COMPUTER SYSTEMS ENGINEERING Catalog Year: 202330

Required prerequisite

Concurrent prerequisite

Updated: 22/03/2023 **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 MATH 1005 SYSC 4907 / ELEC 4907 / ECOR 4907 **MATH 2004 MATH 1004 MATH 1104** SYSC 3020 SYSC 3010 Differ ential upholds course prerequisites. Course prerequisites Multivariable Engineering Project Calculus for Linear Algebra for Equations & Computer Systems Calculus for (note d) are found in the Undergraduate Calendar course Infinite Series for Eng. Students Eng. Students Development Project Engineering Eng. Students (1.0 credit) Eng. Students descriptions, and are indicated by arrows* between courses in this program map. Year status in Engineering prerequisites (as noted by **PHYS 1004 CHEM 1101** 2nd 2nd 2nd, 3rd, or 4th above the course box) vary year to **SYSC 4310** Elective Chemistry for Electromagnetism Computer Systems Complementary year, please carefully review requirements for your Eng. Students **SYSC 2006 SYSC 3310** & Wave Motion SYSC 2004 **SYSC 3303** Studies Elective Ar chitecture Foundation Introduction to catalog year. O.O. Software of Imperative Real-Time Systems Development Concurrent Systems Programming (note a) Academic Advising Elective Elective Obtaining regular academic advising and support Basic Science Complementary Elective Studies Elective for course planning is essential for engineering Elective SYSC 4602 2nd 2nd Computer Engineering Elective students who are "off-pattern" from their program Communications (note b) **SYSC 2100** map. Contact your program advisor: **SYSC 2310 SYSC 3600** SYSC 3320 Algorithms & Data ECOR 1041 **ECOR 1045** Introduction to Systems & Computer Systems Structures Computation & Prop Digital Systems Simulation Design First year students (new and returning): (note a) (0.25 credit) (0.25 credit) ECORSupport@carleton.ca SYSC 4805 Elective Second year and higher students: **ECOR 1043 ECOR 1047** Computer Systems Engineering Elective https://ughelp.sce.carleton.ca/ Circuits Visual Comm Design Lab (note b) (0.25 credit) (0.25 credit) 2nd SYSC 2320 Notes SYSC 3501 SYSC 4001 **ELEC 2501** Computer Operating System Communication **ECOR 1042 ECOR 1046** Circuits & Signals Organization & (note a) Theory Data Management Mechanics (a) Requires C- (C minus) grade or better in SYSC 2006. Ar chitecture (0.25 credit) (0.25 credit) **SYSC 4810** Elective (b) 1.5 credits in Electronics (ELEC) or Systems and Introduction to Engineering Elective Network & Software Computer (SYSC) at the 3000- or 4000-level (may include **ECOR 1044 ECOR 1048** (note b) Security Dynamics up to 1.0 credits in SYSC at the 5000-level) or MECH 2nd (0.25 credit) (0.25 credit) 4503. **CCDP 2100** SYSC 2510 **ECOR 2050 ELEC 2507** Design & Analysis Communication Probability. (c) ECOR 4995 can be taken in Winter term, if required Skills for Statistics & Random ECOR 1055 **ECOR 1056** ofEngineering Electronics I Ena. Students Processes Experiments due to limited elective options in Winter term. Introduction to Introduction to **ECOR 4995** Engineering Engineering Professional Disciplines I Disciplines II Practice (0.0 credit) (d) Register in SYSC 4907 if your project supervisor is in (0.0 credit) (note c) SCE: register in ELEC 4907 if your project supervisor is in DOF. **ECOR 1057 ECOR 3800** IMPORTANT: A minimum grade of C- (C minus) is (e) Please review Engineering Portfolio submission and Engineering Engineering Profession required in SYSC 2006 for degree progression. **ECOR 2995 Engineering Portfolio** registration instructions. Students register for ECOR 2995 Economics (0.0 credit) (note e) (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 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 EnaAcadSupport@carleton.ca for inquiries regarding this program map.

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