Pre-Dentistry 240102 DEN
Associate in Science Degree

Available: Phil Campbell and Shoals Campuses
Advisor: M. Murphy (6246) docm@nwscc.edu
R. Jones (5367) jonesr@nwscc.edu
C. Sockwell (5378) sockwell@nwscc.edu

This program is designed for students who plan to transfer to an institution with various types of professional programs to complete requirements for a degree. All these curricula have the same basic requirements.

Entering students are required to complete ORI 101. Transfer students are exempt from this requirement.

		Semester Hours
Area I:	Written Composition	6
	**ENG 101 and 102	
Area II:	Humanities and Fine Arts	12
	*Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262	6
	SPH 107	3
	Elective: Choose one course from among ART 100, MUS 101, PHL 206*, THR 120, Foreign Language*	3
Area III:	Natural Sciences and Mathematics	11
	Science: Choose two core courses from among BIO 103, 104; CHM 111, 112; PHY 201, 202, 213, 214	8
	Math: Choose one from MTH 112 (higher is preferred) MTH 113, 120, 125, 126, 227, 237, 238	3
Area IV:	History, Social and Behavioral Science	12
	*History: HIS 101 and 102 or HIS 201 and 202	6
	Social and Behavioral Sciences: Choose two courses from among ECO 231, ECO 232, GEO 100, POL 211, PSY 200, PSY 210, SOC 200, SOC 210	6
Area V:	Pre-Professional, Pre-Major, and Elective Courses	19-23
	CIS 146 or demonstrated equivalent computer competency skills. Elective courses appropriate to individual student and transfer institutions. PED can be used as a general elective. Choose from BIO 103, BIO 104, BIO 220, CHM 111, CHM 112, CHM 221, CHM 222, PHY 201, PHY 202, PHY 213, PHY 214, MTH 125, MTH 265	

Total Semester Transfer Hours 60-64

*See note 2 on page 44.

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

Design Engineering Technology 151301 D&D
Associate in Applied Science Degree

Available: Shoals Campus
Advisors: A. Rice (5257) rice@nwscc.edu
M. Hubka (5270) hubka@nwscc.edu

The design engineering program is designed to prepare 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.

Drafting 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 generally be 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 101. Transfer students are exempt from this requirement.

General Education Requirements	Theory	Lab	Semester Hours
***ENG 101 English Composition I	3	0	3
*ENG 130 Technical Report Writing	3	0	3
MTH 103 Intro to Technical Mathematics	3	0	3
MTH 118 Technical Mathematics	3	0	3
PHY 115 Technical Physics	3	2	4
PSY 200 General Psychology	3	0	3
Humanities or Fine Arts Elective	3	0	3
Total General Education Requirements			**22**
Major Requirements			
DDT 104 Basic Computer Aided Drafting and Design	1	4	3
DDT 111 Fundamentals of Drafting and Design	1	4	3
DDT 117 Manufacturing Processes	1	4	3
DDT 122 Advanced Technical Drawing	1	4	3
DDT 124 Basic Technical Drawing	1	4	3
DDT 127 Intermediate Computer Aided Drafting and Design	1	4	3
DDT 128 Intermediate Technical Drawing	1	4	3
DDT 131 Machine Drafting Basics	1	4	3
DDT 132 Architectural Drafting	1	4	3
DDT 134 Descriptive Geometry	1	4	3
DDT 181 Special Topics in Drafting and Design Technology	3	0	3
DDT 211 Intermediate Machine Drafting	1	4	3

DDT 231 Advanced CAD	2	3	3
DDT 233 Three-Dimensional Modeling	1	4	3
DDT 261 Statics, Strengths and Testings of Material	3	0	3
Drafting and Design Electives	X	X	9
Total Major Requirements			**54**

Total Semester Credit Hours 76

Design Engineering Technology Electives

DDT 114 Industrial Blueprint Reading
DDT 115 Blueprint Reading for Machinists
DDT 116 Blueprint Reading for Construction
DDT 118 Basic Electrical Drafting
DDT 125 Surface Development
DDT 126 Sections and Conventional Practice
DDT 130 Fundamentals of Drafting for Related Trades
DDT 133 Basic Surveying
DDT 139 Fundamentals of Drafting for Related Trades Lab
DDT 150 Theory of Residential Drawing and Design
DDT 155 Drawing for Residential Construction
DDT 182 Special Topics in Design Engineering Technology
DDT 191 Drafting Internship (1 cr)
DDT 192 Drafting Internship (2 cr)
DDT 193 Drafting Internship (3 cr)
DDT 212 Intermediate Architectural Drafting
DDT 213 Civil Drafting, Plat Maps
DDT 214 Pipe Drafting
DDT 215 Geometric Dimensioning and Tolerancing
DDT 217 Building Codes, Ordinances, Zoning Restrictions and the A.D.A.
DDT 220 Intermediate Technical and Mechanical Drawing
DDT 221 Advanced Machine Drafting
DDT 222 Advanced Architectural Drafting
DDT 223 Advanced Civil Drafting
DDT 224 Structural Concrete Drafting
DDT 225 Structural Steel Drafting
DDT 226 Technical Illustration
DDT 228 Geographic Information Systems
DDT 229 Inter. Technical and Mechanical Drawing Lab
DDT 232 CAD Customization
DDT 234 3D Graphics and Animation
DDT 235 Specialized CAD
DDT 236 Design Project
DDT 237 Current Topics in CAD
DDT 238 Special Topics in CAD
DDT 239 Independent Studies
DDT 240 Public Utility Drafting
DDT 249 Advanced CAD Applications
DDT 250 Theory of Commercial Drawing and Design
DDT 255 Drawing for Commercial Construction
DDT 267 Co-op Elective
DDT 268 Co-op Elective
DDT 271 Co-op Elective (2-6 cr)
DDT 284 Computer Aided Modeling I
DDT 285 Computer Aided Modeling II
DDT 286 Electronics CAD
DDT 289 Process CAD
DDT 290 Survey of Aerospace Technology

Note: Three Drafting Electives totaling 9 semester hours are required. Students should consult advisor concerning other possible electives from other program areas.

*Students who have completed ENG 130 prior to Spring 2000, and students substituting ENG 102 must take Speech.

**Computer competency skills are embedded within one or more courses required in this curriculum.

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

Computer Aided Design Engineering Technology Short-Term Certificate

151301 DDT

Available: Shoals Campus
Advisor: A. Rice (5257) rice@nwscc.edu
M. Hubka (5270) hubka@nwscc.edu

This program is open to drafting and design industry personnel with a minimum of one year experience in manual drafting, design, or engineering. The program provides upgrade training in the use of computer aided drafting and design (CADD) technology.

Entering students are required to complete ORI 101. Transfer students are exempt from this requirement.

	Theory	Lab	Semester Hours
DDT 104 Basic Computer Aided Drafting and Design	1	4	3
DDT 127 Intermediate Computer Aided Drafting and Design	1	4	3
DDT 231 Advanced CAD	2	3	3
Drafting and Design Elective	X	X	6

Total Semester Credit Hours 15

NOTE: Two Drafting electives totaling 6 semester hours is required. Students should consult advisor concerning other possible electives from other program areas.