



Mechanical Systems C.A.

Career Community: Electrical and Manufacturing

Curriculum Code: 0147

Effective: Fall 2025 – Summer 2030

Purpose of the Major

This program provides technical knowledge and skills in the adjustment, maintenance, part replacement, and repair of tools, equipment and machines. It prepares an individual for an entry-level position.

Milestone

Completion of METD 150 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 the ELTE and METS courses.

Students may substitute ELTE 129 and ELTE 130 for ELTE 131.

Contact Information

For further information, including career options, course substitutions and waivers, etc., contact the Trades Technology Program, West Campus Building, Room M103, telephone number 517-483-5338, email manufacturing@lcc.edu 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 131 | Machine Controls I | 4 / 5 |
| MATH 115 | Technical Mathematics | 4 / 4 |
| METD 150 | Industrial Blueprint Reading | 3 / 3 |
| METS 110 | Mechanical Power Transmissions | 4 / 6 |
| METS 120 | Industrial Pneumatics | 4 / 6 |
| METS 130 | Industrial Hydraulics | 4 / 6 |
| 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

32 credits / 43.5 billing hours

Recommended Course Sequence

| Semester I |
|-----------------------------|
| ELTE 110 |
| MATH 115 |
| METD 150 – Milestone course |
| METS 120 |
| TECH 102 |

| Semester II |
|-------------|
| ELTE 131 |
| METS 110 |
| METS 130 |
| METS 160 |

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.