INDUSTRIAL SYSTEMS TECHNOLOGY

The Industrial Systems Technology curriculum is designed to prepare or upgrade individuals to service, maintain, repair, or install equipment for a wide range of industries. Instruction includes theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial equipment and physical facilities.

Students will learn technical skills in blueprint reading, electricity, hydraulics/pneumatics, machining, welding, and various maintenance procedures. Practical application in these industrial systems will be emphasized and additional advanced course work may be offered.

Upon completion of any of the various levels of this curriculum, graduates should gain the necessary practical skills and related technical information to qualify for employment or advancement in the various areas of industrial systems technology.

Student Learning Outcomes:

- Utilize tools and equipment to service and maintain mechanical systems, plumbing systems, hydraulic and pneumatic systems, and electrical and electronic systems.
- Create, interpret, and modify industrial blueprints and schematics.
- Perform preventive maintenance and troubleshoot a variety of industrial systems.
- Perform various welding and cutting processes used in current industry.

INDUSTRIAL SYSTEMS TECHNOLOGY
A.A.S. Degree (A50240)
Suggested Sequence of Courses

Prefix	Course Title	Class	Lab	Clinic	Work	Credit
FALL SEMESTER 1						
ACA 115	Success and Study Skills	0	2	0	0	1
BPR 111	Print Reading	1	2	0	0	2
ELC 112	DC/AC Electricity	3	6	0	0	5
HYD 110	Hydraulics and Pneumatics	2	3	0	0	3
ISC 112	Industrial Safety	2	0	0	0	2
MEC 111	Machine Processes I	1	4	0	0	3
MNT 110	Introduction to Maintenance Procedures	1	3	0	0	2
	TOTALS	**10**	**20**	**0**	**0**	**18**
SPRING SEMESTER 1						
CIS 110	Introduction to Computers	2	2	0	0	3
ELC 117	Motors and Controls	2	6	0	0	4
ELC 128	Intro to PLC	2	3	0	0	3
MEC 110	Intro to CAD/CAM	1	2	0	0	2
	Humanities/Fine Arts Elective	3	0	0	0	3
	TOTALS	**10**	**13**	**0**	**0**	**15**
SUMMER SEMESTER 1						
ENG 110	Freshman Composition ***or***					
ENG 111	Writing and Inquiry	3	0	0	0	3
	TOTALS	**3**	**0**	**0**	**0**	**3**
FALL SEMESTER 2						
AHR 111	HVACR Electricity	3	2	0	0	3
MAT 110	Math Measurement and Literacy	2	2	0	0	3
WLD 110	Cutting Processes	1	3	0	0	2
WLD 112	Basic Welding	1	3	0	0	2
WLD 121	GMAW (MIG) FCAW/Plate	2	6	0	0	4
	TOTALS	**9**	**16**	**0**	**0**	**14**

Prefix	Course Title	Class	Lab	Clinic	Work	Credit
SPRING SEMESTER 2						
COM 231	Public Speaking ***or***					
ENG 115	Oral Communication	3	0	0	0	3
WLD 115	SMAW (Stick) Plate	2	9	0	0	5
WLD 141	Symbols & Specifications	2	2	0	0	3
	Behavioral/Social Sciences Elective	3	0	0	0	3
	TOTALS	**10**	**11**	**0**	**0**	**14**
	PROGRAM TOTAL					**64**