

# MANUFACTURING INDUSTRIAL ENGINEERING TECHNOLOGY

Code	Title	Credit Hours
MATH-1530	College Algebra <sup>1</sup>	4
MET-1100	Technology Orientation	2
MET-1230	Drawing & AutoCAD <sup>2</sup>	3
MET-1120	Computer Applications and Programming	2
MET-1240	Machine Tools and Manufacturing Processes	3
Select one of the following:		3
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	
MATH-1540	Trigonometry <sup>1</sup>	3
MET-1300	Engineering Materials and Metallurgy	3
MET-1250	Introduction to Additive Manufacturing	3
MET-1410	Computer Aided Manufacturing Processes	3
MET-2601	3D Solid Modeling	3
MET-1261	Product Ideation & Design I	3
MET-1270	Additive Manufacturing Processes	3
MET-2160	3D Scanning, Reverse Engineering, and Quality Inspection	3
PHYS-1210	College Physics I <sup>3</sup>	4
Select one of the following:		
ENG-1020	College Composition II	
ENG-102H	Honors College Composition II	
ENG-2151	Technical Writing	
Select one of the following:		3-4
MET-2151	3D Digital Design & Printing	
PHYS-1220	College Physics II <sup>4</sup>	
MET-2422	Fundamentals of Engineering Economics	3
MET-2410	Quality Control and Lean Manufacturing	3
MET-2990	Product Development and Manufacture	3
Arts & Humanities/Social & Behavioral Sciences requirements		3

<sup>1</sup> MATH-1580 Precalculus or MATH-1610 Calculus I will be accepted in place of MATH-1530 College Algebra & MATH-1540 Trigonometry but an additional 2 credit hours of general electives may be needed.

<sup>2</sup> MET-1220 and MET-1200 together will be accepted in place of MET-1230 Drawing & AutoCAD.

<sup>3</sup> PHYS-2310 General Physics I will be accepted in place of PHYS-1210 College Physics I. PHYS-2310 General Physics I is recommended for students planning to transfer.

<sup>4</sup> PHYS-1220 College Physics II is recommended for students planning to transfer to a four-year program.

Students should select either a Cultural Sensitivity or a Civic Responsibility elective to fulfill their Arts and Humanities/Social and Behavioral Science Requirement.

## Cultural Sensitivity Electives

Code	Title	Credit Hours
<b>ARTS AND HUMANITIES</b>		
DANC-1100	Dance Appreciation	3
ENG-2430	Introduction to Literature: Drama <sup>1</sup>	3
ENG-2510	African-American Literature I <sup>1</sup>	3
ENG-2520	African-American Literature II <sup>1</sup>	3
ENG-2601	Literature for Children and Adolescents <sup>1</sup>	3
ENG-2700	World Literature <sup>1</sup>	3
ENG-2730	Exploration of World Mythology <sup>1</sup>	3
HIST-2031	Islam to the Modern Middle East	3
HUM-1010	Introduction to Humanities	3
HUM-1020	The Individual in Society	3
HUM-102H	Honors Individual in Society	3
HUM-1030	The Individual in Cosmos	3
THEA-1010	Theatre Appreciation	3
THEA-2210	History of Theatre and Drama I	3
THEA-2220	History of Theatre & Drama II	3
<b>SOCIAL AND BEHAVIORAL SCIENCES</b>		
ANTH-1010	Cultural Anthropology	3
ANTH-2010	Peoples and Cultures of the World	3
HIST-1010	History of Civilization I	3
HIST-1020	History of Civilization II	3
HIST-1510	United States History to 1877	3
POL-2070	International Relations	3
PSY-1010	General Psychology	3
PSY-2020	Life Span Development	4
SOC-2100	Aging and Society	3
SOC-2410	Sociology of Gender	3
SOC-2550	Race and Ethnic Relations	3

## Civic Responsibility Electives

Code	Title	Credit Hours
<b>ARTS AND HUMANITIES</b>		
HUM-1020	The Individual in Society	3
HUM-102H	Honors Individual in Society	3
HUM-1030	The Individual in Cosmos	3
PHIL-1000	Critical Thinking	3
PHIL-2050	Bioethics	3
<b>SOCIAL AND BEHAVIORAL SCIENCES</b>		
GEOG-2030	Environmental Geography	3
HIST-1510	United States History to 1877	3
HIST-1520	United States History Since 1877	3
HIST-152H	Honors United States History since 1877	3
POL-1010	American National Government	3
POL-101H	Honors American National Government	3
POL-1020	State & Local Government	3
POL-2030	Comparative Politics	3
POL-2070	International Relations	3
UST-1010	Introduction to Urban Studies	3

MATH-1140, MATH-1141, MATH-1200, MATH-1270, and MATH-1280 can no longer count towards fulfilling the college-level mathematics requirement. These courses were re-classified as developmental mathematics by the state of Ohio in 2016. Tri-C established a 5-year transitioning window for students who had completed these courses prior to 2016 to apply them towards meeting graduation requirements, which expired in Summer 2021. It is highly recommended to see a counselor to determine the appropriate math required for your current major.

## Related Degrees and Certificates

- Digital Design & Product Innovation, Short-Term Certificate
- Digital Manufacturing and Product Launch, Short-Term Certificate
- 3D Digital Design & Manufacturing Technology, Certificate of Proficiency
- Computer-Aided Drafting (CAD), Certificate of Proficiency
- Computer-Integrated Manufacturing (CIM), Certificate of Proficiency
- Industrial Management Technology, Certificate of Proficiency
- Machine Tools Operation, Certificate of Proficiency
- Quality Control, Certificate of Proficiency
- Manufacturing Industrial Engineering Technology, Associate of Applied Science

## Training and Credentials

- CNC Technology Certificate Program
- Computer Aided Design (CAD)
- Right Skills Now CNC Operations Program
- Manufacturing Technical Readiness Program
- Nondestructive Testing (NDT) and Quality Assurance (QA)