



## ELECTRICAL AND INSTRUMENTATION

### Associate in Applied Science Degree – AAS EIT

**Program Locations: The Academy at Fairhope Airport and Thomasville Campuses**

Length: Four Semesters

The Electrical and Instrumentation Technology program is designed to help students exit the program with hands-on skills and knowledge recognized by industry partners as the key competencies to succeed in the field of instrumentation technology.

This is a career program designed for students to go directly into the labor market upon completion. Although some of the courses in this program will transfer to four-year institutions, this program is not designed to be a transfer program of study; therefore, it is not subject to the terms and conditions of Alabama Transfers state transfer and articulation reporting system.

<b>AREA I: Written Composition</b>	<b>3 Total Hours</b>
ENG 101 – English Composition I	3
<b>AREA II: Humanities and Fine Arts</b>	<b>3 Total Hours</b>
Humanities and Fine Arts Elective: Choose one of the following ART 100 – Art Appreciation                      PHL 206 – Ethics and Society ART 203 – Art History I                            REL 100 – History of World Religions ART 204 – Art History II                           REL 151 – Survey of the Old Testament HUM 101 – Introduction to Humanities I       REL 152 – Survey of the New Testament HUM 102 – Introduction to Humanities II      THR 120 – Theater Appreciation MUS 101 – Music Appreciation                   THR 126 – Introduction to Theater PHL 106 – Introduction to Philosophy	3
<b>AREA III: Natural Sciences and Mathematics</b>	<b>6 Total Hours</b>
CIS 146 – Microcomputer Applications	3
Choose <b>one</b> of the following: MTH 100 – Intermediate College Algebra MTH 116 – Mathematical Applications	3
<b>AREA IV: History, Social, and Behavioral Sciences</b>	<b>3 Total Hours</b>
Choose <b>one</b> of the following: ECO 231 – Principles of Macroeconomics      HIS 202 – United States History II ECO 232 – Principles of Microeconomics      POL 200 – Introduction to Political Science GEO 100 – World Regional Geography           POL 211 – American National Government HIS 101 – Western Civilization I                    PSY 200 – General Psychology HIS 102 – Western Civilization II                   PSY 210 – Human Growth and Development HIS 121 – World History I                            SOC 200 – Introduction to Sociology HIS 122 – World History II                           SOC 210 – Social Problems HIS 201 – United States History I	3

AREA V: Pre-Professional, Major, and Elective Courses		46 Total Hours
IET 114 – Basic Electricity		3
IET 122 – Rotating Machinery and Controls		3
IET 131 – Fluid Power Systems		3
ILT 108 – Introduction to Instruments and Process Control		3
ILT 114 – Instrumentation Operation and Calibration		3
ILT 166 – Motors and Transformers I		3
ILT 214 – Control and Troubleshooting Flow, Level, Temperature, Pressure and Level Processes		3
INT 117 – Principles of Industrial Mechanics		3
ELT 131 – Wiring I Commercial and Industrial		3
ELT 212 – Motor Controls II		3
ELT 231 – Introduction to Programmable Controllers		3
ELT 232 – Advanced Programmable Controllers		3
WKO 110 – NCCER Core		3
ORI 101 – Orientation to College <b>or</b> WKO 107 – Workplace Skills Preparation		1
Electrical and Instrumentation AAS Electives: Choose <b>two</b> of the following.		
ACR 111 – Principles of Refrigeration ACR 112 – HVACR Service Procedures ACR 119 – Fundamentals of Gas Heating Systems ACR 121 – Principles of Electricity for HVACR ACR 126 – Commercial Heating Systems ACR 148 – Heat Pump Systems I ACR 205 – System Sizing and Air Distribution ELT 233 – Applied Programmable Controls ILT 180 – Special Topics INT 106 – Elements of Industrial Mechanics	INT 127 – Principles of Industrial Pumps and Piping Systems INT 132 – Preventative and Predictive Maintenance INT 153 – Precision Machining Fundamentals I INT 161 – Blueprint Reading for Industrial Technicians INT 222 - Special Topics INT 232 – Manufacturing Plant Utilities INT 291 – Cooperative Education WKO 106 – Workplace Skills	6
<b>Total Hours</b>		<b>61 SH</b>