



Electrical Technology - Control Maintenance C.A.

Career Community: Electrical and Manufacturing

Curriculum Code: 0760

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 electrician in the machine control field.

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 the 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 ELTE 110 and ELTE 111.

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
ELTE 110	Practical Electricity	4 / 6
ELTE 111	Intro to Industrial Automation	4 / 6
ELTE 122	Industrial Control Electronics	5 / 7
ELTE 131	Machine Controls I	4 / 5
ELTE 132	Control Panel Assembly	2 / 3
ELTE 150	Electric Motor Maintenance	2 / 3
ELTE 232	Machine Controls II	4 / 6
ELTE 260	Programmable Controllers I	4 / 6
ELTE 261	Programmable Controllers II	6 / 8
METS 160	Introduction to Robotics	3 / 4.5
TECH 102	General Industry Safety	2 / 3

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 credits / 57.5 billing hours

Recommended Course Sequence

Semester I (Fall)
ELTE 110 – Milestone course
ELTE 111
TECH 102
Semester II (Spring)
ELTE 131
ELTE 132
METS 160
Semester III (Fall)
ELTE 150
ELTE 232
ELTE 260
Semester IV (Spring)
ELTE 122
ELTE 261

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.