



# ELECTROMECHANICAL ENGINEERING TECHNOLOGY –POWER AND CONTROL (T182) 2022-2023 PATHWAY

PATHWAY SUBJECT TO CHANGE

## SEMESTER 1: FALL 2022 OR WINTER 2023 (2022-01/02)

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
			<b>Total Hours 23</b>

\*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 [georgebrown.ca/assessment-centre](http://georgebrown.ca/assessment-centre)

## SEMESTER 2: WINTER 2023 OR SUMMER 2023 (2022-02/03)

Course Code	Course Title	Pre-Requisite	Hrs/wk
ELCL 1047	Residential Prints and Electrical Safety Code 1 (*online)	—	3
EMNG 1013	Electronic Devices	EMNG 1001	4
EMNG 1015	Motors & Controls	EMNG 1001	3
EMNG 1020	Computers and Microprocessors	—	3
EMNG 1021	CAD Electrical Circuits (*online)	MENG 1002	3
MATH 1171	Mathematics for Engineering Technology 2	MATH 1160	4
GNED	General Education Elective (Select One)	—	3
			<b>Total Hours 23</b>

## SEMESTER 3: FALL 2023 (2023-01)

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 2006	Operations Management & Quality Control	MATH 1171	3
EMNG 2020	Sensors and Instrumentation	EMNG 1016	3
EMNG 2021	Automation Software Development	—	3
EMNG 2035	CAD Electrical Layouts	—	3
EMNG 2036	Computer Applications	—	3
			<b>Total Hours 22</b>

## SEMESTER 4: WINTER 2024 (2023-02)

Course Code	Course Title	Pre-Requisite	Hrs/wk
CIVL 1010	Introduction to Civil Engineering Technology	—	3
EMNG 2034	Embedded Systems & Interfacing	EMNG 2004; EMNG 2021; EMNG 2020	3
EMNG 2037	Programming Principles	—	3
EMNG 2041	Robotics	EMNG 2001; EMNG 2021	3
EMNG 2042	Co-Op Preparation	—	1
EMNG 2040	Workplace Preparedness & Technical Writing	—	3
EMNG 3003	Network Fundamentals	EMNG 2004	3
GNED	General Education Elective (Select One)		3
			<b>Total Hours 22</b>

## CO-OP WORK TERM 1: SUMMER 2024 (2023-03)

Course Code	Course Title	Pre-Requisite	Hrs/wk
TCOP 1007	Co-Op Work Term 1	—	varies

## SEMESTER 5: FALL 2024 (2024-01)

Course Code	Course Title	Pre-Requisite	Hrs/wk
ELCL 1048	Electrical Installation Methods 1	—	5
ELCL 1051	Electrical and Workplace Safety	—	2
ELCL 1057	Residential Prints and Electrical Safety Code 2	ELCL 1047	3
EMNG 3025	Power Transmission and Distribution	—	3
EMNG 3026	Capstone Project 1	—	3
MATH 2015	Calculus 1	MATH 1171	3
MENG 2046	Sustainable Energy Technologies	—	2
			<b>Total Hours 21</b>

## CO-OP WORK TERM 2: WINER 2025 (2024-02)

Course Code	Course Title	Pre-Requisite	Hrs/wk
TCOP 2007	Co-Op Work Term 2	—	varies

## SEMESTER 6: SUMMER 2025 (2024-03)

Course Code	Course Title	Pre-Requisite	Hrs/wk
ELCL 1058	Electrical Installation Methods 2	ELCL 1048	6
EMNG 3027	Electrical Maintenance Management	—	3
EMNG 3028	Power Quality and Distribution	—	3
EMNG 3029	Electrical Protection and Control	—	3
EMNG 3030	Project Management Practices	—	3
EMNG 3036	Capstone Project 2	—	4
MATH 3006	Calculus 2	MATH 2015	3
			<b>Total Hours 25</b>