



2016-2017 Certificate

Certificate: **MANUFACTURING MAINTENANCE (90-628-1)**

Credits: **18 Credits**

Description: This certificate introduces students to the maintenance functions of automated manufacturing, laws of mechanics and principles of physics, physical laws of compression, electronics, motor controls and ladder logic, operation of Programmable Logic Controllers (PLC), and diagnostics, troubleshooting, and interfacing the PLC to other controls, networks, and devices. This certificate leads to careers as maintenance technicians, maintenance supervisors, managers in technically-oriented companies, or industrial technicians. With proper use of electives, all courses in this certificate may be applied to the Automated Manufacturing Systems Technician associate degree.

Related program: Automated Manufacturing Systems Technician

Campuses Available: Elkhorn, iMET, Lakeview and Racine

REQUIRED COURSES

<input checked="" type="checkbox"/> Semester One	<u>Credits</u>	<u>Prerequisite</u>	<u>Corequisite</u>
<input type="checkbox"/> 605-113 DC/AC I	3		
<input type="checkbox"/> 612-102 Pneumatics/Hydraulics, Introduction	3		
<input type="checkbox"/> 620-103 Intro to Industrial Controls	4		605-113
<input type="checkbox"/> 628-109 Mechanical Skills for Technicians	3		
<input checked="" type="checkbox"/> Semester Two	<u>Credits</u>	<u>Prerequisite</u>	<u>Corequisite</u>
<input type="checkbox"/> 628-100 Automated Manufacturing Concepts/Intro	2		
<input checked="" type="checkbox"/> Semester Three	<u>Credits</u>	<u>Prerequisite</u>	<u>Corequisite</u>
<input type="checkbox"/> 442-101 Welding Basics OR	1 OR		
<input type="checkbox"/> 442-102 Introduction to Welding	2		
<input type="checkbox"/> 620-140 Programmable Controllers	2	602-103	
Total Credits	18		

NOTE: Students must complete a certificate program with a minimum of a 2.0 Program GPA.

NOTE: Prerequisites can be waived with departmental approval.