

SIMON FRASER UNIVERSITY
SCHOOL OF ENGINEERING SCIENCE
UNDERGRADUATE COURSE SCHEDULE: SUMMER SEMESTER 2024

(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) - 72

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.

#2874	D100	Lecture	Tue/Thu	10:30 – 12:20	AQ3154	Ash Parameswaran
#3251	LA01	Laboratory (36)	Mon	8:30 – 10:50	ASB9800A	Ash Parameswaran
#3253	LA02	Laboratory (36)	Mon	14:30 – 16:50	ASB9800A	Ash Parameswaran

ENSC 225 Microelectronics I (4) - 300

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.

#2963	E100	Lecture	Tue/Thu	16:30 – 18:20	B9201	Ash Parameswaran
#4739	OPT1	Open Tutorial				Ash Parameswaran
#3125	LA01	Required Lab				Ash Parameswaran

ENSC 251 Software Design & Analysis for Engineers (4) - 144

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.

#2875	D100	Lecture	Tue/Thu	14:30 – 16:20	K9500	Craig Scratchley
#2926	OPT1	Open Tutorial				Craig Scratchley
#2927	LA01	Laboratory (48)	Mon	8:30 – 10:50	ASB8800	Craig Scratchley
#2928	LA02	Laboratory (48)	Mon	14:30 – 16:50	ASB8800	Craig Scratchley
#2953	LA03	Laboratory (48)	Wed	16:30 – 18:50	ASB8800	Craig Scratchley

ENSC 252 Fundamentals of Digital Logic & Design (4) - 115

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.

#2876	D100	Lecture	Wed/Fri	8:30 – 10:20	AQ3149	Majid Shokoufi
#2929	OPT1	Open Tutorial				Majid Shokoufi
#2930	LA01	Laboratory (45)	Mon	11:00 – 13:20	ASB 10877 & 10879	Majid Shokoufi
#2931	LA02	Laboratory (45)	Mon	14:30 – 16:50	ASB 10877 & 10879	Majid Shokoufi
#2932	LA03	Laboratory (45)	Mon	17:00 – 19:20	ASB 10877 & 10879	Majid Shokoufi

ENSC 254**Introduction to Computer Organization (4) - 240**

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.

#2877	D100	Lecture	Wed/Fri	10:30 – 12:20	WMC3520	Zhenman Fang
#2933	OPT1	Open Tutorial				Zhenman Fang
#2934	LA01	Laboratory (48)	Wed	8:30 – 10:20	ASB 9815 & 9817	Zhenman Fang
#2935	LA02	Laboratory (48)	Wed	14:30 – 16:20	ASB 9815 & 9817	Zhenman Fang
#2936	LA03	Laboratory (48)	Thu	10:30 – 12:20	ASB 9815 & 9817	Zhenman Fang
#2937	LA04	Laboratory (48)	Thu	12:30 - 14:20	ASB 9815 & 9817	Zhenman Fang
#3121	LA05	Laboratory (48)	Thu	14:30 – 16:20	ASB 9815 & 9817	Zhenman Fang

ENSC 280**Engineering Measurement and Data Analysis (4) - 300**

REQ-(PHYS 121 and ENSC 120) or PHYS 141) and (MATH 251 and MATH 232). MATH 251 and/or MATH 232 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.

#2964	D100	Lecture	Tue/Thu	8:30 – 10:20	B9200	Atousa Hajshirmohammadi
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ENSC 320**Electric Circuits II (4) - 300**

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

#2967	E100	Lecture	Wed/Fri	16:30 - 18:20	B9201	Rodney Vaughan
#3126	E101	Tutorial				Rodney Vaughan
#3127	OPL1	Required Open Lab				Rodney Vaughan

ENSC 405W**Capstone A: Project Design, Management, and Documentation (3) - 60**

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

#3044	E100	Lecture	Wed	16:30 – 18:20	WMC2200	Craig Scratchley
#4900	LA01	Laboratory	Fri	14:30 – 16:20	WMC2200	Craig Scratchley

ENSC 406**Engineering Ethics, Law, and Professional Practice (2) - 200**

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.

