

LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

Robotics and Automated Technology
Certificate of Achievement

Curriculum Code: 1605 (Effective Fall 2017 – Summer 2022)

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.

PREREQUISITES

Students should see [Course Descriptions](#) for course prerequisite information. See [Academic Assessment and Placement Testing for Student Success](#) for skills assessment and advising information.

INFORMATION

Contact the Center for Manufacturing Excellence, West Campus Building, 5708 Cornerstone Drive, Lansing MI 48917, Room M103, telephone number (517) 483-1104 or by email at manufacturing@lcc.edu. View our website at <http://www.lcc.edu/cme/> for more information.

REQUIREMENTS

TOTAL: 34 CREDITS

| CODE | TITLE | CREDIT HOURS |
|----------------------|---|--------------|
| ELTA 120 | AC Fundamentals – Electrician | 2 |
| ELTE 108 | Practical Electricity I (See Note 1) | 2 |
| ELTE 131 | Machine Controls I (See Note 1) | 4 |
| ENGL 124 | Technical Writing | 3 |
| MATH 115 | Technical Math II | 4 |
| METD 150 | Industrial Blueprint Reading | 3 |
| METS 102 | Industrial/Construction Safety (See Note 1) | 2 |
| METS 110 | Mechanical Power Transmissions (See Note 1) | 4 |
| METS 125 | Intro to Hydraulics/Pneumatics (See Note 1) | 4 |
| METS 145 | Automated Systems (See Note 1) | 3 |
| METS 160 | Introduction to Robotics (See Note 1) | 3 |
| MINIMUM TOTAL | | 34 |

NOTES:

1. 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 classes may also be used to fulfill the prerequisite for ELTE 108 and all the METS courses on this curriculum.
2. To receive a certificate of achievement from Lansing Community College, a student must maintain a grade point average of 2.0 or above in the courses required for the certificate.

SUGGESTED COURSE SEQUENCE

Students should see course descriptions to find out when departments plan to offer courses. Students who for any reason are unable to follow the course sequence suggested below (for example, those who are part-time, have transferred in courses from another school, or have prerequisites to fulfill) should contact an academic advisor for help with adjustments.

| I | II |
|----------|-----------|
| ELTA 120 | ELTE 131 |
| ELTE 108 | METS 110 |
| ENGL 124 | METS 125 |
| MATH 115 | METS 145 |
| METD 150 | METS 160 |
| METS 102 | |