



Electrical Technology - Construction C.A.

Career Community: Electrical and Manufacturing

Curriculum Code: 0759

Effective: Fall 2025 – Summer 2030

Purpose of the Major

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.

Milestone

Completion of ELTE 110 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in this course is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in this course.

Additional Information

A student must earn a minimum grade of 2.0 in all courses.

If students have already completed DCTM 102 with a grade of 2.0 or higher, that will satisfy the TECH 102 requirement. DCTM 102 will also fulfill the prerequisite for BLDT 120, ELTE 110, and ELTE 121.

Contact Information

For further information, including career options, course substitutions and waivers, etc., 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.

Major Required Courses

Course Code	Course Title	Credit / Billing Hours
CITN 115	IoT & Automation Fundamentals	5 / 6
ELTA 105	Elect. Industry Orientation	.5 / .5
ELTA 180	Introduction to Fire Alarms	1 / 1
ELTE 110	Practical Electricity	4 / 6
ELTE 112	Basic Wiring Installation	2 / 3
ELTE 121	Electrical Mathematics	5 / 6
ELTE 131	Machine Controls I	4 / 5
ELTE 141	National Electrical Code I	4 / 4
ELTE 142	National Electrical Code II	4 / 4
ELTE 145	Electrical Prints for Building	4 / 5
ELTE 150	Electric Motor Maintenance	2 / 3
TECH 102	General Industry Safety	2 / 3

Major Required Courses, Limited Choice – Select one

Course Code	Course Title	Credit / Billing Hours
BLDT 120	Structural Framing	4 / 6
DCTM 101	Drafting/Intro to CAD	3 / 4

Additional Credits

After completing the course and credit requirements as noted on this pathway, students who fall short of the 30-credit minimum required for a Certificate of Achievement may select any course(s) needed to reach 30 credits, except those courses noted in number 7 in the [Institutional Requirements for Certificates of Achievement](#). Students are encouraged to use Degree Works and meet with an Advisor to ensure all requirements are met and for course recommendations.

Minimum Total Credit Hours

40.5 credits / 50.5 billing hours

Recommended Course Sequence

Semester I (Fall)
CITN 115
ELTE 110 – Milestone course
TECH 102
Limited Choice

Semester II (Spring)
ELTA 105
ELTE 112
ELTE 121
ELTE 131
ELTE 141

Semester III (Fall)
ELTA 180
ELTE 145

Semester IV (Spring)
ELTE 142
ELTE 150

LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree titles, and make course changes as needed, without prior notice. The College also reserves the right to discontinue programs when warranted.