#2962	D100	Lecture	Wed	12:30 – 14:20	AQ3181	Bob Gill
#2938	D101	Tutorial (20)	Mon	10:30 – 11:20	RCB5125	Bob Gill
#2939	D102	Tutorial (20)	Mon	11:30 – 12:20	RCB5125	Bob Gill
#2940	D103	Tutorial (20)	Mon	14:30 – 15:20	RCB6101	Bob Gill
#2956	D104	Tutorial (20)	Mon	15:30 – 16:20	RCB6101	Bob Gill
#2957	D105	Tutorial (20)	Tue	14:30 – 15:20	RCB5118	Bob Gill
#2958	D106	Tutorial (20)	Tue	15:30 – 16:20	RCB5118	Bob Gill
#2960	D107	Tutorial (20)	Fri	12:30 – 13:20	WMC3511	Bob Gill
#2941	D108	Tutorial (20)	Fri	13:30 – 14:20	WMC3511	Bob Gill
#2942	D109	Tutorial (20)	Thu	14:30 – 15:20	WMC3251	Bob Gill
#2943	D110	Tutorial (20)	Thu	15:30 – 16:20	WMC3251	Bob Gill

ENSC 425**Electronic System Design (4) - 60**

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.

#2878	D100	Lecture	Tue/Thu	8:30 – 10:20	WMC2200	Lakshman One
#2944	OPT1	Open Tutorial				Lakshman One
#2945	LA01	Required Lab				Lakshman One

ENSC 426**High Frequency Electronics (4) - 40**

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

#2879	D100	Lecture	Tue/Thu	12:30 – 14:20	WMC3220	Lakshman One
#2946	OPT1	Open Tutorial				Lakshman One
#2947	LA01	Required Lab				Lakshman One

ENSC 428**Digital Communications (4) - 40**

REQ-Completion of 80 units including ENSC 327 with a minimum grade of C-.

#2883	E100	Lecture	Tue/Thu	17:30 – 19:20	AQ3153	Daniel Lee
#3128	OPT1	Open Tutorial				Daniel Lee
#3129	LA01	Required Lab				Daniel Lee

ENSC 429**Digital Signal Processing (4) – 120**

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.

#2880	D100	Lecture	Tue/Thu	10:30 – 12:20	AQ3182	Jie Liang
#3719	OPT1	Open Tutorial				Jie Liang
#3720	LA01	Required Lab				Jie Liang

ENSC 440**Capstone B: Engineering Design Project (3) - 130**

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.

#2873	E100	Lecture	Wed	17:30 - 19:20	WMC3260	Shervin Jannesar
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ENSC 470**Optical and Laser Engineering Applications (4) - 35**

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

#2881	D100	Lecture	Wed/Fri	10:30 – 12:20	AQ5016	Shawn Sederberg
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ENSC 476**Biophotonics and Microscopy Techniques (4) - 30**

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**

#4864	D100	Lecture	Wed/Fri	8:30 – 10:20	WMC2507	Pierre Lane
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ENSC 482**Introduction to Decision Making in Engineering (4) - 45**

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.

#2882	D100	Lecture	Tue/Thu	10:30 - 12:20	SWH10051	Shahram Payandeh
#2950	OPT1	Open Tutorial				Shahram Payandeh
#3250	LA01	Laboratory				Shahram Payandeh

ENSC 483**Modern Control Systems (4) - 80**

Prerequisite: ENSC 383 or MSE 381, with a minimum grade of C- and a minimum of 80 units. Students with credit for MSE 483 may not take ENSC 483 for further credit.

#2884	D100	Lecture	Wed/Fri	14:30 – 16:20	C9000	Shervin Jannesar
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TEKX 101**Introduction to 3D Printing and Laser Scanning Technologies (3) - 40**

Students will complete several 3D printed projects within the course. Quantitative/Breadth-Science

#2966	D100	Lecture	Fri	12:30 – 14:20	SWH10051	Juan Ferrer
#3252	D101	Tutorial	Fri	14:30 – 16:20	SWH10051	Juan Ferrer