
Class of 2019 - Term 7 - Spring 2018 Semester

Course	Complementary Studies	Instructor
8151	Technology,Sustainable Society & International Development (Distance)	Spracklin-Reid, D

Course	Civil	Instructor
7704	Design of Steel Structures	Adluri S
7713	Hydrology and Water Resources	Daraio, J
7745	Highway Engineering	Hossain, K
<u>Choose two electives from the following options:</u>		
7718	Environmental Geotechniques	Zhang, H
7706	Finite Element Analysis	Adluri S
7716	Hydrotechnical Engineering	Daraio, J
8671	Safety and Risk Engineering (Distance)	KhanF/Sajid Z
8692	Drilling Engineering	Butt, S/Said, M

Class of 2019 - Term 7 - Spring 2018 Semester

Computer

7804	Computer Engineering Design Project I	Czarnuch, S
7824	Introduction to Digital Signal Processing	Attarsharghi, S
7894	Concurrent Programming	Ul Hasan, M
	<u>Choose two electives from the following options:</u>	
7825	Control Systems II	O'Young, S
7854	Image Processing and Applications	Czarnuch, S
7855	Communications electronics	Wanasinghe, T
7952	Robotics and Automation	Nguyen, T
8680	Process Control and Instrumentation	Iqbal T.
8863	Introduction to LSI Design/ASIC Design	TBA
8879	Digital Communications	Karami, E

Prior to term 8, students are advised to consider completing as much as possible of:

[- complementary studies requirements](#)

[- free elective requirements](#)

(during either term 7 or the fall work term).

Electrical

7803	Electrical Engineering Design Project I	Czarnuch, S
7824	Introduction to Digital Signal Processing	Attarsharghi, S
	<u>Choose three electives from the following options:</u>	
7825	Control Systems II	O'Young, S
7844	Power System Analysis	Jeyasurya, B.
7854	Image Processing and Applications	Czarnuch, S
7855	Communications electronics	Wanasinghe, T
7856	Renewable Energy Systems	Iqbal T.
7952	Robotics and Automation	Nguyen, T
8680	Process Control and Instrumentation	Iqbal T.
8879	Digital Communications	Karami, E

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 Class of 2019 - Term 7 - Spring 2018 Semester

 Mechanical

Mechanical Core - All students are required to take:

7926	Mechanical Project I	De Silva, O
7930	Instrumentation and Experimental Design	De Silva, O

Plus one Free Elective from below:

Business 3630 - New Venture Creation (strongly suggested by Memorial's Center for Entrepreneurship (MCE) for entrepreneurship based ENGI 8926 projects)

Any 2000* level or higher University course. Any 3000*level or higher

Engineering course. *Requires the approval of Department Head

Students are required to select a stream path below, since many Term 8

Technical Electives require Term 7 courses as pre-requisites:

Mechanics and Materials**All stream students are required to take:**

7911	Industrial Materials	Caines, S
7929	Mechanical Components Design II	Pooyafar, P

Plus one Technical Elective from below:

7934	Finite Element Analysis	ElRuby, A
8971	Welding and Joining	Nasiri, A

Thermal Fluids**All stream students are required to take:**

7901	Heat Transfer II	Pope K.
7903	Mechanical Equipment	Muzychka, Y

Plus one Technical Elective from below:

7934	Finite Element Analysis	ElRuby, A
8970	Gas Dynamics	Nikapitiya, J

Mechatronics**All stream students are required to take:**

7929	Mechanical Components Design II	Pooyafar, P
7953	Mechatronics II	Al Janaideh, M

Plus one Technical Elective from below:

7825	Controls II	O'Young, S
7854	Image Processing and Applications	Czarnuch, S
7952	Robotics & Automation	Nguyen, T

Class of 2019 - Term 7 - Spring 2018 Semester

Petroleum Technical Stream**All stream students are required to take:**

8691	Advanced Petroleum Production Engineering	Zendehboudi, S
8692	Drilling Engineering	Butt, S/Said, M

Plus one Technical Elective from below:

7903	Mechanical Equipment	Muzychka, Y
8671	Safety and Risk Engineering (distance)	KhanF/Sajid Z
8970	Gas Dynamics	Nikapitiya, J

Biomedical Stream Stream**All stream students are required to take:**

MED 6250	Clinical Research	Czarnuch, S
HKR 2311	Anatomy and Physiology (MUST have been taken in Winter 2018 by distance)	

Plus one Technical Elective from below:

7854	Image Processing and Applications	Czarnuch, S
7952	Robotics & Automation	Nguyen, T
7934	Finite Element Analysis	El Ruby, A

Class of 2019 - Term 7 - Spring 2018 Semester

ONAE

7000	Ocean Systems Design	Molyneux, D
7007	Ocean Engineering Materials	Moro, L
7033	Marine Hydrodynamics	Peng H.
7035	Seakeeping and Maneuvering of ocean Vehicles	Qiu, W
<u>Choose one elective from the following options:</u>		
7706	Finite Element Analysis	Adluri, S
7934	Finite Element Analysis	El Ruby, A
7003	Small Craft Design	Walker, D
8691	Advanced Petroleum Production Engineering	Zendehboudi, S
8692	Drilling Engineering	Butt, S/Said, M
Or a technical Elective approved by the Department Head		

Process

7621	Process Dynamics and Control	Ahmed S.
7640	Process Engineering Project I	Ahmed, S
8677	Process Plant Design and Economics	Sripal, E

In addition to the three required course listed above, all students must register for two Technical Stream Courses. The recommended courses are as follows:

Petroleum Technical Stream

8692	Drilling Engineering	Butt, S/Said, M
7623	Process Simulation	Zhang, Yahui
<u>Choose one electives from the following options:</u>		
8671	Safety and Risk Engineering (Distance)	KhanF/Sajid Z
8691	Advanced Petroleum Production Engineering	Zendehboudi, S

Process Technical Stream

7623	Process Simulation	Zhang, Yahui
8671	Safety and Risk Engineering (Distance)	KhanF/Sajid Z
