SIMON FRASER UNIVERSITY

SCHOOL OF ENGINEERING SCIENCE

UNDERGRADUATE COURSE SCHEDULE: SPRING 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 180 Introduction to Engineering Analysis (3) (300 Cap)

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

#5820	D100	Lecture	Tue	14:30 – 16:20	SWH10081	Jie Liang
#5821	LA01	Laboratory	Thu	14:30 – 16:20	SWH10081	Jie Liang

ENSC 325 Microelectronics II (4) (112 Cap)

REQ-ENSC 225 or ENSC 226 orMSE251

#5822	D100	Lecture	Wed/Fri	12:30 – 14:20	AQ3005	Majid Shokoufi
#5824	D101	Tutorial	*One weekly hour of tutorial will occur within the scheduled lecture time*			Majid Shokoufi
#5825	LA01	Required Lab	TBA	TBA		Majid Shokoufi

ENSC 327 Communication Systems (4) (115 Cap)

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

#5855	D100	Lecture	Tue/Thu	14:30 – 16:20	AQ3153	Daniel Lee
#5858	D101	Tutorial	TBA	TBA		Daniel Lee
#5859	LA01	Required Lab	TBA	TBA		Daniel Lee

ENSC 350 Digital Systems Design (4) (140 Cap)

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

#5853	D100	Lecture	Wed/Fri	8:30 – 10:20	WMC3260	Andres Erazo Sosa
#5854	D101	Tutorial	*One weekly hour of tutorial will occur within the scheduled lecture time*			Andres Erazo Sosa
#5903	LA01	Required Lab (47)	Tue	10:30 – 13:00	ASB10877/10879	Andres Erazo Sosa
#5904	LA02	Required Lab (47)	Tue	16:30 – 19:00	ASB10877/10879	Andres Erazo Sosa
#5909	LA03	Required Lab (46)	Thu	16:30 – 19:00	ASB10877/10879	Andres Erazo Sosa

ENSC 383 Feedback Control Systems (4) (120 Cap)

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

#5856	D100	Lecture	Wed/Fri	14:30 – 16:20	AQ3153	Majid Shokoufi
#5860	D101	Tutorial	*One weekly hour of tutorial will occur within the scheduled lecture time*			Majid Shokoufi
#5925	LA01	Required Lab	TBA	TBA		Majid Shokoufi

ENSC 386 Introduction to Mechanical Design (4) (50 Cap)

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

#5857	D100	Lecture	Wed/Fri	10:30 – 12:20	WMC3513	Shahram Payandeh
#5861	D101	Tutorial	*One weekly hour of tutorial will occur within the scheduled lecture time*			Shahram Payandeh
#5862	LA01	Required Lab	TBA	TBA	TBA	Shahram Payandeh

ENSC 387 Introduction to Electro-Mechanical Sensors and Actuators (4) (55 Cap)

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

#5823	D100	Lecture	Tue/Thu	8:30 – 10:20	AQ5007	Bob Gill
#5826	D101	Tutorial	*One weekly hour of tutorial will occur within the scheduled lecture time*			Bob Gill
#5910	LA01	Required Lab	TBA	TBA		Bob Gill

ENSC 405W Capstone A: Project Design, Management, and Documentation (3) (70 Cap)

Enrollment in this course is by application: http://www.sfu.ca/engineering/current-students/undergraduate-students/forms-and-resources/research-courses-forms.html#capstone

#5827	D100	Lecture	Tue	14:30 – 16:20	RCB8100	Michael Hegedus
#5830	LA01	Laboratory	Thu	14:30 – 16:20	RCB8100	Michael Hegedus

ENSC 410 The Business of Engineering (3) (140 Cap)

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

#5828	D100	Lecture	Wed/Fri	12:30 – 14:20	WMC3260	Ryan D'Arcy
#5911	D101	Tutorial	TBA	TBA		Ryan D'Arcy

ENSC 413 Deep Learning Systems in Engineering (3) (28 Cap)

Enrollment in this course is by application: https://coursys.sfu.ca/forms/ensc-413-application-form/ THIS COURSE IS COMBINED WITH ENSC 813 G100

#5841	D100	Lecture	Wed/Fri	14:30 – 16:20	AQ5039	Ivan Bajic
#5913	D101	Tutorial	TBA	TBA		Ivan Bajic

ENSC 416 Engineering Electromagnetics II: Design (4) (34 Cap)

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

#5835	D100	Lecture	Tue/Thu	10:30 – 12:20	SWH10051	Bob Gill
#5906	D101	Tutorial	TBA	TBA		Bob Gill

