

Manufacturing Technology



HEARTLAND
COMMUNITY COLLEGE

Associate in Applied Science 62-64 Semester Hours

General Education Requirements

COMM 101	Intro to Oral Communication	3 hrs.
ENGL 101	Composition I	3
MATH 109	College Algebra	4
Or		
TMAT 103	Technical Mathematics I	4
MATH 128	Trigonometry	3
Or		
TMAT 105	Technical Mathematics II	4
Physical Science Elective		4
Social Science/Humanities Elective		<u>3</u>
TOTAL		20-21

Technical Core Requirements

CAD 101	Introduction to AutoCAD	3
CSCI 101	Intro to Computer Information Science	4
MFTG 110	Manufacturing Processes	3
MAIN 101	Industrial Electricity & Systems	3
TECH 114	Introduction to Technical Graphics	<u>3</u>
TOTAL		16

Planning & Quality Option

MFTG 215	Statistics & Quality Control	3
MFTG 216	Statistical Process Control	2
MTRL 101	Basics of Supply Chain Management	3
MTRL 210	Master Planning of Resources	3
MTRL 220	Detailed Scheduling and Planning	3
MTRL 230	Execution and Control of Operations	3
BUSN 170	Supervision	3
BUSN 220	Principles of Management	3
Technical Elective		<u>3</u>
TOTAL		26

Machine Tool Design Option

CAD 110	CAD Software Applications	3
CAD 215	CAD Design with Parametric Modeling	4
MFTG 120	Computer Numerically Controlled Manufacturing	4
MTT 101	Machine Tool I	4
MTT 110	Toolmaking I	3
MTT 150	Ferrous Metallurgy	3
MTT 201	Machine Tool II	3
MTT 210	Toolmaking II	3
Technical Elective*		<u>3</u>
TOTAL		27

*CAD 224, CAD 240 and MTT 150 are recommended as Technical electives for this option.

Program Description:

Manufacturing Technology is a comprehensive program designed to prepare graduates for employment or advancement in industrial/manufacturing organizations as technicians, engineering aids or first-line supervisors. Students will learn the processes involved in mass production, the planning, quality control, material selection, tools and equipment, and how to inspect and handle parts, equipment, and the finished product.



Updated 02/17/10