

# DRAFTING AND DESIGN TECHNOLOGY

Associate in Applied Science Degree

**LENGTH:** Four Semesters

**PURPOSE:** 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—Aided-Design 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.

**AREA I ..... WRITTEN COMPOSITION ..... 3 SH**

ENG 101..... English Composition I ..... 3

**AREA II ..... HUMANITIES AND FINE ARTS ..... 6 SH**

Humanities Elective..... ART, MUS, THR, REL, or PHL..... 3

SPH 107..... Fundamentals of Public Speaking ..... 3

**AREA III ..... NATURAL SCIENCES AND MATHEMATICS ..... 9-10 SH**

MTH 116..... Mathematical Applications..... 3

MTH, CIS, SCI Elective ..... Math, Computer Science, Natural Science Elective ..... 6-7

**AREA IV ..... HISTORY, SOCIAL, AND BEHAVIORAL SCIENCES ..... 3 SH**

Elective ..... ANT, ECO, GEO, HIS, POL, PSY, or SOC..... 3

**AREA V ..... PRE-PROFESSIONAL, MAJOR, AND ELECTIVE COURSES ..... 45 SH**

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

**Total Hours ..... 66-67 SH**

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.