



# INDUSTRIAL MAINTENANCE TECHNOLOGY

## Program Description & Curriculum

### About the Program

The purpose of this program is to provide specialized classroom instruction and practical shop experience to prepare students for employment in a variety of jobs in the industrial maintenance field.

The Industrial Maintenance Technology program prepares individuals to install, repair, and maintain industrial machinery and equipment such as pumps, motors, pneumatic and hydraulic systems, and production machinery. It includes instruction in testing, adjusting, and repairing pneumatic and hydraulic systems, attaching supplemental equipment such as

hoses, valves, gates, mechanical, electrical, and electronic control devices. It also includes instruction in material handling equipment, pipefitting, welding, metal fabrication, and millwright.

### Degrees/Certificates

- Associate of Applied Science (AAS)
- Technical Diploma (TD)
- Certificate of Technical Studies (CTS)
- Technical Competency Area (TCA)

*Available degrees and certificates may vary at each campus. Check with your local campus for more information.*

**CIP 470303**

<b>INDUSTRIAL MAINTENANCE TECHNOLOGY</b>				
<b>Course #</b>	<b>Course Title</b>	<b>Lecture/Lab Hours</b>	<b>Credit Hours</b>	<b>Clock Hours</b>
IMMT1013	Workplace Safety & Orientation	3/0	3	45
IMMT1102	Introduction to Industrial Maintenance Technology	0/2	2	30
CPTR1005	Computer Literacy*	3/0	3	45
IMMT1102	Blueprint Reading I	2/0	2	30
<b>TCA - Maintenance Helper</b>			<b>10</b>	<b>150</b>
IMMT1123	Introductory Welding*	0/3	3	90
IMMT1133	Technical Mathematics*	3/0	3	45
IMMT1142	Basic Electricity	0/2	2	30
IMMT1143	Material Handling/Rigging	1/2	3	45
IMMT1122	Blueprint Reading II*	2/0	2	30
IMMT1153	Plant Equipment	1/2	3	45
CPTR1112	Computer Fundamentals for Technology*	2/0	2	45
IMMT1163	Problem Solving and Teamwork*	3/0	3	45
JOBS2450	Job Seeking Skills	2/0	2	30
<b>Industrial Maintenance Technician (Core Courses) Total</b>			<b>33</b>	<b>555</b>
<b>CTS-General Technician</b>			<b>33</b>	<b>555</b>
<i>There are two concentrations available within the <b>Industrial Maintenance Technician Technical Diploma</b>: Mechanical Technician and/or Electrical Technician.</i>				
<b>Mechanical Technician Concentration</b> (requires the successful completion of the Industrial Maintenance Technician (Core Courses) and the following courses.				
IMMT2103	Introductory Machining*	1/2	3	45
IMMT2113	Hydraulic/Pneumatic Systems*	1/2	3	45
IMMT2123	Pumps, Pipefitting, & Piping Systems*	1/2	3	45
IMMT2133	Machine Maintenance & Installation*	1/2	3	45
<b>Electrical Technician Concentration</b> (requires the successful completion of the Industrial Maintenance Technician (Core Courses) and the following courses.				
IMMT2143	Electronics I*	0/2	2	45
IMMT2152	Instrumentation*	0/2	2	45
IMMT2163	Programmable Controllers	0/2	2	45

IMMT2173	Monitoring & Communications Systems*	1/2	3	45
IMMT2153	Motor Controls	1/2	3	45
<b>TD-Industrial Maintenance Technician</b>			<b>45</b>	<b>Varies<sup>1</sup></b>
<i>Any Technical Diploma (TD) Concentration PLUS the following general education courses will result in an Associate of Applied Science Degree in Industrial Maintenance Technology.</i>				
ENGL1015	English Composition**	0/3	3	45
MATH1015	College Algebra**	0/3	3	45
PSYC2015	Introduction to Psychology**	0/3	3	45
PHSC1015	Physical Science**	0/3	3	45
SPCH1015	Introduction to Public Speaking**	0/3	3	45
<b>AAS-Industrial Maintenance Technology</b>			<b>60</b>	<b>Varies<sup>2</sup></b>
<i>Additional Course Recommendations</i>				
CSRV1000	Customer Service	3/0	3	45
CSRV2000	Customer Service and Sales	3/0	3	45
ENTP1000	Foundations of Entrepreneurship	3/0	3	45
<i>The following courses may be substituted for the above course requirements with approval from the College's Chief Academic Officer:</i>				
SPPR2991	Special Projects I	0/1	1	30
SPPR2993	Special Projects II	0/2	2	60
SPPR2995	Special Projects III	0/3	3	90
SPPR2996	Special Projects IV	3/0	3	45
SPPR2997	Practicum	0/3	3	135
SPPR2999	Cooperative Education	0/3	3	135
SPPR2998	Special Projects V	1/0	1	15
<sup>1</sup> Clock hours for the Mechanical Concentration (TD) totals 735 hours. Clock hours for the Electrical Concentration (TD) totals 780 hours. <sup>2</sup> Clock hours for the Mechanical Concentration (AAS) totals 960 hours. Clock hours for the Electrical Concentration (AAS) totals 1005 hours. *New Course **General Education Courses required for completion of the Associate of Applied Science credential. These courses may be taken concurrently with IMMT courses as long as appropriate course prerequisites have been satisfied.				