

LANSING COMMUNITY COLLEGE

Computer, Engineering/Manufacturing Industrial Technologies

Curriculum Code: 0759
(Effective Fall 2018 –
Summer 2023)

Electrical Technology, Construction C.A. Pathway

This certificate is designed to provide students with a background in applied electrical theory and the basic mechanical skills necessary to the practicing construction electrician.

For More Information

Contact the Electrical Technology Program at the West Campus Building, Room M127, telephone number (517) 483-1570 or Student Services West Campus, West Campus Building, Room M106, telephone number (517) 267-5452.

Semester I Fall	Course Title	Prerequisites	Credit/Billing Hours
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Program of Study Requirements

Students who have already completed DCTM 102, HVAC 102, METS 102 or WELD 102 with a grade of 2.0 or higher may substitute one of these courses for ELTE 102. Any of these courses may also be used to fulfill the prerequisite for BLDT 120, ELTE 108, ELTE 109, ELTE and ELTE 121.

CITN 115	IoT & Automation Fundamentals	Reading Level 4 and Writing Level 4	5 / 6
ELTE 102	Industrial/Construction Safety	Reading Level 3 and Writing Level 2	2 / 3
ELTE 108 <i>(1st 8 weeks)</i>	Practical Electricity I	Minimum 2.0 in (ELTE 102 or DCTM 102 or HVAC 102 or METS 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 and (Math Level 3 or minimum 2.0 in MATH 105 or MATH 106)	2 / 3
ELTE 109 <i>(2nd 8 weeks)</i>	Practical Electricity II	Minimum 2.0 in ((ELTE 102 or DCTM 102 or HVAC 102 or METS 102 or WELD 102 or concurrently) and (ELTE 108 or concurrently)) and Reading Level 3 and Writing Level 2 and (Math Level 3 or minimum 2.0 in MATH 105 or MATH 106)	2 / 3

Construction Prints and Processes Electives - <i>Select 1</i>			
BLDT 120	Structural Framing	Minimum 2.0 in (DCTM 102 or ELTE 102 or HVAC 102 or METS 102 or WELD 102 or concurrently) and Reading Level 4 and Writing Level 4 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	4 / 6
DCTM 101	Drafting/Intro to CAD	Reading Level 4 and Writing Level 4 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	3 / 4
Credits			14-15 / 19-21
Semester II Spring	Course Title	Prerequisites	Credit/Billing Hours
Program of Study Requirements			
ELTA 105	Elect. Industry Orientation	Reading Level 3	.5 / .5
ELTE 112	Basic Wiring Installation	Minimum 2.0 in (ELTE 109 or ELTE 110 or HVAC 110) and Reading Level 3 and Writing Level 2 and Math Level 3	2 / 3
ELTE 121	Electrical Mathematics	Minimum 2.0 in ((ELTE 102 or DCTM 102 or HVAC 102 or METS 102 or WELD 102) and (ELTE 110 or ELTE 108)) and (minimum 2.0 in MATH 107 or MATH 114 or Math Level 5) and Reading Level 5	5 / 6
ELTE 131	Machine Controls I	Minimum 2.0 in (ELTE 108 or ELTE 110) and Reading Level 3 and Writing Level 2 and Math Level 3	4 / 5
ELTE 141	National Electrical Code I	Minimum 2.0 in (ELTE 109 or ELTE 110 or HVAC 110) and Reading Level 3 and Writing Level 2 and Math Level 3	4 / 4
Credits			15.5 / 18.5

Semester III Fall	Course Title	Prerequisites	Credit/Billing Hours
Program of Study Requirements			
ELTA 180	Introduction to Fire Alarms	Minimum 2.0 in (ELTE 109 or concurrently) and Reading Level 3 and Writing Level 2 and Math Level 3	1 / 1
ELTE 142	National Electrical Code II	Minimum 2.0 in ELTE 141 and Reading Level 3 and Writing Level 2 and Math Level 3	4 / 4
ELTE 145	Electrical Prints for Building	Minimum 2.0 in ELTE 141 and Reading Level 3 and Writing Level 2 and Math Level 3	4 / 5
ELTE 150	Electric Motor Maintenance	Minimum 2.0 in (ELTE 109 or ELTE 110 or HVAC 110) and Reading Level 3 and Writing Level 2 and Math Level 3	2 / 3
Credits			11 / 13
Total Credits			40.5 / 50.5-52.5