

Maintenance Technology



HEARTLAND
COMMUNITY COLLEGE

Associate in Applied Science 63-64 Semester Hours

General Education Requirements

COMM 101	Intro to Oral Communication	3 hrs.
ENGL 101	Composition I	3
MATH 109	College Algebra for Math & Science	4
Or		
TMAT 103	Technical Mathematics I	4
MATH 128	Trigonometry	3
Or		
TMAT 105	Technical Mathematics II	4
Physical Science		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
MAIN 101	Industrial Electricity & Systems	3
MFTG 110	Manufacturing Processes	3
TECH 114	Intro to Technical Graphics	<u>3</u>
TOTAL		16

Technical Electives

Specialty Electives** (See option areas below)
TOTAL 27-28

Industrial Maintenance Option

MAIN 102	Mechanical Systems	3
MAIN 202	Fluid Power Systems	3
MAIN 220	Machine Installation & Maintenance	3
MAIN 222	Industrial Controllers	3
MTT 101	Machine Tool I	4
MTT 201	Machine Tool II	3
WELD 110	Maintenance Welding	3
Electives**		<u>6</u>
TOTAL		28

Electrical Maintenance Option

ELTC 102	DC Electronics	3
ELTC 103	AC Electronics	3
ELTC 206	Digital Electronics & Microprocessors	3
ELTC 207	Solid State Electronics Troubleshooting and Measurements	3
ELTC 212	Automation and Control Electronics	3
ELTC 220	Data Communications	3
MAIN 201	Electrical Wiring & Maintenance	3
MAIN 222	Industrial Controllers	3
Elective**		<u>3</u>
TOTAL		27

** Electives as approved by advisor or department

Facilities Maintenance Option

CNST 101	Construction Materials & Methods	3
CNST 103	Building Mechanics	3
CNST 113	Construction Documents & Quantity Takeoff	3
MAIN 104	Air Conditioning & Refrigeration	3
MAIN 221	Heating Systems	3
REEC 110	Green Building Technology	3
Electives**		<u>9</u>
TOTAL		27

Note:

Students are encouraged to pursue a certificate program in conjunction with the A.A.S. degree. Other electives may be taken as approved by an advisor or the department.

Program Description & Career Opportunities

The Maintenance Technology Associate in Applied Science Degree is a two-year program designed to prepare graduates for a position in industrial and facility maintenance or management. This program includes introductions to industrial electricity and wiring, mechanical applications, welding, hydraulic and pneumatic equipment, and heating and air conditioning systems.

Upon completion of the program, students will be qualified for entry-level or apprenticeship positions as truck and heavy equipment mechanics, oilers, machinists, tool and die makers, plumbers and pipe fitters, iron workers, public utilities/industrial maintenance workers and facility technicians.

Maintenance technicians install and repair industrial machinery and install new machinery based on blueprints. Maintenance mechanics, also known as industrial machine repairers and millwrights, keep equipment in sound operating condition. Heartland Community College's Maintenance Technology program will provide students with knowledge of blueprint reading, use and care of tools and equipment, welding, basic carpentry, rigging and scaffolding, machine shop practices and shop math. They will also learn the skills to fit bearings, align gears, connect motors and belts; learn to work with wood, steel, concrete as well as other building materials; and learn to dismantle existing equipment.

