### Industrial Systems Technology, A.A.S.

This program provides training in which students gain the skills, knowledge, and experience for employment in Industrial Systems Maintenance occupations. The students will acquire techniques and skills applicable to the rapidly growing field of Industrial Systems Technology.

The student will have the opportunity to learn fundamental principles of electrical, mechanical, hydraulic, pneumatic and robotic systems used in advanced manufacturing applications. Additionally, process control, instrumentation and Programmable Logic Control (PLC) systems and techniques are covered. Students who complete all courses listed in the curriculum will be awarded an associate in applied science degree in Industrial Systems Technology. Successful completion of the program prepares graduates for entry-level employment in a variety of industrial-related fields.

Program: Industrial Systems Technology Type: Associate in Applied Science

#### **Area I: Written Composition**

Item #	Title	Credits
ENG 101	English Composition I	3

#### Area II: Humanities and Fine Arts

Item #	Title	Credits
	Humanities/Fine Arts Elective	3
	SPH 106 OR SPH 107	3

#### Area III: Natural Sciences and Mathematics

Item #	Title	Credits
	MTH 116 or higher	3
PHS 112	Physical Science II	4

### Area IV: History, Social and Behavioral Sciences

Item #	Title	Credits
PSY 200	General Psychology	3

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#### Area V: Career and Technical Courses

Item #	Title	Credits
	ORT 100 OR ORI 101	1
CIS 146	Microcomputer Applications	3
	INT 101 OR ELT 108	3
	INT 103 OR ELT 109	3
INT 105	Introduction to Process Technology	3
	INT 113 OR ELT 209	3
INT 117	Principles of Industrial Mechanics	3
INT 118	Fundamentals of Industrial Hydraulics and Pneumatics	3
INT 119	Principles of Mechanical Measurement and Technical Drawing	3
INT 123	Concepts of Solid State Electronics	3
INT 132	Preventive and Predictive Maintenance	3
	INT 134 OR WDT 107	3
INT 139	Introduction to Robot Programming	3
	INT 184 OR ELT 231	3
INT 208	Advanced Process Simulation	3
	INT 213 OR ELT 212	3
INT 284	Advanced Programmable Logic Controllers (PLC's)	3
	Total credits:	68

### **Course Sequencing**

## Industrial Systems Technology Associate in Applied Science Degree Suggested Course Sequence First Semester

If applicable, ORT 100 or ORI 101 is required for all first-time college students.

Item #	Title	Credits
	ORT 100 OR ORI 101	1
	MTH 116 or higher	3
CIS 146	Microcomputer Applications	3
_	INT 101 OR ELT 108	3
	INT 134 OR WDT 107	3

## Industrial Systems Technology Associate in Applied Science Degree Suggested Course Sequence Second Semester

Item #	Title	Credits	
ENG 101	English Composition I	3	<u> </u>
	INT 103 OR ELT 109	3	<u>.</u>
INT 119	Principles of Mechanical Measurement and Technical Drawing	3	<u>.</u>
INT 123	Concepts of Solid State Electronics	3	<u> </u>
INT 132	Preventive and Predictive Maintenance	3	<u>.</u>

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## Industrial Systems Technology Associate in Applied Science Degree Suggested Course Sequence Third Semester

Item #	Title	Credits
	INT 113 OR ELT 209	3
INT 117	Principles of Industrial Mechanics	3
INT 118	Fundamentals of Industrial Hydraulics and Pneumatics	3
	Humanities/Fine Arts Elective	3
	SPH 106 OR SPH 107	3

## Industrial Systems Technology Associate in Applied Science Degree Suggested Course Sequence Fourth Semester

Item #	Title	Credits
INT 105	Introduction to Process Technology	3
	INT 184 OR ELT 231	3
-	INT 213 OR ELT 212	3
PHS 112	Physical Science II	4

# Industrial Systems Technology Associate in Applied Science Degree Suggested Course Sequence Fifth Semester

Item #	Title	Credits
INT 139	Introduction to Robot Programming	3
INT 208	Advanced Process Simulation	3
INT 284	Advanced Programmable Logic Controllers (PLC's)	3
PSY 200	General Psychology	3

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