Industrial Automation Technology A.A.S.

Advisors – Ayers Campus: Wesley Beecham, Electrical Building (256.835.5441) wbeecham@gadsdenstate.edu; Tarina VanNatta, Computer Science Building (FAME) (256.835.5457) tvannatta@gadsdenstate.edu;
East Broad Campus: Jack Mayfield, Industrial Automation Building (256.549.8637) jmayfield@gadsdenstate.edu

NOTICE(s): For the A.A.S. Degree in Industrial Automation Technology, the student must complete a minimum of 76 credit hours – a minimum of 61 in technical courses and a minimum of 15 in general education courses – all of which must be approved by the advisor. A maximum of 9 credit hours of technical electives may be selected from any approved area of Engineering Technology programs with prior written approval from the student's major advisor. Technical courses may vary to meet student needs and to provide options. Admission Requirement: High school diploma or GED.

The courses in this program of study may not be offered every semester. It is important to consult with your advisor to determine course schedules to stay on track to graduate.

The student is responsible for verifying the transferability of credit in this program to a senior institution with the appropriate senior institution advisor.

Students enrolled in the Industrial Automation FAME program are exempt from taking EET 100 – Introduction to Engineering Technologies, ELT 110 – Wiring Methods, ELT 118 – Commercial/Industrial Wiring I and WKO 101 - Workplace Skills Development I.

Area I — Written Composition

Item #	Title	Hours
ENG 101	English Composition I	3
	Sub-Total Credits	3

Area II — Humanities and Fine Arts

Item #	Title	Hours
	Humanities/Fine Arts Elective	3
	Sub-Total Credits	3

Area III — Natural Sciences and Mathematics

Item #	Title	Hours
INT 104	Principles of Technology	3
	MTH 100: Intermediate College Algebra OR numerically higher	3
	Sub-Total Credits	6

Area IV — History, Social and Behavioral Sciences

Item #	Title	Hours
	History, Social and Behavioral Sciences Elective	3
	Sub-Total Credits	3

Area V - Required Technical Courses

Item #	Title	Hours
EET 100	Introduction to Engineering Technologies	3
EET 109	Electrical Blueprint Reading I	3
ELT 110	Wiring Methods	3
	ELT 118 or INT 158	3
	ELT 231 or INT 184	3
	INT 101 or EET 103	3
	INT 103 or EET 104	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 126	Preventive Maintenance	3
INT 127	Principles of Industrial Pumps and Piping Systems	3
INT 134	Principles of Industrial Maintenance Welding and Metal Cutting Techniques	3
ORI 101	Orientation to College	1
WKO 101	Workplace Skills Development I	1
	Sub-Total Credits	41

Additional Coursework:

Choose 20 credit hours from the following list:

Item #	Title	Hours
CIS 146	Computer Applications	3
EET 278	Advanced Robotics	5
INT 119	Principles of Mechanical Measurement and Technical Drawing	3
INT 128	Principles of Industrial Environmental Controls	3
INT 139	Introduction to Robotic Programming	3
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
INT 153	Precision Machining Fundamentals I	3
INT 180	Special Topics	2
INT 206	Industrial Motors I	3
INT 211	Industrial Motors II	3
INT 252	Variable Speed Motor Drives	3
INT 253	Industrial Robotics	3
INT 280	Special Topics in Industrial Maintenance Technology	3
INT 291	Cooperative Education	3
INT 292	Cooperative Education	3
INT 293	Cooperative Education	3
INT 296	Co-Op	1
INT 297 A	Co-Op	1
INT 297 B	Co-Op	1
INT 297 C	Co-Op	1
INT 297 D	Co-Op	1
INT 298	Co-Op	2
ELT 114	Residential Wiring Methods	3
ELT 115	Residential Wiring Methods II	3
ELT 117	AC/DC Machines	3
ELT 122	Advanced AC/DC Machines	3
	ELT 183 or INT 129	3
ELT 212	Motor Controls II	3
ELT 232	Advanced Programmable Controllers	3
ELT 244	Conduit Bending and Installation	3
ACR 111	Principles of Refrigeration	3
ACR 112	HVACR Service Procedures	3
MDT 105	Introduction to Computer-Aided Design (CAD)	3
SPH 106	Fundamentals of Oral Communication	3

Sub-Total Credits	94
	76