

LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

Industrial Manufacturing Engineering Technology
Associate in Applied Science Degree

Curriculum Code: 0110 (Effective Fall 2011 – Summer 2016)

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* or *Course Offerings* for course prerequisite information. See the *Assessment and Placement Testing* section 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)

CODE	TITLE	TOTAL: 66 CREDITS 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)	3
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)	3
METD 220	Basic Unigraphics/NX	4
METM 100	Manufacturing Processes	3
METM 105	TQM in Manuf & Production	4
METM 110	Intro to Precision Machining (See Notes 1 and 2)	4
METM 115	Introduction to Plastics	3
METM 130	Issues in Global Manufacturing	4
METM 190	Metallurgy and Heat Treatment	4
METS 130	Industrial Hydraulics (See Note 3)	4
PHYS 221	Introductory Physics I (See Note 4)	4
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***(See General Education Core Requirements 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**66****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 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 four courses may also be used to fulfill the prerequisite for ELTE 110, and METS 130.
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.
6. This program is the first two years of a 3 + 1 agreement with Ferris State University for a Bachelor of Applied Science Degree in Industrial Technology and Management. See the transfer guide entitled Industrial Technology and Management 3 + 1, Ferris State University LCC Campus, curriculum guide #1230.

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	METD 220	PHYS 221
METD 105	METD 130	METM 115	METM 190
METD 110	METM 105	METM 130	METS 130
METM 100	METM 110	MATH 141	WRIT 121
SPCH 130	POLS 260	WELD 103	