



Robotics and Automated Technology C.A.

Curriculum Code: 1605

Effective: Fall 2020 – Summer 2025

Description

A student who completes this certificate will be exposed to the elements of automated systems design and installation needed to obtain employment in various settings including those within the manufacturing and industrial sectors. Students will be able to maintain, troubleshoot, test, and repair modern-day equipment having a technologically diverse design.

Additional Information

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

Contact Information

Contact the Center for Manufacturing Excellence at the West Campus Building, 5708 Cornerstone Drive, Lansing MI 48917, Room M103, telephone number 517-483-1104 or by [email](mailto:manufacturing@lcc.edu) (manufacturing@lcc.edu).

Program of Study Required Courses

Course Code	Course Title	Credit / Billing Hours
ELTE 108	Practical Electricity I	2 / 3
ELTE 129	Machine Controls I-A	2 / 2.5
ELTE 130	Machine Controls I-B	2 / 2.5
ELTE 132	Control Panel Assembly	2 / 3
MATH 115	Technical Math II	4 / 4
METD 150	Industrial Blueprint Reading	3 / 3
METM 108	Machine Tool Operations	4 / 6
METS 102	Industrial/Construction Safety	2 / 3
METS 125	Intro to Hydraulics/Pneumatics	4 / 6
METS 145	Automated Systems	3 / 4.5
METS 160	Introduction to Robotics	3 / 4.5

Total Credit Hours

31 credits / 42 billing hours

Recommended Course Sequence

Semester I	Semester II
ELTE 108 (First 8 weeks) ELTE 129 (Second 8 weeks) MATH 115 METD 150 METS 102 METS 160	ELTE 130 (First 8 weeks) ELTE 132 (Second 8 weeks) METM 108 METS 125 METS 145