

ELECTROMECHANICAL ENGINEERING TECHNOLOGY (T171) 2021-2022 PATHWAY

Semester 1: Fall 2021 or Winter 2022 [2021-01/02]

Course Code	Course Title	Pre-Requisite	Hrs/wk
EMNG 1001	Circuit Analysis		5
EMNG 1004	Metrology		2
MENG 1002	Engineering Drawing		3
MENG 1087	Machining Fundamentals		3
MENG 1088	Occupational Health and Safety		1
GSSC 1027	Personal Finance		3
MATH 1160	Mathematics for Engineering Technology 1		3
COMM 1007*	College English		3
		Total Hours	23

*Depending on the results of your placement test, you may be required to take Foundation Level Communications: COMM 1003 (English Skills) or CESL 1003 (English Skills-ESL) before progressing to COMM 1007. Students placed in COMM 1003 or CESL 1003 will be charged extra tuition. Please visit the Assessment Centre for further information

<https://www.georgebrown.ca/assessment-centre>

Semester 2: Winter 2022 or Spring 2022 [2021-02/03]

Course Code	Course Title	Pre-Requisite	Hrs/wk
EMNG 1003	Engineering Mechanics	MATH 1160	3
EMNG 1012	Introduction to Mechanical CAD	MENG 1002	3
EMNG 1013	Electronic Devices	EMNG 1001	4
EMNG 1015	Motors & Controls	EMNG 1001	3
EMNG 1016	Electro-Pneumatics	MATH 1160	3
MATH 1171	Mathematics for Engineering Technology 2	MATH 1160	4
GSSC 1100	Small Business Plan & Operation		3
		Total Hours	23

Semester 3: Fall 2022 [2022-01]

Course Code	Course Title	Pre-Requisite	Hrs/wk
EMNG 2001	Introduction to PLC Systems	EMNG 1015 EMNG 1016	4
EMNG 2004	Digital Electronics	EMNG 1013	3
EMNG 2020	Sensors and Instrumentation	EMNG 1016	3
EMNG 2021	Automation Software Development		3
EMNG 2045	Introduction to Machining (delivered in the 2 nd 7 weeks for 2hrs per week)	MENG 1087	1

Course Code	Course Title	Pre-Requisite	Hrs/wk
MENG 2070	Workplace Essentials	COMM 1007	2
GNED	General Education Elective (Select One)		3
		Total Hours	19

Semester 4: Winter 2023 [2022-02]

Course Code	Course Title	Pre-Requisite	Hrs/wk
EMNG 2022	Measurement & Final Control Elements		3
EMNG 2024	Internet of Things for Homes and Buildings	EMNG 2004	4
EMNG 2025	Electrical Techniques	EMNG 1013	4
EMNG 3003	Network Fundamentals	EMNG 2004	3
MENG 2046	Sustainable Energy Technologies	EMNG 1003	2
MENG 3030	Technical Report Writing	COMM 1007	2
GNED	General Education Elective (Select One)		3
		Total Hours	21

Semester 5: Fall 2023 [2023-01]

Course Code	Course Title	Pre-Requisite	Hrs/wk
EMNG 2026	Applied Project 1	EMNG 2022 EMNG 2024 EMNG 2025	4
EMNG 3002	Building Science Fundamentals	MATH 1171	3
EMNG 3004	Building Networks and Protocols	EMNG 3003	4
EMNG 3006	Alarm and Video Systems	EMNG 3003	4
EMNG 3015	Building Control Systems	EMNG 3003 MENG 2046	4
EMNG 3016	Fundamentals of HVAC/R Systems	MATH 1171	3
		Total Hours	22

Semester 6: Winter 2024 [2023-02]

Course Code	Course Title	Pre-Requisite	Hrs/wk
EMNG 3011	Building Management & Commissioning	EMNG 3002 EMNG 3016	4
EMNG 3013	Building Sub-Systems and Integration	EMNG 3002 EMNG 3004 EMNG 3016	4
EMNG 3018	Applied Project 2	EMNG 2026	6
EMNG 3019	Building Operations and Management	EMNG 3002 EMNG 3016	2

Course Code	Course Title	Pre-Requisite	Hrs/wk
EMNG 3020	Blueprint Reading for Buildings	EMNG 1012	2
EMNG 3021	Connected Homes	EMNG 2024	4
		Total Hours	22

PATHWAY SUBJECT TO CHANGE