Design Engineering Technology

Associate in Applied Science

Available: Shoals Campus

Advisors: Trenton Allen (5257) Anthony. Allen@nwscc.edu

Design Engineering prepares students for the manufacturing and construction industry. Today, the drafter is a highly skilled technician with an ability to visualize objects three dimensionally before they are physically created. By using traditional manual tools or computer assisted methods, the drafter creates drawings that describe the shape and size of the product or project.

Design Engineering instruction at the College is offered in fundamental, intermediate, and advanced levels of drafting and design. Advanced courses train students for the development of drawings in mechanical and architectural design. Related studies prepare the student academically in mathematics, physics, psychology, and English.

A graduate of the program will be generally qualified to enter the industry as an entry level draftsperson, detailer, or apprentice designer. Graduates are encouraged to continue education toward a professional degree in engineering or architecture.

Entering students are required to complete ORI 107. Transfer students are exempt from this requirement.

Notes:

- * Drafting Electives totaling 6 semester hours are required. Students should consult with advisor concerning other possible electives from other program areas.
- * Computer competency skills are embedded within one or more courses required in this curriculum.

Program: Design Engineering Technology

Entrance Requirements

- Submit a completed application;
- High School diploma or equivalent required:
- Age Requirement:
- Submit official high school/high school equivalent transcripts, if applicable;
- Submit official college transcripts, if applicable;
- · Satisfy Placement Testing requirements.

Area I: Written Composition

* Keyboarding skills are essential for the successful completion of English 101.

Item #	Title	Credits
ENG 101	English Composition I	3
	ENG 102	3

Area II: Humanities and Fine Arts

Preferred ART 100 or MUS 101. *Note SPH107 or foreign language may NOT be the one course designated to fulfill the SACSCOC Core Requirement for Humanities and Fine Arts. Please choose from one of the following:

Item #	Title	Credits
	Humanities and Fine Arts Elective	3

Area III: Natural Sciences and Mathematics

Item #	Title	Credits
MTH 100	Intermediate College Algebra	3
MTH 112	Precalculus Algebra	3
PHY 115	Technical Physics	4

Area IV: History, Social and Behavioral Science

Please choose from one of the following:

Item #	Title	Credits
	Social and Behavioral Sciences Elective	3

Area V: Technical Concentration and Electives

Item #	Title	Credits
DDT 104	Basic Computer Aided Drafting and Design	3
DDT 111	Fundamentals of Drafting and Design Technology	3
DDT 114	Industrial Blueprint Reading	3
DDT 117	Manufacturing Processes	3
DDT 124	Intro to Technical Drawing	3
DDT 127	Intermediate Computer Aided Drafting and Design	3
DDT 128	Intermediate Technical Drawing	3
DDT 144	Basic 3D Modeling	3
DDT 181	Special Topics in Drafting and Design Technology	3
DDT 220	Advanced Technical Drawing	3
DDT 231	Advanced Cad	3
DDT 233	Intermediate 3D Modeling	3
DDT 236	Design Project	3
DDT 244	Advanced Solids Modeling	3
DDT 291	Со-Ор	3
	DDT Elective	3
	DDT Elective	3
	Minimum Credit Hours for Graduation:	73