

TERM 8 - CLASS OF 2018 - Winter 2018

COMPLEMENTARY STUDIES

For graduation, you must also have passed the seven complementary studies courses with an average over these seven courses of at least 60%. If you have not already done so, please submit a [Complementary Studies Self Audit form.](#)

	Course #	Course Name	Instructor
ENGI	4102	Engineering Economics	Shekari, E
ENGI	8151	Technology, Sustainable Society and International Development	Hurley, S

TERM 8 - CLASS OF 2018 - Winter 2018**CIVIL**

Course #	Course Name	Instructor
	Required:	
ENGI 8152(004)	Engineering Professionalism II	Spracklin-Reid/Rosales
ENGI 8700	Civil Engineering Project - multiple sections	Bruneau, S/Skinner, J
ENGI 8740	Contract Law and Labour Relations	Wellon, R

Technical Electives - choose three electives in total**Choose up to 3 electives from:**

ENGI 8705	Structural Building Systems	Adluri, S
ENGI 8713	Municipal Engineering	Snelgrove, K
ENGI 8717	Environmental Assessment	Saady, N
ENGI 8751	Coastal and Ocean Engineering	Bruneau, S

Choose up to 1 elective from:

ENGI 8074	Arctic Ocean Engineering	Colbourne, B
ENGI 8676	Design of Natural Gas Handling Equipment	Aborig,A
ENGI 8670	Reliability Engineering (Distance)	Khan, F/Abolmbola, M
ENGI 8673	Subsea Pipeline Engineering	Shiri, H
ENGI 8690	Reservoir Engineering	Aborig,A
ENGI 8992	Arctic Offshore Engineering	Taylor, R.

TERM 8 - CLASS OF 2018 - Winter 2018**COMPUTER**

Required:

ENGI	8152(002)	Engineering Professionalism II	Spracklin-Reid/Rosales
ENGI	8854	CoE Design Project	Czarnuch, S
ENGI	8894	RT Operating Sys / Embedded and RT Systems Design	Anderson, J.

Technical Electives (choose 2):

ENGI	7680	Supervisory Control and Data Acquisition	Masek, V.
ENGI	8814	Computer Vision	Shehata, M.
ENGI	8877	Wireless and Mobile Communications	Eldemerdash, Y
ENGI	8821	Design of Digital Signal Processing Systems	Moloney, C
ENGI	8826	Filter Synthesis	Power, S
ENGI	8868	Computer and Communications Security	Heys, H
		Computer Science elective (must be approved by Department Head)	
ENGI	8103	Engineering in Medicine	Power/Czarnuch/Shehata

Free Elective:

[approved by Department Head](#)**ELECTRICAL**

Required:

ENGI	8152(002)	Engineering Professionalism II	Spracklin-Reid/Rosales
ENGI	8853	EE Design Project	Czarnuch, S
ENGI	8826	Filter Synthesis	Power, S

Technical Electives (choose 2):

ENGI	5865	Digital Systems	House, A
ENGI	7680	Supervisory Control and Data Acquisition	Masek, V.
ENGI	7811	Antennas	Li, Y
ENGI	8814	Computer Vision	Shehata, M.
ENGI	8821	Design of Digital Signal Processing Systems	Moloney, C
ENGI	8877	Wireless and Mobile Communications	Eldemerdash, Y
ENGI	8845	Power System Operation	Liang, X
ENGI	8103	Engineering in Medicine	Power/Czarnuch/Shehata

Free Elective:

[approved by Department Head](#)

