SIMON FRASER UNIVERSITY
SCHOOL OF ENGINEERING SCIENCE
UNDERGRADUATE COURSE SCHEDULE: SUMMER SEMESTER 2022

(Contact: ensccrd@sfu.ca x25910)
**This schedule is subject to change without notice,
always consult SIS for the most current and accurate information**

- *A C- grade or better in prerequisite courses is required to register in engineering science courses*
- *Minimum 2.4 CGPA is required for direct registration in upper division courses (excluding ENSC 320)*
- *Other Faculties' students may not register with a CGPA below 2.4*
- *Online enrollment in ENSC 3XX and 4XX courses is restricted to Engineering Science students who have declared their option.*
- *Tutorials without specified days and times will occur during the specified lecture time*

ENSC 220   Electric Circuits I (4)

REQ-(PHYS 121 or PHYS 126 or PHYS 141) and (ENSC 120). Corequisite: MATH 232 and MATH 210. MATH 232 and/or MATH 310 may be taken concurrently. Students with credit for MSE 250 cannot take this course for further credit. Seats in this course are reserved for students in the Engineering Science or the minor in Computer and Electronics Design program.

#	Section	Type	Day	Time	Room	Instructor
#4053	D100	Lecture	Tue/Thu	14:30 – 16:20	RCB8100	Ash Parameswaran
#4846	D101	Tutorial				Ash Parameswaran
#5193	LA02	Laboratory	Tue	10:30 – 12:20	ASB9800A	Ash Parameswaran
#5194	LA03	Laboratory	Wed	14:30 – 16:20	ASB9800A	Ash Parameswaran
#5195	LA04	Laboratory	Thu	10:30 – 12:20	ASB9800A	Ash Parameswaran

ENSC 225   Microelectronics I (4)

REQ-(ENSC 220 or MSE 250), (MATH 232) and (MATH 310). Students taking or with credit for ENSC 226 or MSE 251 may not take ENSC 225 for further credit. This course has a mandatory lab for all students to complete the course requirements. This lab is an open lab.

#	Section	Type	Day	Time	Room	Instructor
#4030	D100	Lecture	Wed/Fri	8:30 – 10:20	K9500	Majid Shokoufi
#4038	LA01	Required Lab			TBD	Majid Shokoufi

ENSC 251   Software Design & Analysis for Engineers (4)

REQ-(CMPT 128 or CMPT 135), or (CMPT 125 and CMPT 127). Seats in this course are reserved for students in the Engineering Science Major or the minor in Computer and Electronics Design program.

#	Section	Type	Day	Time	Room	Instructor
#4054	D100	Lecture	Wed/Fri	10:30 – 12:20	SWH10041	Zhenman Fang
#4061	D101	Tutorial			TBD	Zhenman Fang
#4056	LA01	Laboratory	Mon	10:30 – 12:50	ASB8836	Zhenman Fang
#4057	LA02	Laboratory	Mon	15:00 – 17:20	ASB8836	Zhenman Fang

ENSC 252   Fundamentals of Digital Logic & Design (4)

REQ-(CMPT 128 or CMPT 125 or CMPT 126 or CMPT 135). Students with credit for ENSC/CMPT 150 or ENSC329/MSE 350 cannot take this course for further credit.

#	Section	Type	Day	Time	Room	Instructor
#4055	D100	Lecture	Tue/Thu	12:30 – 14:20	B9201	Anita Tino
#4062	D101	Tutorial				Anita Tino
#5197	LA04	Laboratory	Fri	14:30 – 16:50	ASB9896	Anita Tino
#5212	LA05	Laboratory	Tue	16:30 – 18:50	ASB9896	Anita Tino
#5213	LA06	Laboratory	Thu	16:30 – 18:50	ASB9896	Anita Tino

ENSC 254 — Introduction to Computer Organization (4)

REQ-(ENSC 251 and ENSC 252) or (CMPT 150 and CMPT 225 and enrolled as a Computer Science Major). ENSC 254 is a required course for all Engineering Science Majors and Honours students (no course substitutions are permitted). Students with credit for; or who are concurrently enrolled in ENSC/CMPT 250 or ENSC 329 / MSE 350 cannot take this course for further credit. Seats in this course are reserved for students in Engineering Science program.

#4050	D100	Lecture	Tue/Thu	08:30 - 10:20	AQ3182	Craig Scratchley
#4051	D101	Tutorial				Craig Scratchley
#4129	LA01	Laboratory	Tue	10:30 – 12:20	ASB8800	Craig Scratchley
#4130	LA02	Laboratory	Tue	14:30 – 16:20	ASB8800	Craig Scratchley
#4052	LA04	Laboratory	Fri	10:30 – 12:20	ASB8800	Craig Scratchley

ENSC 280 — Engineering Measurement and Data Analysis (4)

REQ-(PHYS 121 and ENSC 120) or PHYS 141) and (MATH 251 and MATH 232). MATH 251 and/or MATH 323 may be taken concurrently with ENSC 280. Engineering Science Majors and Honours students are required to take ENSC 280 (no course substitutions will be accepted). Students with credit for STAT 270, MSE 210, or PHYS 231 cannot take this course for further credit. Seats in this course are reserved for students in the Engineering Science program.

#4046	D100	Lecture	Wed/Fri	14:30 - 16:20	AQ3181	Majid Shokoufi

ENSC 320 — Electric Circuits II (4)

REQ-(ENSC 220 or MSE 250), and (MATH 232 and MATH 310). Seats in this course are reserved for students in Engineering Science Program.

