

SFU ENGINEERING SCIENCE [ELECTRONICS OPTION]

ACADEMIC PLANNING FORM SPRING 2023 ONWARDS							
Name:	ID:				Date:		
Students may follow the Standard Schedule OR the Advanced Schedule . Further details are online.							
Students are strongly advised to follow these schedules as closely as possible so that prerequisites are met for the following terms. Consequences of deviating from this schedule are the responsibility of the student.							
STANDARD SCHEDULE							
YEAR 1							
TERM 1, FALL □ ENSC 151-4 Intro to software development □ ENSC 100W-3 Engineering, Science and Society □ ENSC 105W-3 Process, Form and Conv. in Prof. Genres □ ENSC 120-2 Intro to Electronics Lab Instruments □ MATH 151-3 Calculus I (or MATH 150-4)		TERM 2, SPRING ENSC 180-3 Intro to Engineering Analysis MATH 152-3 Calculus II MATH 232-3 Applied Linear Algebra PHYS 120-3 Mechanics and Modern Physics		near Algebra	SUMMER (Standard Schedule) CHEM 121-4 General Chemistry & Lab I PHYS 121-3 Optics, Electricity, and Magnetism MATH 260-3 Intro to Ordinary Differential Equations Complementary Studies (CMPL) Elective I#		
YEAR 2							
TERM 3, FALL ENSC 204-1 Graphical Communication for Engineering ENSC 220-4 Electric Circuits I ENSC 251-4 Software Design and Analysis for Engineers ENSC 252-4 Fundamentals of Digital Logic and Design MATH 251-3 Calculus III TERM 5, FALL ECON 103-4 Principles of Microeconomics SPRING TERM 4, SUMMER ENSC 225-4 Microelectronics I ENSC 252-4 Introduction to Computer Organization ENSC 254-4 Introduction to Computer Organization ENSC 280-4 Engineering Measurements & Data Analysis ENSC 320-4 Electric Circuits II MATH 254-3 Vector and Complex Analysis for Applied Sciences TERM 6, SPRING ENSC 325-4 Microelectronics II						nalysis	
 ENSC 316-3 Introduction to Electrodynamics for Engineers ENSC 324-3 Electronic Devices ENSC 351-4 Embedded and Real Time System Software ENSC 380-3 Linear Systems 			□ ENS	 □ ENSC 327-4 Communication Systems □ ENSC 350-4 Digital Systems Design □ ENSC 383-4 Feedback Control Systems □ Complementary Studies (CMPL) Elective II# 			
YEAR 4							
TERM 7, SPRING ENSC 427-4 Communication Networks OR ENSC 428-4 Digital Communications ENSC 405W-3 Project Documentation, User Interface Design, and Group Dynamics ENSC 410-3 The Business of Engineering ENSC 416-4 Introduction to High Frequency Circuit De Engineering Science & Design (ESD) Elective I-4*			Circuit Desiç	TERM 8, SUMMER □ ENSC 406-2 Engineering Ethics, Law, and Professional Practice □ ENSC 425-4 Electronic System Design □ ENSC 426-4 High Frequency Electronics □ ENSC 440-3 Capstone Engineering Science Project □ Engineering Science & Design (ESD) Elective II-4* □ Engineering Science & Design (ESD) Elective III-4*			
ADDITIONAL REQUIREMENTS FOR HONOURS: GPA REQUIREMENTS:							
□ ENSC 498-1 Engineering Science Thesis Proposal □ Minimum 2.0 CGPA and UDGPA required for degree □ ENSC 499-9 Engineering Science Undergraduate Thesis □ Minimum 2.4 CGPA required for registration in UD							

Additional Notes

☐ **Minimum** 3.0 CGPA and UDGPA required for degree

Minimum 2.2 CGPA required to remain in Engineering

^{*} ESD Electives consist of a minimum of 12 units chosen from the approved list on the back of this planner.

[#] Complimentary Electives - At least one CMPL Elective should be a B-Hum, and at least one should be from Central Issues, Methodology & Thought Process list: http://www.sfu.ca/engineering/current-students/undergraduate-students/requirements-and-policies/electives.html

[^] Please check with your co-op coordinator to confirm that all **co-op requirements** have been met.

Engineering Science and Design (ESD) Electives:

Students in the Electronics Engineering option must complete <u>12 units</u> of Engineering Science & Design Electives, chosen from the course list below. For the Electronics option, only MACM 316 can be used as a 300 level ESD elective, and only <u>one</u> 300 level ESD elective is permitted.

- ENSC 424-4 Multimedia Communications Engineering
- ENSC 427-4 Communication Networks
- ENSC 428-4 Data Communications
- ENSC 429-4 Digital Signal Processing
- ENSC 450-4 VLSI Systems Design
- ENSC 452-4 Advanced Digital System Design
- ENSC 470-4 Optical and Laser Engineering Applications
- ENSC 474-4 Digital/Medical Image Processing
- ENSC 475-4 Biomedical Instrumentation
- ENSC 476-4 Biophotonics and Microscopy Techniques
- ENSC 477-4 Biomedical Image Acquisition
- ENSC 483-4 Modern Control Systems
- ENSC 489-4 Computer Aided Design and Manufacturing
- ENSC 495-4 Introduction to Microelectronic Fabrication
- MACM 316-3 Numerical Analysis I

Policy	Link
GPA Requirements and Co-op	http://www.sfu.ca/engineering/current-students/undergraduate-students/information-for-new-students.html
Residency Requirements	http://www.sfu.ca/students/calendar/faculties-research/faculty-applied-sciences.html
Complementary (CMPL) Electives	http://www.sfu.ca/engineering/current-students/undergraduate- students/requirements-and-policies/electives.html
Prerequisites and Course Descriptions	http://www.sfu.ca/students/calendar/programs/engineering-science-electronics-engineering-option/major/bachelor-of-appliedscience.html
Mandatory Co-op	http://www.sfu.ca/engineering/current-students/undergraduate-students/Co-op-and-work-experience.html
WQB Requirements for Engineering Students	http://www.sfu.ca/engineering/current-students/undergraduate-students/requirements-and-policies/wqb-requirements.html
Duplication/Repeats of Courses	http://www.sfu.ca/engineering/current-students/undergraduate-students/requirements-and-policies/repeat-policy.html
Course Sequencing	http://www.sfu.ca/engineering/current-students/undergraduate-students/course-schedule.html