

SIMON FRASER UNIVERSITY
SCHOOL OF ENGINEERING SCIENCE
UNDERGRADUATE COURSE SCHEDULE: SPRING SEMESTER 2021

(Contact: Nathan Owen 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 120 Introduction to Electronics Laboratory Instruments Operation and Measurement Techniques (2)

Prerequisite: BC Pre-Calculus 12 and BC Physics 12 (or equivalents).

#8471	D100	Lecture	TBA	TBA	TBA	Ash Parameswaran
#8472	LA01	Laboratory	Tue/Thu	8:30 – 12:20	TBA	Ash Parameswaran
#8473	LA02	Laboratory	Thu/Fri	13:30 – 17:20	TBA	Ash Parameswaran

ENSC 180 Introduction to Engineering Analysis (3)

REQ-(CMPT 128, CMPT 120, or CMPT 130) and (MATH 151 or MATH 150). Corequisite: MATH 152 and MATH 232.

#6920	D100	Lecture	Mon/Fri	14:30 – 16:20	REMOTE	William Scratchley
#6921	LA01	Laboratory	TBA	TBA	REMOTE	William Scratchley

ENSC 325 Microelectronics II (4)

REQ-ENSC 225 or ENSC 226 or MSE251

#6928	D100	Lecture	Mon/Wed	8:30 – 10:20	REMOTE	Marek Syrzycki
#6934	D101	Tutorial	TBA	TBA	REMOTE	Marek Syrzycki
#6935	LA01	Required Lab	TBA	TBA	REMOTE	Marek Syrzycki

ENSC 327 Communication Systems (4)

REQ-(ENSC 380 or MSE 280) and ENSC 280.

#6929	D100	Lecture	Tue/Thu	14:30 – 16:20	REMOTE	Atousa Hajshirmohammadi
#6936	D101	Tutorial	TBA	TBA	REMOTE	Atousa Hajshirmohammadi
#6937	LA01	Required Lab	TBA	TBA	REMOTE	Atousa Hajshirmohammadi

ENSC 350 Digital Systems Design (4)

REQ-(ENSC 215 and either ENSC 250 or CMPT 250) or (ENSC 252 and ENSC 254)

#6924	D100	Lecture	Wed/Fri	10:30 – 12:20	REMOTE	Lakshman One
#6926	D101	Tutorial	TBA	TBA	REMOTE	Lakshman One
#6988	LA03	Laboratory	Fri	18:00 – 19:00	REMOTE	Lakshman One
#6927	LA04	Laboratory	Fri	19:00 – 20:00	REMOTE	Lakshman One

ENSC 383**Feedback Control Systems (4)**

REQ-ENSC 380 (or MSE 280). Students with credit for MSE 381 may not take ENSC 383 for further credit

#6930	D100	Lecture	Wed/Fri	14:30 – 16:20	REMOTE	Parvaneh Saeedi
#6938	D101	Tutorial	TBA	TBA	REMOTE	Parvaneh Saeedi
#6989	LA01	Required Lab	TBA	TBA	REMOTE	Parvaneh Saeedi

ENSC 386**Introduction to Mechanical Design (4)**

REQ-PHYS 120, MATH 310, and (ENSC 281 or ENSC 385). Students who have previously taken ENSC 230 cannot take this course for credit.

#6931	D100	Lecture	Tue/Thu	8:30 – 10:20	REMOTE	Shahram Payandeh
#6939	D101	Tutorial	TBA	TBA	REMOTE	Shahram Payandeh
#6940	LA01	Required Lab	TBA	TBA	REMOTE	Shahram Payandeh

ENSC 387**Introduction to Electro-Mechanical Sensors and Actuators (4)**

REQ-ENSC 380 or MSE 280. Students with credit for MSE 310 may not take ENSC 387 for further credit.

#6932	D100	Lecture	Mon/Wed	12:30 – 14:20	REMOTE	Michael Adachi
#6941	D101	Tutorial	TBA	TBA	REMOTE	Michael Adachi
#6990	LA01	Required Lab	TBA	TBA	REMOTE	Michael Adachi

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/>

#6944	D100	Lecture	Tue/Thu	14:30 – 16:20	REMOTE	William Scratchley
#6947	LA01	Laboratory	TBA	TBA	REMOTE	William Scratchley

ENSC 410**The Business of Engineering (3)**

REQ- A minimum of 80 units is required to enroll in this course. Students with credit for ENSC 201, ENSC 411, or MSE 300 cannot complete this course for further credit

#6991	D101	Tutorial	TBA	TBA	REMOTE	Ryan D'Arcy
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ENSC 413**Deep Learning Systems in Engineering (3)**Enrollment in this course is by application: <https://coursys.sfu.ca/forms/ensc-413-application-form/> THIS COURSE IS COMBINED WITH ENSC 813 G100

#6997	D100	Lecture	Tue/Thu	14:30 – 16:20	REMOTE	Ivan Bajic
#7009	D101	Tutorial	TBA	TBA	REMOTE	Ivan Bajic

ENSC 416**Engineering Electromagnetics II: Design (4)**

REQ-ENSC 316 with a grade of at least C+.