#4039	D100	Lecture	Wed/Fri	10:30 - 12:20	EDB7618	Rodney Vaughan
#4063	D101	Tutorial				Rodney Vaughan
#4848	LA01	Required Lab	Mon	8:30 – 10:20	ASB9800A	Rodney Vaughan

ENSC 405W — Capstone A: Project Design, Management, and Documentation (3)

Enrollment in this course is by application: https://coursys.sfu.ca/forms/ensc-ensc-405w-capstone-a-application/

#4135	E100	Lecture	Wed	16:30 – 18:20	AQ3149	Craig Scratchley
#4139	LA01	Laboratory	Mon	14:30 – 16:20	AQ5037	Craig Scratchley

ENSC 406 — Engineering Ethics, Law, and Professional Practice (2)

REQ-(100 units including one of ENSC 100 or ENSC 106 or CMPT 106 or MSE 102. Students with credit for MSE 402 may not take ENSC 406 for further credit). Online enrollment in this course is restricted to Engineering Science students who have declared their option.

#4065	D100	Lecture	Tue	10:30 - 12:20	AQ3182	Michael Hegedus
#4067	D101	Tutorial	Mon	8:30 – 9:20	AQ5017	Michael Hegedus
#4069	D103	Tutorial	Mon	9:30 – 10:20	AQ5017	Michael Hegedus
#4071	D105	Tutorial	Mon	13:30 – 14:20	WMC3251	Michael Hegedus
#4073	D107	Tutorial	Fri	12:30 – 13:20	RCB6101	Michael Hegedus
#4074	D108	Tutorial	Fri	12:30 – 13:20	RCB5125	Michael Hegedus
#4075	D109	Tutorial	Fri	13:30 – 14:20	RCB6101	Michael Hegedus
#4076	D110	Tutorial	Fri	13:30 – 14:20	RCB5125	Michael Hegedus

ENSC 425   **Electronic System Design (4)**

REQ-(ENSC 320 and ENSC 325) and (ENSC 380 or MSE 280), and a minimum of 80 units. Online enrollment in this course is restricted to Engineering Science students who have declared their option and students in the minor in Computer and Electronics Design.

#4066	D100	Lecture	Tue/Thu	12:30 - 14:20	AQ5016	Lakshman One
#4077	D101	Tutorial				Lakshman One
#4078	LA01	Required Lab				Lakshman One

ENSC 426   **High Frequency Electronics (4)**

REQ-Completion of 80 units including (ENSC 416 or PHYS 421) and ENSC 325, with a minimum grade of C-.

#4138	D100	Lecture	Tue/Thu	14:30 – 16:20	AQ5016	Lakshman One
#4102	D101	Tutorial				Lakshman One
#4103	LA01	Required Lab				Lakshman One

ENSC 429   **Digital Signal Processing (4)**

REQ-(ENSC 327 or ENSC 328) and (ENSC 380 or MSE 280) and a minimum of 80 units. Online enrollment in this course is restricted to Engineering Science students who have declared their option and students in the Minor in Computer and Electronics Design.

#4047	D100	Lecture	Wed/Fri	14:30 - 16:20	AQ3153	Bob Gill
#4048	D101	Tutorial				Bob Gill
#4049	LA01	Required Lab				Bob Gill

ENSC 440   **Capstone B: Engineering Design Project (3)**

ENSC 405W. Students will be automatically enrolled in ENSC 440 in the term immediately following successful completion of ENSC 405W. Online enrollment in this course is restricted to Engineering students who have declared their option.

#4064	D100	Lecture	Thu	08:30 - 10:20	WMC3260	Andrew Rawicz

ENSC 462   **Integrated Microsensors and Actuators (4)**

REQ - (ENSC 225 or MSE 251) and (ENSC 324 or PHYS 365) or permission from the instructor and a min. of 80 units.
THIS COURSE IS COMBINED WITH ENSC 854

#4891	E100	Lecture	Tue/Thu	18:30 – 19:50	WMC3220	Michael Adachi

ENSC 470   **Optical and Laser Engineering Applications (4)**

REQ- Completion of 80 units including (PHYS 121 or PHYS 126 or PHYS 141) and (MATH 310). Online enrollment in this course is restricted to Engineering Science students who have declared their option.
THIS COURSE IS COMBINED WITH ENSC 894 G100

#5205	D200	Lecture	Wed/Fri	8:30 – 10:20	SWH10061	Shawn Sederberg
#5206	LA03	Laboratory	Mon	14:30 – 16:20	BLU11911	Shawn Sederberg
#5207	LA04	Laboratory	Mon	16:30 – 18:20	BLU11911	Shawn Sederberg

ENSC 476   **Biophotonics and Microscopy Techniques (4)**

REQ: Completion of 80 units including PHYS 121 or 102 or 141, with a minimum grade of C-. Recommended: ENSC 376 or 470.
THIS COURSE IS COMBINED WITH ENSC 895 G100

#4123	D100	Lecture	Tue/Thu	16:30 – 18:20	BLU10031	Pierre Lane

ENSC 482   **Introduction to Decision Making in Engineering (4)**

REQ-(MATH 232) and (MACM 316) and (ENSC 280 or MSE 210 or PHYS 231), and a minimum of 80 units. Online enrollment in this course is restricted to Engineering Science students who have declared their option. Students in programs other than Engineering will not be enrolled for this offering.

#4124	D100	Lecture	Wed/Fri	10:30 - 12:20	WMC2532	Shahram Payandeh
#4125	D101	Tutorial				Shahram Payandeh

TEKX 101   **Introduction to 3D Printing and Laser Scanning Technologies (3)**
Students will complete several 3D printed projects within the course. Quantitative/Breadth-Science

#4800	D100	Lecture	Mon	10:30 – 12:20	AQ5005	Juan Ferrer