Industrial Systems Technology: FAME - Advanced Manufacturing, A.A.S

The Industrial Systems Technology- FAME - Advanced Manufacturing A.A.S Option is a specialized program tailored to prepare students for careers in Industrial Systems Maintenance within the advanced manufacturing sector. This intensive curriculum offers comprehensive training in the fundamental principles and practices crucial for success in industrial environments and requires alternative coursework in Manufacturing Core Exercises (MCEs), industrial mechanics, industrial pumps and piping systems, and advanced robotics training.

Throughout the program, students delve deep into the intricacies of electrical, mechanical, hydraulic, pneumatic, and robotic systems commonly found in advanced manufacturing settings. Additionally, they explore key concepts in process control, instrumentation, and Programmable Logic Control (PLC) systems, ensuring they are proficient in cutting-edge technologies and methodologies.

Upon successful completion of all required courses, students will be awarded an associate in applied science degree in Advanced Manufacturing option. This credential signifies their readiness for entry-level roles in a diverse range of industrial-related fields, empowering them to drive innovation and progress in modern manufacturing processes.

Application Process
A FAME application and additional instructions are available at **applytofame.com**. Hard copies and digital application materials may be turned in to the Associate Dean of CTE office located on the Dothan campus. Students must submit the following items:

- Wallace Community College online application
- FAME application
- Unofficial copy of High School and College transcripts
- Unofficial or official score report from ACT or Accuplacer

Entrance Requirements

1. Must be 18 years of age by June of the application year. FAME also accepts incumbent workers looking to change their career path and veterans who would like to work in the manufacturing industry
2. Must have a High School Diploma or Equivalent
3. Must be a US citizen or eligible for work in the US
4. Must be college Ready (means that the applicant must be eligible to take MTH 100 and ENG 101).
    - ACT: Math Score: 18 or above and English Score: 18 or above
    - SAT: Math Score: 510 or above and English Score: 510 or above
    - Accuplacer Quantitative Reasoning, Algebra, and Statistics score of 253 or above and Accuplacer score of 5 or above
5. Must have a desire to work in a manufacturing environment troubleshooting, installing, and maintaining equipment.
6. Must be selected for an apprenticeship by a participating industry partner.

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
INT 140	F.A.M.E. MANUFACTURING CORE EXERCISE 1, SAFETY CULTURE	1
INT 142	F.A.M.E. MANUFACTURING CORE EXERCISE 2, WORKPLACE VISUAL ORGANIZATION (5S)	1
INT 144	F.A.M.E. MANUFACTURING CORE EXERCISE 3, LEAN MANUFACTURING	1
INT 146	F.A.M.E. MANUFACTURING CORE EXERCISE 4, PROBLEM SOLVING	1
INT 148	F.A.M.E. MANUFACTURING CORE EXERCISE 5, MACHINE RELIABILITY	1

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
	History, Social and Behavioral Sciences Electives	3

Area V: Pre-Professional, Pre-Major, and Elective Courses

Item #	Title	Credits
ORT 100	Orientation for Career Students	1
ELT 117	AC/DC Machines	3
INT 101	DC Fundamentals	3
INT 103	AC Fundamentals	3
INT 113	Industrial Motor Control I	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 127	PRINCIPLES OF INDUSTRIAL PUMPS AND PIPING SYSTEMS	3
INT 129	INDUSTRIAL SAFETY AND MAINTENANCE TECHNIQUES	3
INT 132	Preventive and Predictive Maintenance	3
INT 139	Introduction to Robot Programming	3
INT 184	Introduction to Programmable Logic Controllers (PLC's)	3
INT 208	Advanced Process Simulation	3
INT 213	Industrial Motor Control II	3
INT 253	INDUSTRIAL ROBOTICS	3
INT 284	Advanced Programmable Logic Controllers (PLC's)	3
WDT 107	Smaw Fillet/OFC/PAC/CAC	3
	Total credits:	**Total Credits 70**

Course Sequencing

Semester 1

Item #	Title	Credits
ENG 101	English Composition I	3
INT 101	DC Fundamentals	3
INT 119	Principles of Mechanical Measurement and Technical Drawing	3
INT 129	INDUSTRIAL SAFETY AND MAINTENANCE TECHNIQUES	3
INT 140	F.A.M.E. MANUFACTURING CORE EXERCISE 1, SAFETY CULTURE	1
ORT 100	Orientation for Career Students	1

Semester 2

Item #	Title	Credits
INT 103	AC Fundamentals	3
INT 113	Industrial Motor Control I	3
INT 117	Principles of Industrial Mechanics	3
INT 142	F.A.M.E. MANUFACTURING CORE EXERCISE 2, WORKPLACE VISUAL ORGANIZATION (5S)	1
	MTH 116 or higher	3

Semester 3

Item #	Title	Credits
ELT 117	AC/DC Machines	3
INT 127	PRINCIPLES OF INDUSTRIAL PUMPS AND PIPING SYSTEMS	3
INT 208	Advanced Process Simulation	3
INT 213	Industrial Motor Control II	3
INT 144	F.A.M.E. MANUFACTURING CORE EXERCISE 3, LEAN MANUFACTURING	1

Semester 4

Item #	Title	Credits
INT 146	F.A.M.E. MANUFACTURING CORE EXERCISE 4, PROBLEM SOLVING	1
INT 118	Fundamentals of Industrial Hydraulics and Pneumatics	3
INT 132	Preventive and Predictive Maintenance	3
INT 184	Introduction to Programmable Logic Controllers (PLC's)	3
INT 139	Introduction to Robot Programming	3
PHS 112	Physical Science II	4

Semester 5

Item #	Title	Credits
INT 148	F.A.M.E. MANUFACTURING CORE EXERCISE 5, MACHINE RELIABILITY	1
WDT 107	Smaw Fillet/OFC/PAC/CAC	3
INT 253	INDUSTRIAL ROBOTICS	3
INT 284	Advanced Programmable Logic Controllers (PLC's)	3
	History, Social and Behavioral Sciences Electives	3