ENSC 427 Communication Networks (4) (45 Cap)

REQ-ENSC 327. A minimum of 80 units required. Engineering students may not take CMPT 371 as a substitute for ENSC 427. THIS COURSE IS COMBINED WITH ENSC 894 G300

#5917	E100	Lecture	Tue/Thu	16:30 – 18:20	AQ5008	Ljiljana Trajkovic
#5918	E101	Tutorial	*One weekly hour of tutorial will occur within the scheduled lecture time*			Ljiljana Trajkovic
#5919	LA01	Required Lab	TBA	TBA		Ljiljana Trajkovic

ENSC 450 VLSI Systems Design (4) (50 Cap)

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

#5838	E100	Lecture	Tue/Thu	16:30 – 18:20	SWH10061	Aminreza Ahari Kaleibar
#5839	E101	Tutorial	*One weekly hour of tutorial will occur within the scheduled lecture time*			Aminreza Ahari Kaleibar
#5907	LA01	Laboratory (25)	Wed	16:30 – 20:20	ASB9815	Aminreza Ahari Kaleibar
#7746	LA03	Laboratory (25)	Mon	16:30 – 20:20	ASB9815	Aminreza Ahari Kaleibar

ENSC 452 Advanced Digital System Design (4) (48 Cap)

REQ-ENSC 350 and 351, a minimum of 80 units. THIS COURSE IS COMBINED WITH ENSC 894 G100

#5864	D100	Lecture	Wed/Fri	10:30 – 12:20	ASB9896	Lesley Shannon
#8028	LA03	Laboratory (24)	Mon	8:30 – 12:20	ASB8800	Lesley Shannon
#8029	LA04	Laboratory (24)	Mon	13:30 – 17:20	ASB8800	Lesley Shannon
#8030	LA05	Laboratory (5)	Mon	14:30 – 18:20	ASB8800	Lesley Shannon

ENSC 461 ST – Synth. Aperture Radar Application (4) (8 Cap)

REQ-4th Year ENSC & Instructor consent. THIS COURSE IS COMBINED WITH ENSC 895 G100

#7954	D100	Lecture	Fri	8:30 – 12:20	TASC1-7006	Bernhard Rabus

ENSC 474 Digital/Medical Image Processing (4) (45 Cap)

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.

#5818	D100	Lecture	Tue/Thu	12:30 – 14:20	WMC2501	Parvaneh Saeedi
#5819	D101	Tutorial	*One weekly hour of tutorial will occur within the scheduled lecture time*			Parvaneh Saeedi
#5912	LA01	Required Lab	TBA	TBA		Parvaneh Saeedi

ENSC 475 Biomedical Instrumentation (4) (16 Cap)

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

#5844	D100	Lecture	Tue/Thu	10:30 – 12:20	WMC2521	Bonnie Gray
#5845	D101	Tutorial	TBA	TBA		Bonnie Gray
#5846	LA01	Laboratory	TBA	TBA		Bonnie Gray

ENSC 488 Introduction to Robotics (4) (50 Cap)

REQ-(ENSC 230 or ENSC 386) and (ENSC 383 or MSE 381), and 80 units. THIS COURSE IS COMBINED WITH ENSC 894 G400

#5829	D100	Lecture	Wed/Fri	8:30 – 10:20	WMC2501	Michael Hegedus
#5831	D101	Tutorial	*One weekly hour of tutorial will occur within the scheduled lecture time*			Michael Hegedus
#5832	LA01	Required Lab	TBA	TBA		Michael Hegedus

ENSC 495 Introduction to Microelectronic Fabrication (4) (12 Cap)

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-495-application-form/ THIS COURSE IS COMBINED WITH ENSC 851 G100

#5914	E100	Lecture	Mon	16:30 – 18:20	WMC3517	Michael Adachi
#5915	LA01	Laboratory (6)	Wed	16:30 – 20:20	ASB8825	Michael Adachi
#5916	LA02	Laboratory (6)	Fri	8:30 – 12:20	ASB8825	Michael Adachi

TEKX101 Introduction to 3D Printing & Scanning Technologies (3) (40 Cap)

Students will learn the basic concepts of 3D printing, computer design tools, and the use of 3D scanners to make replicas of existing objects. Students will complete several 3D printed projects within the course. Quantitative/Breadth-Science.

#5929	D100	Lecture	Fri	12:30 – 14:20	AQ4120	Juan Ferrer
#5930	D101	Tutorial	Fri	14:30 – 16:20	WMC3220	Juan Ferrer