

# Industrial Maintenance Technology

Industrial Maintenance Technology Associate in Applied Science Degree

Somerset Community College  
Program Overview

somerset.kctcs.edu

## PROGRAM ADVISORS

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## CAREER OPTIONS:

The Industrial Maintenance Technology program at Somerset Community College was designed to prepare entry level multi-skilled industrial technicians wishing to pursue a career in the field of industrial manufacturing equipment maintenance, troubleshooting, and repair. Successful graduates in the program should be able to maintain and prepare production equipment in the areas of mechanical, electrical, and hydraulic systems.

## PROGRAM DETAILS

The Industrial Maintenance Technology program at Somerset Community College offers students a comprehensive, action-based technical education program. This program was designed to give the student the knowledge and skills needed to safely and efficiently perform the maintenance tasks that are necessary to maintain the machinery and associated equipment that are common to local industry.

An understanding of the requirements and opportunities in maintenance, good safety practices, pride in workmanship, and an understanding of the principles and accepted practices of the maintenance trade are covered in this program. Students are trained to hold positions in factories, automated manufacturing facilities, energy production plants, stamping facilities, hospitals, etc., where multi-skilled maintenance personnel are needed. Included are courses in industrial electricity, motor controls, programmable logic controllers, welding, general maintenance, fluid power, metal fabrication, and machine tool. Progression in the Industrial Maintenance Technology program is contingent upon achievement of a grade of "C" or better in each technical course and maintenance of a 2.0 cumulative grade point average or better (on a 4.0 scale).

The program offers a 68 credit-hour Associate in Applied Science degree as well as a diploma and 7 certificate options.

The program incorporates 21 credit hours in general studies, 34 credit hours in the major core of industrial maintenance and 13 hours of electives that will allow the students to acquire a broad exposure to the industrial maintenance field.

The electives allow students and employers to customize a program to meet their specific needs. The electives may be taken in a broad array of classes including, but not limited to, maintenance machining, presswork and die maintenance, programmable logic controllers, and electrohydraulics.

## INDUSTRIAL TECHNOLOGY CREDENTIALS:

### CERTIFICATES:

- Industrial Maintenance Machinists Mechanic (19-21 credit hours)
- Industrial Maintenance Electrical Mechanic (12-15 credit hours)
- Industrial Maintenance Mechanic Level I (13-15 credit hours)
- Industrial Maintenance Mechanic Level II (22-26 credit hours)
- Industrial Maintenance Robotics Technician (25-29 credit hours)
- Electro-hydraulic Technician (13-15 credit hours)
- Fluid Power Mechanic (8-10 credit hours)

### DIPLOMA:

- Industrial Maintenance Technician (48-53 credit hours)

### DEGREE:

- Associate in Applied Science (AAS) Degree in Industrial Maintenance Technology (60-68 credit hours)

## PROGRAM NOTES:

- Industrial Maintenance Technology was recently listed by KCTCS in the 2010-2016 Strategic Plan as a High Wage / High Demand job!
- Upon completion of the program, graduates are offered the opportunity to gain national certification through the AMTEC and NOCTI end of program assessments.
- This program is offered at SCC's Somerset Campus and Laurel Campus.



**SOMERSET**  
COMMUNITY COLLEGE

# Industrial Maintenance Technology

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Advising Planner

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## REQUIRED COURSES

### GENERAL EDUCATION REQUIREMENTS (21 HOURS) Credit

ENG 101	Writing I . . . . .	3
MAT 116	Technical Mathematics . . . . .	3
	Science . . . . .	3
	Heritage/Humanities . . . . .	3
	Social Interaction . . . . .	3
	Oral Communication . . . . .	3
	Computer Literacy . . . . .	3

### TECHNICAL COURSES REQUIRED (34 HOURS)

BRX 120	Basic Blueprint Reading. . . . .	3*
FPX 100	Fluid Power. . . . .	3
FPX 101	Fluid Power Lab . . . . .	2
IMT 110	Industrial Maintenance Electrical Principals . . . . .	3
IMT 111	Industrial Maintenance Electrical Principals Lab . . . . .	2
IMT 150	Maintaining Industrial Equipment I . . . . .	3
IMT 151	Maintaining Industrial Equipment I Lab . . . . .	2
IMT 220	Industrial Maintenance Electrical Motor Controls I . . . . .	3
IMT 221	Industrial Maintenance Electrical Motor Controls I Lab. . . . .	2
IMT 280	Advanced Programmable Logic Controllers I. . . . .	3
IMT 281	Advanced Programmable Logic Controllers I Lab . . . . .	2
IMT 100	Welding for Maintenance AND . . . . .	3
IMT 101	Welding for Maintenance Lab OR . . . . .	2
WLD 120	Shielded Metal Arc Welding AND. . . . .	(3)
WLD 121	Shielded Metal Arc Welding Lab . . . . .	(2)
IMT 289	Industrial Maintenance Technology Capstone . . . . .	1*

### TECHNICAL ELECTIVES\* (13-15 HOURS)

- To receive an Associate in Applied Science degree, students must complete thirteen (13) credit hours of electives from the approved list. This list is NOT all inclusive. Other technical elective courses may be taken with approval of the program instructor/advisor.
- To receive a diploma, students must complete fifteen (15) credit hours of electives from the approved list. This list is NOT all inclusive. Other technical elective courses may be taken with approval of the program instructor/advisor.

IMT 115	Maintenance Machining I. . . . .	2
IMT 116	Maintenance Machining I Lab . . . . .	5
IMT 200	Industrial Robotic and Robotic Maintenance . . . . .	4
MST 206	Electrohydraulics . . . . .	3
MST 207	Electrohydraulics Lab . . . . .	2

\*Online Courses

TOTAL HOURS FOR PROGRAM – 68

## SEMESTER COURSE LISTING

### SEMESTER ONE (18 HOURS)

IMT 110  
IMT 111  
IMT 220  
IMT 221  
IMT 100  
IMT 101  
Gen Ed

### SEMESTER TWO (18 HOURS)

BRX 120  
IMT 115  
IMT 116  
IMT 280  
IMT 281  
Gen Ed

### SEMESTER THREE (19 HOURS)

FPX 100  
FPX 101  
IMT 150  
IMT 151  
Gen Ed  
Gen Ed  
Gen Ed

### SEMESTER FOUR (13 HOURS)

Technical Electives  
(6 hours minimum) as approved by advisor /  
program coordinator.  
Gen Ed  
Gen Ed

TOTAL HOURS FOR PROGRAM – 68

Notes: