

LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

Industrial Manufacturing Engineering Technology
Associate in Applied Science Degree

Curriculum Code: 0110 (Effective Fall 2015 – Summer 2020)

Industrial manufacturing engineering technology is the study of a variety of technologies used in today's industry. Physical and mental skills are required including mechanical skills, problem-solving abilities, and dexterity. Employment opportunities are with industries that have a variety of work processes and/or trades. **Not all courses in this program transfer to all colleges.** Students planning to transfer should see an academic advisor before enrolling in any course.

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 Applied Manufacturing Technologies Program, West Campus Building, Room M103, telephone number (517) 483-5338 (Website: www.lcc.edu/manufacturing/) or Student Services West Campus, West Campus Building, Room M106, telephone number (517) 267-5452.

REQUIREMENTS (See Notes 1 and 2)

TOTAL: 64 CREDITS

| CODE | TITLE | CREDIT HOURS |
|----------|---|--------------|
| ELTE 102 | Industrial/Construction Safety (See Note 3) | 2 |
| ELTE 110 | Practical Electricity (See Note 3) | 3 |
| MATH 141 | Calculus with Applications (See Note 4) | 4 |
| METD 105 | PC Applications for Technology | 3 |
| METD 110 | Mechanical CAD Drafting I (See Note 2) | 4 |
| METD 130 | Geometric Dimension/Tolerance (See Note 2) | 4 |
| METD 220 | Basic Unigraphics/NX | 4 |
| METM 100 | Manufacturing Processes | 3 |
| METM 110 | Intro to Precision Machining (See Note 2) | 4 |
| METM 190 | Metallurgy and Heat Treatment | 4 |
| METS 120 | Industrial Pneumatics (See Note 3) | 4 |
| METS 130 | Industrial Hydraulics (See Note 3) | 4 |
| METS 140 | Rigging (See Note 3) | 3 |
| PHYS 221 | Introductory Physics I (See Note 4) | 4 |

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|----------|-------------------------------|---|
| POLS 260 | Comparative Political Systems | 3 |
| SPCH 130 | Fund of Public Speaking | 3 |
| WELD 103 | Combination Welding | 4 |
| WRIT 121 | Composition I | 4 |

LIMITED CHOICE REQUIREMENTS

TOTAL: 0 CREDITS

Complete the indicated number of credits from **EACH CHOICE** listed below.

CHOICE 1: [General Education Core Areas](#)

0 Credits

(Click the link above for information on how to fulfill these requirements. Core area proficiency exams, where appropriate, are available for each core area.)

| | |
|--|---|
| Communication Core Area (See Note 5) | 0 |
| Global Perspectives and Diversity Core Area (See Note 5) | 0 |
| Mathematics Core Area (See Note 5) | 0 |
| Science Core Area (See Note 5) | 0 |
| Writing Core Area (See Note 5) | 0 |

MINIMUM TOTAL

64

NOTES:

1. It is highly recommended that students work with an advisor before beginning this curriculum which assumes high level math placement.
2. Basic mechanical drafting skills are necessary to begin this curriculum and may be demonstrated by a score of 80% or better on the Drafting Placement Test or by passing METD 100 with a 2.0 minimum grade.
3. Students who have already completed DCTM 102, HVAC 102, METS 102 or WELD 102 with a grade of 2.0 or higher may substitute one of these courses for ELTE 102. Any of these courses may also be used to fulfill the prerequisite for ELTE 110, METS 120, METS 130 and METS 140.
4. Students will need Math Level 7 for MATH 141 and Math Level 9 for PHYS 221. Math levels can be established by placement test or by completing MATH course work as indicated in each course prerequisite.
5. Students completing "REQUIREMENTS" have fulfilled the requirements for this Core area.

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 | III | IV |
|----------|----------|----------|----------|
| ELTE 102 | ELTE 110 | MATH 141 | METM 190 |
| METD 105 | METD 130 | METD 220 | METS 130 |
| METD 110 | METM 110 | METS 140 | PHYS 221 |
| METM 100 | METS 120 | WELD 103 | WRIT 121 |
| SPCH 130 | POLS 260 | | |