



Robotics and Automated Technology C.A.

Curriculum Code: 1605

Effective: Fall 2019 – Summer 2024

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 at manufacturing@lcc.edu.

Program of Study Required Courses

| Course Code | Course Title | Credit / Billing Hours |
|-------------|--------------------------------|------------------------|
| ELTE 108 | Practical Electricity I | 2 / 3 |
| ELTE 109 | Practical Electricity II | 2 / 3 |
| ELTE 131 | Machine Controls I | 4 / 5 |
| MATH 115 | Technical Math II | 4 / 4 |
| METD 150 | Industrial Blueprint Reading | 3 / 3 |
| METS 102 | Industrial/Construction Safety | 2 / 3 |
| METS 110 | Mechanical Power Transmissions | 4 / 6 |
| 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 131 |
| ELTE 109 (Second 8 weeks) | METS 110 |
| MATH 115 | METS 125 |
| METD 150 | METS 145 |
| METS 102 | |
| METS 160 | |