

DRAFTING AND DESIGN TECHNOLOGY

Associate in Applied Science Degree

Program Locations: Bay Minette Campus

Length: Four Semesters

The Drafting and Design/Additive Manufacturing Technology program provides the technical training for students to interpret and produce engineering and architectural graphics and data. Visualization skills are developed to design and evaluate technical content. With the use of Computer—AidedDesign 3D Solid modeling software the student will gain the skills to design and convert complex virtual CAD models into physical products. The program prepares the student for a career in engineering, manufacturing, architecture, and construction where intelligent graphics, 3D Printing, Rapid Prototyping, Additive Manufacturing Technologies, and Direct Digital Manufacturing are required throughout the design process.

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 STARS.

| AREA I: Written Composition | | 3 Total Hours |
|--|--|--------------------|
| ENG 101 – English Composition I | | 3 |
| AREA II: Humanities and Fine Arts | | 6 Total Hours |
| Choose one of the following: | | |
| SPH 106 – Fundamentals of Oral Communication | | 3 |
| SPH 107 – Fundamentals of Public Speaking | | |
| Humanities and Fine Arts Elective: Choose one of the following | | |
| ART 100 – Art Appreciation | PHL 206 – Ethics and Society | 3 |
| 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 | | |
| AREA III: Natural Sciences and Mathematics | | 9 – 10 Total Hours |
| MTH 116 – Mathematical Applications | | 3 |
| Math, Computer Science, or Natural Science Elective: Choose one of the following | | |
| BIO 101 – Introduction to Biology I | MTH 110 – Finite Mathematics | 6-7 |
| BIO 102 – Introduction to Biology II | MTH 112 – Precalculus Algebra | |
| BIO 103 – Principles of Biology I | MTH 113 – Precalculus Trigonometry | |
| CIS 146 – Microcomputer Applications | MTH 115 – Precalculus Algebra and Trigonometry | |
| CIS 147 – Advanced Microcomputer Applications | MTH 116 – Mathematical Applications | |
| CIS 130 – Introduction to Information Systems | PHS 111 – Physical Science I | |
| CHM 104 – Introduction to Inorganic Chemistry | PHS 112 – Physical Science II | |
| CHM 111 – College Chemistry I | PHY 120 – Introduction to Physics | |
| CHM 112 – College Chemistry II | PHY 201 – General Physics I with Trigonometry | |
| MTH 100 – Intermediate College Algebra | PHY 202 – General Physics II with Trigonometry | |

| AREA IV: History, Social, and Behavioral Sciences | | 3 Total Hours |
|---|---|----------------|
| Choose one of the following: | | |
| ECO 231 – Principles of Macroeconomics | HIS 202 – United States History II | 3 |
| 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 | | |
| AREA V: Pre-Professional, Major, and Elective Courses | | 46 Total Hours |
| ADM 101 – Precision Measurement | | 3 |
| ADM 106 – Quality Control Concepts | | 3 |
| ADM 261 – Reverse Engineering | | 3 |
| DDT 104 – Basic Computer Aided Drafting and Design | | 3 |
| DDT 111 – Fundamentals of Drafting and Design Technology | | 3 |
| DDT 117 – Manufacturing Processes | | 3 |
| DDT 124 – Basic Technical Drawing | | 3 |
| DDT 127 – Intermediate CAD | | 3 |
| DDT 131 – Machine Drafting Basics | | 3 |
| DDT 132 – Architectural Drafting | | 3 |
| DDT 212 – Intermediate Architectural Drafting | | 3 |
| DDT 231 – Advanced CAD | | 3 |
| DDT 232 – CAD Customization | | 3 |
| DDT 233 – Intermediate Three Dimensional Modeling | | 3 |
| DDT 236 – Design Project | | 3 |
| ORI 101 – Orientation to College or WKO 107 – Workplace Skills Preparation | | 1 |
| Total Hours | | 67 – 68 SH |