**AEROSPACE ENGINEERING - STREAM D** Catalog Year: 202330

## Updated: 17/07/2025 **SECOND YEAR FIRST YEAR** THIRD YEAR **FOURTH YEAR Notes FALL WINTER FALL** WINTER **FALL WINTER FALL WINTER** Course Prerequisites and Year Status Requirements The Faculty of Engineering and Design strictly **MATH 1005 MATH 2004 MATH 1004 MATH 1104 MATH 3705 AERO 3002** MAAE 4907 / ECOR 4907 Differential upholds course prerequisites. Course prerequisites Multivariable Engineering Design Project (note b) Calculus for Linear Algebra for Equations & Mathematica Aerospace Design Calculus for are found in the Undergraduate Calendar course Infinite Series for Eng. Students Eng. Students Methods I & Practice (1.0 credit) 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 2nd, 3rd, or 4th above the course box) vary year to Chemistry for **ELEC 4509** Eng. Students **AERO 4842** Elective **AERO 2001** year, please carefully review requirements for your **MAAE 2202** Communications **AERO 3240 AERO 3841** Spacecraft Design I Aerospace Mechanics of Links catalog year. Engineering Spacecraft Design Orbital Mechanics Solids I Graphical Design Academic Advising **PHYS 1004** Elective Introductory Complementary Obtaining regular academic advising and support Electromagnetism Studies Elective & Wave Motion **AERO 4446** AERO 4442 2nd 2nd for course planning is essential for engineering Heat Transfer for Transatmospheric students who are "off-pattern" from their program Spacecraft Aerospace **MAAE 2101 MAAE 3004** Applications Propulsion **MAAE 2300 MAAE 3300** map. Contact your program advisor: **ECOR 1045** ECOR 1041 Dynamics of Fluid Mechanics I Fluid Mechanics II Computation & Prog. Dynamics Machinery (0.25 credit) (0.25 credit) First year students (new and returning): ECORSupport@carleton.ca 4th **ECOR 1047 ECOR 1043 AERO 4540** Visual Comm. Circuits **Elective** Second year and higher students: (0.25 credit) (0.25 credit) 2nd 2nd 3rd Spacecraft Attitude Engineering Elective maeadvising@cunet.carleton.ca **Dynamics & Control** (note a) **ECOR 2050 MAAE 2400 ELEC 3909 MAAE 3500** Design & Analysis **ECOR 1046** ECOR 1042 Thermodynamics Electromagnetic Feedback Control of Engineering Notes & Heat Transfer Systems Waves Data Management Experiments (0.25 credit) (0.25 credit) (a) 1.5 credits in Mechanical and Aerospace Engineering **Elective** Elective (MAAE, AERO or MECH) at the 4000-level Engineering Elective Engineering Elective **ECOR 1048 ECOR 1044** or AERO 3101, AERO 3700, ELEC 4503, ELEC 4600 or (note a) (note a) Mechatronics 2nd 2nd ELEC 4709. (0.25 credit) (0.25 credit) **CCDP 2100** Elective **MAAE 2700 SYSC 3600** (b) Students must complete all first and second year Communication Complementary ECOR 1055 **ECOR 1056** Skills for courses, as well as 3.5 credits of third year courses (with Studies Elective Simulation Eng. Students Introduction to Introduction to the exception of Complementary Studies Elective) to **ECOR 4995** Engineering Engineering enroll in MAAE 4907 or ECOR 4907 (Eng. Design Project). Disciplines I Disciplines II Professional (0.0 credit) (0.0 credit) Practice (note c) (c) ECOR 4995 can be taken in Winter term, if required due to limited elective options in Winter term. **ECOR 1057 ECOR 3800** Engineering (d) Please review Engineering Portfolio submission and Engineering Profession **ECOR 2995 Engineering Portfolio** Economics registration instructions. Students register for ECOR 2995 (0.0 credit) (note d) (0.0 credit) 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 \*\*Please run your audit after making any registration 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

changes to verify they have been applied successfully