1042 Thermodynamics Flectromagnetic Feedback Control Spacecraft Attitude Engineering Elective of Engineering **Notes** & Heat Transfer Waves Dynamics & Control Systems (note a) Mechanics Data Management Experiments (0.25 credit) (0.25 credit) (a) 1.5 credits in Mechanical and Aerospace Engineering (MAAE, AERO or MECH) at the 4000-level **ECOR 1048 ECOR 1044** or AERO 3101, AERO 3700, ELEC 4503, ELEC 4600 or Mechatronics 2nd 2nd (0.25 credit) (0.25 credit) ELEC 4709. **CCDP 2100** Elective **MAAE 2700 SYSC 3600** Elective **Elective** Communication Complementary Engineering Elective Engineering Elective (b) Students must complete all first and second year ECOR 1055 **ECOR 1056** Skills for Studies Elective Simulation (note a) (note a) Eng. Students Introduction to Introduction to courses, as well as 3.5 credits of third year courses (with Engineering Engineering the exception of Complementary Studies Elective) to Disciplines I Disciplines II (0.0 credit) (0.0 credit) enroll in MAAE 4907 (Eng. Design Project).

**ECOR 2995** 

Portfolio

(0.0 credit)

**ECOR 4995** 

Practice

(note c)

\*Arrow Legend
Required prerequisite

Concurrent prerequisite

\*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 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 <a href="mailto:EngAcadSupport@carleton.ca">EngAcadSupport@carleton.ca</a> for inquiries regarding this program map.

**ECOR 3800** 

Engineering

Economics

**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

(c) ECOR 4995 can be taken in Winter term, if required

due to limited elective options in Winter term.