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MECHANICAL

		Required:	
ENGI	8152(001)	Engineering Professionalism II	Spracklin-Reid/Rosales
ENGI	8926	Mechanical Project II	Sharan, A
		9 credit hours from Technical Stream Courses	
		Students may experience scheduling difficulties if courses are selected from more than one technical stream.	
		<u>Mechanics and Materials</u>	
		<u>All stream students are required to take:</u>	
ENGI	8933	Fatigue and Fracture	Nasiri, A
		<u>Plus two technical electives from below:</u>	
ENGI	8103	Engineering in Medicine	Power/Czarnuch/Shehata
ENGI	8911	Corrosion and Corrosion Control	Shirokoff, J.
ENGI	8937	Machine Dynamics	Yang, J
ENGI	8946	Modelling and Simulation of Dynamic Systems	Rideout G.
ENGI	8982	Mechanical Behaviour of Composites	Nakhla, S
ENGI	8992	Arctic Offshore Engineering	Taylor, R.
		<u>Mechatronics</u>	
		<u>All stream students are required to take:</u>	
ENGI	8946	Modelling and Simulation of Dynamic Systems	Rideout G.
		<u>Plus two technical electives from below:</u>	
ENGI	8103	Engineering in Medicine	Power/Czarnuch/Shehata
ENGI	8814	Computer Vision	Shehata, M.
ENGI	8826	Filter Synthesis	Power, S
ENGI	8937	Machine Dynamics	Yang, J
		<u>Petroleum Technical Stream</u>	
		<u>All stream students are required to take:</u>	
ENGI	8690	Reservoir Engineering	Aborig, A
		<u>Plus two technical electives from below:</u>	
ENGI	8673	Subsea Pipeline Engineering	Shiri, H
ENGI	8676	Design of Natural Gas Handling Equipment	Aborig,A
ENGI	8694	Downstream Processing	Zhang, Yan
ENGI	8911	Corrosion and Corrosion Control	Shirokoff, J.
ENGI	8992	Arctic Offshore Engineering	Taylor, R.
		<u>Thermo Fluids</u>	
		<u>All stream students are required to take:</u>	
ENGI	8903	Design of Thermal Systems	Dehghani, S
		<u>Plus two technical electives from below:</u>	
ENGI	8103	Engineering in Medicine	Power/Czarnuch/Shehata
ENGI	8984	Sustainable Energy Systems	Pope, K
ENGI	8947	Computational Fluid Mechanics	Bodaghkhani, A
ENGI	8965	Advanced Fluid Dynamics	Duan, X
ENGI	8992	Arctic Offshore Engineering	Taylor, R.

* **Other courses may be taken with approval of Department Head**

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ONAE

		Required:	
ENGI	8152(005)	Engineering Professionalism II	Spracklin-Reid/Rosales
ENGI	8000	ONAE Project	Colbourne, B
Phys	3300	Introductin to Physical Oceanography	
		Technical Electives (choose 2):	
ENGI	8054	Advanced Marine Vehicles	Molyneux, D
ENGI	8074	Arctic Ocean Engineering	Colbourne, B
ENGI	8075	Finite Element Analysis of Marine Structures	Quinton, B
ENGI	8670	Reliability Engineering (Distance)	Khan, F/Abolmbola, M
ENGI	8673	Subsea Pipeline Engineering	Shiri, H
ENGI	8751	Coastal and Ocean Engineering	Bruneau, S
		Other courses with permission from the Department Head	
		Focus Stream Elective.	

PROCESS

ENGI	8152(003)	Engineering Professionalism II	Spracklin-Reid/Rosales
ENGI	8640	Process Engineering Project	James, L
		<u>Process Technical Stream</u>	
ENGI	7651	Industrial Pollution Control	Zhang, Yahui
ENGI	7691	Mineral and Metallurgical Process Engineering	Zhang, Yahui
		Choose one of:	
ENGI	8670	Reliability Engineering (Distance)	Khan, F/Abolmbola, M
ENGI	8694	Petroleum Refining & Downstream Processing	Zhang, Yan
ENGI	8911	Corrosion and Corrosion Control	Shirokoff, J.
		<u>Petroleum Technical Stream</u>	
ENGI	8690	Reservoir Engineering	Aborig, A
ENGI	8694/8696	Petroleum Refining & Downstream Processing	Zhang, Yan
		Choose one of:	
ENGI	8670	Reliability Engineering (Distance)	Khan, F/Abolmbola, M
ENGI	8676	Design of Natural Gas Handling Equipment	Aborig,A

One Free Elective

one free elective which must be a 5000-level or higher Engineering course, or a 2000-level or higher course either from the Faculty of Arts or the Faculty of Science or a 3000-level or higher course from the Faculty of Business Administration. Selection of a course must be approved by the Department Head.