



Internal Certificate **2013-2014**

**Automated Manufacturing Systems Technician
Elkhorn-Lakeview Campuses**

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

20 Credits

- 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.

REQUIRED COURSES

Course Number	Course Title	Credits	Sequence
628-100	Intro to Automated Manufacturing	2	1
442-101	Welding Basics	1	1
605-113	DC/AC	3	1
628-109	Mechanical Skills for Technicians	3	2
620-103	Intro to Industrial Controls (Coreq. 605-113)	4	2
612-102	Pneumatics/Hydraulics - Introduction	3	3
620-140	Programmable Controllers (Prereq. 620-103)	2	3
606-111	Blueprint Reading	+2	3
		<u>20</u>	

NOTE: Students must complete a certificate program with a minimum of a 2.0 Program GPA.
NOTE: Prerequisites can be waived with departmental approval.