

Class of 2026 - Term 7 - Spring 2025 Semester

Course	Complementary Studies	Instructor
ENGI 4102	Engineering Professionalism	Shekari, E.
Civil		
CIV 7130	Hydrology and Water Resources	Daraio, J.
CIV 7530	Design of Steel Structures	Adluri, S.
CIV 7730	Highway Engineering	Reza, A.
Choose two electives from the following options:		
CIV 7140	Hydrotechnical Engineering	Abdel-Razek, A.R.
CIV 7240	Geotechnical Engineering III	Dhar, A.
CIV 7620	Environmental Geotechniques	Zhang, H.
CIV 7340	Finite Element Structural Analysis	Adluri, S.
Computer		
ECE 7010	Computer Engineering Design Project I	Peters, D.
ECE 7400	Concurrent Programming	Vardy, A.
ECE 7600	Introduction to Digital Signal Processing	Power, S.
Choose two electives from the following options:		
ECE 7200	Control Systems II	O'Young, S.
ME 7204	Robotics and Automation	Mann, G.
ECE 7410	Image Processing and Applications	Czarnuch, S.
ECE 7420	Computer Security	Anderson, J.
ECE 7500	Introduction to LSI Design/ASIC Design	Zhang, L.
ECE 7620	Digital Communications	Alnahhal, I.
ECE 7800	Power Systems Analysis	cancelled
<p>Computer Science electives as approved by ECE Department Head Students in the Biomedical stream, who have taken HKR 2311, should take MED 6250 and one of ECE 7200, 7410, 7420, ME 7204 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).</p>		
Electrical		
ECE 7000	Electrical Engineering Design Project I	Peters, D.
ECE 7600	Introduction to Digital Signal Processing	Power, S.
Choose three electives from the following options:		
ECE 7200	Control Systems II	O'Young, S.
ME 7204	Robotics and Automation	Mann, G.
ECE 7210	Process Control and Instrumentation	Mohsin Jamil
ECE 7410	Image Processing and Applications	Czarnuch, S.
ECE 7620	Digital Communications	Alnahhal, I.
ECE 7810	Renewable Energy Systems	cancelled
<p>Students in the Biomedical stream, who have taken HKR 2311, should take MED 6250, one of ECE 7200, 7410, ME 7204 and one other technical elective. Prior to term 8, students are advised to consider completing as much as possible of: - complementary studies requirements - free elective requirements</p>		

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

Mechanical

Mechanical Core - All students are required to take:

ME 7203	Instrumentation and Experimental Design	De Silva, O.
ME 7703	Mechanical Component Design II	Yang, J.
ME 7704	Mechanical Project I	Yang, J.

Free Elective - may be any 2000-level or higher University course, or 3000-level or higher Engineering course, that does not duplicate a previously-completed Engineering course.
(Departmental approval is required)

Technical Electives (except Biomedical stream students)

See University Calendar for Group A/B technical elective requirements.

<https://www.mun.ca/university-calendar/st-johns-campus/faculty-of-engineering-and-applied-science/6/4/>

Group A

ME 7104	Industrial Materials	Sayed, A.
ME 7205	Mechatronics II	Said, M.
ME 7404	Heat Transfer II	Pope, K.
ME 7405	Mechanical Equipment	Amini, M.
ME 7603	Finite Element Analysis	Elruby, A.

Group B

ME 7105	Welding and Joining	Alidokht, S. CANCELLED
ME 7204	Robotics & Automation	Said, M.
ME 7503	Gas Dynamics	Muzychka, Y.
ME 7220/ENGI 9981	Guidance Navigation and Control	De Silva, O.
ENGI 8153	Engineering in Medicine	Nakhla, S.
ECE 7200	Control Systems II	O'Young, S.
ECE 7410	Image Processing and Applications	Czarnuch, S.
PROC 7171	Safety and Risk Engineering	Mamudu, A.

Biomedical Stream

Students who were accepted into the Biomedical stream in Fall 2024 are required to take:

MED 6250	Basic Introduction to Clinical Epidemiology	Czarnuch, S.
ENGI 8153	Engineering in Medicine	Nakhla, S.

Choose one elective from the following options:

ME 7603	Finite Element Analysis	Elruby, A.
---------	-------------------------	------------

ECE 7410 Image Processing and Applications Czarnuch, S.

ONAE

ONAE 7000 Ocean Systems Design Smith, D
ONAE 7002 Ship Structures II Daley, C
ONAE 7033 Marine Hydrodynamics Peng, H
ONAE 7036 Maneuvering of ocean Vehicles Qiu, W

Choose one elective from the following options:

ONAE 7003 Small Craft Design Cancelled

ONAE 7046 Marine Economics and Ship Construction Molyneux, D
PROC 7171 Safety and Risk Engineering (distance) Mamudu, A.

Or a technical Elective approved by the Department Head

Process

PROC 7021 Process Dynamics and Control Imtiaz, S
PROC 7040 Process Engineering Project I Ahmed, S
PROC 7077 Process Plant Design and Economics Azargohar, R

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

PROC 7125 Process Data Analytics Imtiaz, S

Choose one electives from the following options:

PROC 7141 Bioprocess Engineering I Hawboldt, K
PROC 7171 Safety and Risk Engineering Mamudu, A
PROC 7291 Advanced Petroleum Production Engineering Aborig, A

Process Technical Stream

PROC 7125 Process Data Analytics Imtiaz, S
PROC 7141 Bioprocess Engineering I Hawboldt, K
PROC 7171 Safety and Risk Engineering Mamudu, A
PROC 7293 Mineral Processing and Tailings Management Lin, C

Last Updated: April 29, 2025