

SFU Engineering Science – **SYSTEMS OPTION**  
2012/04

<b>YEAR 1</b>				
<b>TERM 1, FALL</b>		<b>TERM 2, SPRING</b>		<b>SUMMER</b>
CHEM 121-4    General Chemistry & Lab	CMPT 128-3    Intro to Computing Science & Programming for Engineers	ENSC 102-1    Form, Style, & Professional Genres	ENSC 150-3    Intro to Computer Design	
ENSC 100W-3    Engineering Society & Technlgy	ENSC 101W-1    Writing Process, Persuasion, & Presentations	MATH 152-3    Calculus II	MATH 232-3    Elementary Linear Algebra	
MATH 151-3    Calculus I – or MATH 150	PHYS 120-3    Modern Physics & Mechanics	PHYS 121-3    Optics, Electricity, & Magnetism	PHYS 131-2    General Physics Lab	
		Cmpl I	First Complementary Elective	
<b>YEAR 2</b>				
<b>TERM 3, FALL</b>		<b>SPRING</b>	<b>TERM 4, SUMMER</b>	
ECON 103-4    Principles of Microeconomics	ENSC 215-3    Microcontroller/Assembly Programming	Co-op Term	CMPT 225-3    Data Structures & Programming	ENSC 204-1    Graphical Communication for Engineering
ENSC 220-3    Electronic Circuits I	MACM 101-3    Discrete Mathematics I		ENSC 225-4    Microelectronics	ENSC 250-3    Intro to Computer Architecture
MATH 251-3    Calculus III	MATH 310-3    Intro to Ord. Differential Equations		PHYS 221-3    Intermediate Electricity & Magnetism	STAT 270-3    Intro to Probability & Statistics
<b>YEAR 3</b>				
<b>FALL</b>	<b>TERM 5, SPRING</b>		<b>SUMMER</b>	<b>TERM 6, FALL</b>
Co-op Term	ENSC 230-4    Intro to Mechanical Design	ENSC 304-1    Human Factors & Usability Engineering	ENSC 325-4    Microelectronics II	ENSC 383-4    Feedback Control Systems
	ENSC 320-3    Electrical Circuits II	ENSC 330-3    Engineering Materials	ENSC 387-4    Intro to Electromechanical Sensors & Actuators	Cmpl II
	ENSC 351-4    Real Time & Embedded Systems	ENSC 380-3    Linear Systems	Cmpl II	Second Complementary Elective
			Scie I	Science Elective
<b>YEAR 4</b>				
<b>TERM 7, SPRING</b>		<b>SUMMER</b>	<b>TERM 8, FALL</b>	
ENSC 305-1    Project Documentation & Team Dynamics	ENSC 406-2    Social Responsibility and Professional Practice		ENSC 201-3    The Business of Engineering	ENSC 488-4    Intro to Robotics
ENSC 440-4    Capstone Engineering Science Project	ENSC 483-4    Modern Control Systems		ENSC 489-4    Computer Aided Design & Manufacturing	ENSC 4XX-4    Second Engineering Science Elective
ENSC 483-4    Modern Control Systems	MACM 316-3    Numerical Analysis I			
ENSC 4XX-4    First Engineering Science Elective				

Additional Requirements for Honors:

- ENSC 498-3    Engineering Science Thesis Proposal
- ENSC 499-9    Engineering Science Undergraduate Thesis