## Industrial Maintenance/Instrumentation, A.A.S.

Program Code AAS-ADMA-IMIN CIP 15.0613 Type A.A.S.

The Associate in Applied Science degree in Advanced Manufacturing with a concentration in Industrial Maintenance/ Instrumentation will prepare graduates for employment as entry-level instrumentation technicians. Concepts covered in teh concentration include electronics for electricians, instrumentation circuits and systems, transducers, detectors, actuators, control devices, and fundamentals of pressure, force, weight, motion, liquid level, and fluid flow.

### **GENERAL EDUCATION CORE REQUIREMENTS**

Item #	Title	Credits
ENG 101	English Composition I	3
MTH 103	Introduction to Technical Mathematics	3
	Humanities/Fine Arts Elective (Excluding Speech and Foreign Language)	3
	Social & Behavioral Science Electives	3
	Natural Science or MTH Elective	3-4

#### ADVANCED MANUFACTURING CORE COURSE REQUIREMENTS

Item #	Title	Credits
ADM 101	Precision Measurement	3
ADM 104	Introduction to Thermal/Electrical Principles	3
ADM 105	Fluid Systems	3
ADM 106	Quality Control Concepts	3
	ADM 107 OR ADM 108	3
ADM 111	Manufacturing Safety Practices	3

#### BASIC ELECTRICITY COURSE REQUIREMENTS

Item #	Title	Credits
ELT 108	DC Fundamentals	3
ELT 109	AC Fundamentals	3
ELT 110	Wiring Methods	3
ELT 117	AC/DC Machines	3

# INSTRUMENTATION COURSE REQUIREMENTS

Item #	Title	Credits	
ILT 104	Industrial Instrumentation	3	
ILT 240	Sensors Technology and Applications	3	
ELT 209	Motor Controls I	3	
ELT 212	Motor Controls II	3	
ILT 214	Control and Troubleshooting Flow, Level, Temperature, Pressure and 3 Level Processes		
ELT 231	Introduction to Programmable Controllers	3	
ELT 232	Advanced Programmable Controllers	3	
	Total Credits	66-67	