

MANUFACTURING ENGINEERING

Manufacturing Technology Major

TECHNOLOGY & WORKFORCE DEVELOPMENT DIVISION

Program of Study

The Manufacturing Technology major provides a structured yet flexible degree path for those interested in developing hands-on skills in various aspects of an organization.

The core technical courses cross CAD, Electrical, Manufacturing and Mechanical areas. Students will take three additional courses, listed as Technical Elective, in the area of their interest.

Two of the three technical electives must be 2000 level courses. If you are unsure, ask your advisor.

This major is ideal for individuals who have completed or are working on an apprenticeship program and would like to complete an associate degree.

The faculty has identified the following Learning Outcomes for all graduates:

- Prepare drawing on Computer-Aided Design (CAD) to completely describe a part for manufacture, including views and tolerances.
- Produce parts using various types of manual machines.
- Inspect parts that were produced using various types of tools.

POTENTIAL OCCUPATIONS:

- Machine Repair
- Maintenance Mechanic
- Millwright
- Machinist

Associate of Applied Science

TECHNICAL CONCENTRATION

		Credit Hrs.
CAD 1110	CAD I	3
EET 1050	Electricity	3
MET 1080	Manufacturing Systems	3
MET 1130	Manufacturing Processes I	2
MET 1140	Manufacturing Processes Lab	2
MET 2200	Hydraulics I	3
MET 2600	Mechanical Power Transmission	3
MFG 1020	Safety	1
ROB 1010	Introduction to Robotics	3
	Technical Elective	3
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	Total Technical Credit Hours	32

GENERAL EDUCATION AND RELATED COURSES

GEN 1000	First-Year Seminar	1
ENG 1050	College Composition I	3
ENG 1900	Technical Writing	3
MGT 2300	Process Improvement & LEAN Manufacturing	3
MTH 1150	Math for the Trades	4
PHY 1070	Survey of Physics	3
PHY 1075	Survey of Physics Lab	1
QCT 1020	Blueprint Reading	2
SPE 2010	Effective Speaking	3
	*Humanities Elective	3
	*Social Science Elective	3
	Total General Education & Related Credit Hours	29

TOTAL CREDIT HOURS **61**

- * See page 95 for a listing of specific electives.
See your advisor for appropriate course selection.

For available Certificate Program options, see catalog pages 97-103.

- ** All students graduating from Terra State Community College with an Associate degree of any kind will be functionally proficient in common computer operations and applications. Please see your academic advisor or academic division office for further details.

To determine when courses are scheduled, see program curriculum sheet which is available from the Enrollment Services office in Building A/Room 100, from the Technology and Workforce Development Division office, Building E, Room 107 or on the web at www.terra.edu.