COASTAL ALABAMA COMMUNITY COLLEGE

ADVANCED MANUFACTURING - MECHATRONICS

Associate in Applied Science Degree

Program Locations: Baldwin Preparatory Academy and Fairhope Academy

Length: Four Semesters

The Mechatronics 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 mechatronics.

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.

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

AREA V: Pre-Professional, Major, and Elective Courses	46 – 48 Total Hours
ADM 101 – Precision Measurement	3
ADM 111 – Manufacturing Safety Practices	3
ELT 212 – Motor Controls II	3
ELT 231 – Introduction to Programmable Controllers	3
ELT 232 – Advanced Programmable Controllers	3
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 139 – Introduction to Robotic Programming	3
INT 117 – Principles of Industrial Mechanics	3
ORI 101 – Orientation to College **or** WKO 107 – Workplace Skills Preparation	1
CHOOSE 9-11 Hours from Electives: INT 127 – Principles of Industrial Pumps and Piping Systems (3) WKO 106 – Workplace Skills (3) WKO 110 – NCCER Core (3) INT140 FAME Manufacturing Core Exercise 1, Safety Culture (1) INT142 FAME Manufacturing Core Exercise 2, Workplace Visual Organizations (5S) (1) INT144 FAME Manufacturing Core Exercise 3, Lean Manufacturing (1) INT146 FAME Manufacturing Core Exercise 4, Problem Solving (1) INT148 FAME Manufacturing Core Exercise 5, Machine Reliability (1)	9-11
Total Hours	**61- 63 SH**