

MODEL ROUTE

School: School of Engineering Technology & Applied Sciences - AMAT **Program Number:** 4501 (

Program Title: Apprenticeship - Electrician, Construction Maintenance **Credential:** ☒ Certificate
☐ Diploma
☐ Degree

Delivery Mode: ☒ Non Co-Op ☐ Co-Op **Duration:** ☐ 2 Semesters
☐ Fast Track ☒ 4 Levels
☐ 8 Semesters

Intake: 2025F-2026W

Course Code	Course Title	Co/Pre-Requisite (Course Code)	Lab Hours	Lecture Hours
Level 1	Basic			
APEL 121	Communication and Documentation		0	27
APEL 122	Introduction to the Canadian Electrical Code		0	36
APEL 123	Trade Practices		0	36
APEL 124	Installation and Maintenance Methods		45	9
APEL 125	Electrical Fundamentals		27	54
APEL 126	Drawings, Specifications and Standards Fundamentals		0	36
Level 2	Intermediate			
APEL 221	Electrical Systems	APEL 121 - 126	9	63
APEL 222	Electronic Fundamentals	APEL 121 - 126	18	18
APEL 223	Drawings, Specifications and Standards Intermediate	APEL 121 - 126	0	36
APEL 224	Motor Controls and Devices	APEL 121 - 126	27	18
APEL 225	Communication and Monitoring Systems	APEL 121 - 126	27	18
APEL 226	Canadian Electrical Code II	APEL 121 - 126	0	36
Level 3	Advanced			
APEL 321	Renewable Energy Generating and Storage Systems	APEL 221 - 226	9	18
APEL 322	Electrical Theory and Application	APEL 221 - 226	27	45
APEL 323	PLC Fundamentals	APEL 221 - 226	18	9
APEL 324	Power Electronics	APEL 221 - 226	18	18
APEL 325	Drawings, Specifications and Standards Advanced	APEL 221 - 226	0	36
APEL 326	Introduction to Instrumentation	APEL 221 - 226	18	18
APEL 327	Canadian Electrical Code III	APEL 221 - 226	0	36
Level 4	Advanced			
APEL 421	Building Automation Systems (Common Core)	APEL 321 - 327	8	24
APEL 422	Professionalism and Ethics (Common Core)	APEL 321 - 327	0	16
APEL 423	Power Conditioning (Common Core)	APEL 321 - 327	0	24
APEL 424	Advanced Motors and Generators (Common Core)	APEL 321 - 327	16	24
APEL 425	High voltage Service and Operation (Common Core)	APEL 321 - 327	0	40
APEL 426	Specialty Installations (Construction only)	APEL 321 - 327	0	40
APEL 427	Canadian Electrical Code IV (Construction only)	APEL 321 - 327	0	48



Trade Code: 309A)

- ☐ Graduate Certificate
- ☐ Advanced Diploma
- ☐ None

- ☐ 3 Levels
- ☐ 6 Semesters
- ☐ 9 Semesters

Total		
Weekly	Weeks (15)	Total Hours
Hours		

		27
		36
		36
		54
		81
		36
	Total	270

		72
		36
		36
		45
		45
		36
	Total	270

		27
		72
		27
		36
		36
		36
		36
	Total	270

		32
		16
		24
		40
		40
		40
		48
	Total	240