## **AEROSPACE ENGINEERING: ELECTRONICS & SYSTEMS** Updated: 20/03/2025 Catalog Year: 202530 **FIRST YEAR SECOND YEAR THIRD YEAR FOURTH YEAR Notes FALL FALL WINTER 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** Elective **MATH 3705 ELEC 3909** MAAE 4907 / ECOR 4907 Differential Multivariable Engineering Design Project (note b) Calculus for Complementary Equations & Mathematica Electromagnetic the Undergraduate Calendar course descriptions, and are Calculus for Infinite Series for Eng. Students Studies Elective Methods I Waves (1.0 credit) 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 2nd 2nd 3rd **MATH 1104 CHEM 1101** carefully review requirements for your catalog year. **AERO 4003** Linear Algebra for Chemistry for **AERO 4504** Aerospace Systems Eng. Students Eng. Students **ELEC 3105 AERO 3002 ELEC 2501 ELEC 2507** Avionics Systems Design Electromagnetic Aerospace Design Circuits & Signals Electronics I & Practice Academic Advising Obtaining regular academic advising and support for **PHYS 1004** course planning is essential for engineering students who **Elective** Introductory Basic Science 2nd are "off-pattern" from their program map. Contact your 2nd 2nd Electromagnetism SYSC 3501 **MAAE 2400** Flective program advisor: & Wave Motion Thermodynamics Communication **MAAE 2101 ELEC 3500 MAAE 2300** & Heat Transfer Theory **ELEC 2607** First year students (new and returning): Engineering Digital Electronics Fluid Mechanics I Switching Circuits ECORSupport@carleton.ca Dynamics Second year and higher students: **ECOR 1031 ECOR 1033** maeadvising@cunet.carleton.ca Programming & Elective Elective Statics Data Management Engineering Elective Complementary 2nd 2nd Studies Elective (note a) Notes **MAAE 3500 ELEC 3509 AERO 2001** Feedback Control **MAAE 2202** Flectronics II Aerospace Mechanics of (a) 1.5 credits in Mechanical and Aerospace Engineering Solids I Graphical Design (MAAE, AERO or MECH) at the 4000-level **ECOR 1032 ECOR 1034** or AERO 3240, AERO 3841, ELEC 4502, ELEC 4503, ELEC Circuits & **Elective** Elective Dynamics Mechatronics 4505, ELEC 4506, ELEC 4509, ELEC 4600, ELEC 4602, Engineering Elective Engineering Elective (note a) ELEC 4609, ELEC 4703, ELEC 4706, ELEC 4707, ELEC (note a) 2nd 4708, ELEC 4709, SYSC 4205, SYSC 4600 or SYSC 4607. **CCDP 2100** 2nd 2nd **SYSC 3600** Communication (b) Students must complete all first and second year Systems & ECOR 1055 **ECOR 1056** Skills for **ECOR 2050 MAAE 2700** Simulation courses, as well as 3.5 credits of third year courses (with Introduction to Introduction to Eng. Students Design & Analysis Engineering Engineering Engineering the exception of Complementary Studies Elective) to of Engineering **ECOR 4995** Disciplines I Disciplines II Materials Experiments enroll in MAAE 4907 or ECOR 4907 (Eng. Design Project). (0.0 credit) (0.0 credit) Professional 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** (d) Please review Engineering Portfolio submission and Engineering Engineering Profession ECOR 2995 Engineering Portfolio registration instructions. Students register for ECOR 2995 Economics (0.0 credit) (note d) (0.0 credit)

\*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. Concurrent prerequisite

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

once 4th year status is achieved, either before or

concurrent with ECOR 4995.