

Residential and Commercial Electricity Technology

Diploma – 45 credit hours

Purpose: The Residential and Commercial Electricity program provides students with the skills necessary for an entry-level job as an electrician. Thorough technical instruction is given in the layout, assembly, installation, and troubleshooting of fixtures, devices, services, heating systems, pumps, motors and motor controls used in residential, commercial, and some industrial locations.

The students learn electrical theory and the techniques of the trade, including blueprint reading, wiring, pipe bending, motor control, switching, and power circuits. Emphasis is placed on meeting the requirements of the National Electrical Code in all wiring installations.

Successful completion of the course qualifies the student to take the State of Maine journeyman's examination and to enter employment under a master electrician. Residential/commercial electricity is a two-semester program that starts in the fall semester, and concludes with a 6 week internship with and Electrical Contractor during the following May and June.

Career Opportunities: Upon completion of the program, graduates are eligible to take the State of Maine journeyman's electrician examination. Upon passing the state examination, students are issued journeyman-in-training licenses. Graduates may find employment opportunities with electrical contractors, electrical equipment suppliers, and industrial maintenance companies.

The student must be a graduate of Regional Technical Center Electrical Program or equivalent, earn an Accuplacer score high enough for Math 106, or pass high school algebra with a C or better.

Program Educational Outcomes: Upon completion of the diploma curriculum in the Residential and Commercial Electricity Technology program, the graduate is prepared to:

1. Understand and apply knowledge in layout, assembly, installation, and troubleshooting of fixtures, devices, services, heating systems, pumps, motors, and motor controls used in residential, commercial, and some industrial locations.

2. Understand and apply knowledge of electrical theory and techniques of the trade, including blueprint reading, wiring, pipe bending, motor control, switching, and power circuits.
3. Demonstrate ability to understand requirements of the National Electrical Code in all wiring installations.
4. Be eligible to take State of Maine journeyman's electrician examination and to enter employment under a master electrician.
5. Qualify for employment opportunities with electrical contractors, electrical equipment suppliers, and industrial maintenance companies.

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Course #	Course Title	Credits
Semester 1		
DRG126	Architectural Drafting and CAD	3
ENG101	College Composition	3
FYE100	First Year Experience	1
REY131	Residential and Commercial Electricity Technology I	2
REY152	Residential and Commercial Electricity Technology II	8
TEC150	Electronic Principles I	3
	Total	20
Semester 2		
MAT106	College Mathematics for Technologies	3
NEC111	National Electrical Code	3
REY181	Residential and Commercial Electricity Technology III	9
REY184	Residential and Commercial Electricity IV	4
TEC151	Electronic Principles II	3
	Total	22
Semester 3		
REY 190	Residential and Commercial Electricity Internship	3
	Total	3