#6975	D100	Lecture	Wed/Fri	8:30 – 10:20	REMOTE	Lakshman One
#6977	LA01	Required Lab	TBA	TBA	REMOTE	Lakshman One

ENSC 427**Communication Networks (4)**

REQ-ENSC 327. A minimum of 80 units required. Engineering students may not take CMPT 371 as a substitute for ENSC 427.

#6902	D100	Lecture	Mon/Wed	14:30 – 16:20	REMOTE	Ljiljana Trajkovic
#6911	D101	Tutorial	TBA	TBA	REMOTE	Ljiljana Trajkovic
#6923	LA01	Required Lab	TBA	TBA	REMOTE	Ljiljana Trajkovic

ENSC 428**Digital Communications(4)**

REQ-ENSC 327 and a minimum of 80 units.

#6974	D100	Lecture	Tue/Thu	10:30 – 12:20	REMOTE	Daniel Lee
#6976	D101	Tutorial	TBA	TBA	REMOTE	Daniel Lee
#6978	LA01	Required Lab	TBA	TBA	REMOTE	Daniel Lee

ENSC 450**VLSI Systems Design (4)**

REQ- (ENSC 225 or ENSC 226 or MSE 251) and ENSC 350, and a minimum of 80 units.

#6984	E100	Lecture	Tue/Thu	16:30 – 18:20	REMOTE	Anita Tino
#6985	E101	Tutorial	TBA	TBA	REMOTE	Anita Tino
#6986	LA01	Laboratory	Wed	16:30 – 20:20	REMOTE	Anita Tino
#6987	LA02	Laboratory	Fri	8:30 – 12:20	REMOTE	Anita Tino

ENSC 452**Advanced Digital System Design (4)**

REQ-ENSC 350 and 351, a minimum of 80 units. THIS COURSE IS COMBINED WITH ENSC 894.

#7004	LA01	Laboratory	Tue	8:30 – 11:30	REMOTE	Lesley Shannon
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ENSC 474**Digital/Medical Image Processing (4)**

REQ- ((ENSC 180 and ENSC 251) or CMPT 225), and a minimum of 80 units. Students with credit for ENSC 460/895-Digital Image Processing and Analysis cannot take this course for further credit. THIS COURSE IS COMBINED WITH ENSC 895 G200.

#6907	D100	Lecture	Mon/Wed	10:30 – 12:20	REMOTE	Mirza Beg
#6912	D101	Tutorial	TBA	TBA	REMOTE	Mirza Beg
#6992	LA01	Required Lab	TBA	TBA	REMOTE	Mirza Beg

ENSC 475**Biomedical Instrumentation (4)**

REQ- (ENSC 225 or MSE 251), ENSC 320, (ENSC 380 or MSE 280) and a minimum of 80 units. ENSC 380/MSE 280 can be taken concurrently. Students with credit for ENSC 372 cannot take this course for further credit. THIS COURSE IS COMBINED WITH ENSC 895 G400

#8338	D100	Lecture	Tue/Thu	8:30 – 10:20	REMOTE	Bonnie Gray
#8339	D101	Tutorial	TBA	TBA	REMOTE	Bonnie Gray
#8340	LA01	Laboratory	TBA	TBA	REMOTE	Bonnie Gray

ENSC 488**Introduction to Robotics (4)**

REQ-(ENSC 230 or ENSC 386) and (ENSC 383 or MSE 381), and 80 units

#6946	D100	Lecture	Mon/Wed	8:30 – 10:20	REMOTE	Kamal Gupta
#6948	D101	Tutorial	TBA	TBA	REMOTE	Kamal Gupta
#6949	LA01	Required Lab	TBA	TBA	REMOTE	Kamal Gupta

ENSC 495**Introduction to Microelectronic Fabrication(4)**REQ-ENSC 225 or ENSC 226 or MSE 251 or PHYS 365, and permission of the instructor and a minimum of 80 units. Enrolment in this course is by application only. Please fill in this form: <https://coursys.sfu.ca/forms/ensc-ensc-495851-application-form/> THIS COURSE IS COMBINED WITH ENSC 851 G100

#6906	E100	Lecture	Mon	16:30 – 18:20	REMOTE	Michael Adachi
#6910	LA01	Laboratory	Wed	16:30 – 20:20	REMOTE	Michael Adachi
#6913	LA02	Laboratory	Fri	8:30 – 12:20	REMOTE	Michael Adachi

TEKX 101**Introduction to 3D Printing and Laser Scanning Technologies (3)**

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

#8437	D100	Lecture	Mon/Wed	12:30 – 14:20	AQ5018	Juan Ferrer
#8438	LA01	Laboratory	TBA	TBA	TBA	Juan Ferreer