

DRAFTING AND DESIGN TECHNOLOGY (DDT)

(Wallace and Sparks Campuses and Easterling Correctional Facility)

Drafting and Design Technology encompasses many divergent fields of study, including Aerospace, Architectural, Civil, Electrical, Mechanical, Piping, Structural, and Technical Illustrating. All of these fields focus on the ability to communicate by using a graphic language. Graphic communication is the ability to translate ideas and rough sketches into finished drawings that can be used to manufacture or assemble the desired product. These drawings are produced with the aid of specialty drawing and measuring instruments and the use of special computer programs. Students in this program learn basic drafting techniques as well as advanced topics within the fields of Architectural and Mechanical Design. Computer-Aided Drafting and Design (CAD) is an essential part of this program and is explored in depth.

Students who complete the prescribed degree curriculum will earn an associate in applied science degree in Drafting and Design Technology in the chosen option. Students who complete the prescribed program certificate curriculum will earn a certificate in the chosen option. Admission is conditional and depends on the student's ability to perform the essential functions for this program. Reasonable accommodations are considered.

DEGREE CURRICULUM

(Wallace and Sparks Campuses)

<i>Course</i>	<i>Credit Hours</i>
Area I: Written and Oral Communications	6
ENG 101 English Composition I	3
SPH 106 Fundamentals of Oral Communication OR	
SPH 107 Fundamentals of Public Speaking	3
Area II: Humanities and Fine Arts	3
Humanities/Fine Arts Elective	3
Area III: Natural Sciences, Mathematics, and Computer Science	10
CIS 146 Microcomputer Applications	3
MTH 100 Intermediate College Algebra	3
PHS 112 Physical Science II OR	
CHM 111 College Chemistry I OR	
PHY 201 General Physics I OR	
PHY 213 General Physics I w/ Calculus	4
Area IV: History, Social and Behavioral Sciences	3
History/Behavioral Science/Social Science Elective	3
Area V: Career and Technical Courses	48
Required Orientation Courses	
ORI 101 Orientation to College OR	
ORI 105 Orientation and Student Success	1-3
ORI 104 WorkKeys® Assessment and Advisement	1
Required Field of Concentration Courses	
DDT 104 Basic Computer-Aided Drafting	3
DDT 111 Fundamentals of Drafting and Design Technology	3
DDT 117 Manufacturing Processes	3
DDT 124 Basic Technical Drawing	3

DDT 127	Intermediate Computer-Aided Drafting and Design	3
DDT 128	Intermediate Technical Drawing	3
DDT 130	Fundamentals of Drafting for Related Trades	3
DDT 134	Descriptive Geometry	3
DDT 139	Fundamentals of Drafting for Related Trades Lab	3
DDT 150	Theory of Residential Drawing and Design	3
DDT 155	Drawing for Residential Construction	4
Total Drafting and Design Technology Credits		34

Select at least 12 hours from the following elective courses:

ACR 121	Principles of Electricity for HVAC/R	3
ACR 205	System Sizing and Air Distribution	3
ASE 101	Fundamentals of Automotive Technology	3
ASE 112	Electrical Fundamentals	3
CIS 251	C++ Programming Language	3
CIS 285	Object-Oriented Programming	3
DDT 122	Advanced Technical Drawing	3
DDT 212	Intermediate Architectural Drafting	3
DDT 216	Design of Structural Wood Members	3
DDT 222	Advanced Architectural Drafting	3
DDT 225	Structural Steel Drafting	3
DDT 231	Advanced CAD	3
DDT 235	Specialized CAD	3
DDT 236	Design Project	3
DDT 237	Current Topics in CAD	3
ELT 114	Residential Wiring Methods I	3
ELT 115	Residential Wiring Methods II	3
INT 118	Fundamentals of Industrial Hydraulics and Pneumatics	3
INT 134	Principles of Industrial Maintenance Welding and Metal Cutting Techniques	3
Total Elective Credits		15
Total Credits for Degree		73

Drafting and Design Technology Associate in Applied Science Degree Suggested Course Sequence

<i>FIRST SEMESTER</i>	<i>SECOND SEMESTER</i>	<i>THIRD SEMESTER</i>
CIS 146	DDT 124*	DDT 150**
DDT 104	DDT 127	DDT 155**
DDT 111	DDT 128*	SPH 106 or 107
DDT 117*	ENG 101	Drafting and Design Technology Elective*
ORI 101 or 105	MTH 100	
ORI 104		
<i>FOURTH SEMESTER</i>	<i>FIFTH SEMESTER</i>	
DDT 130**	DDT 134	
DDT 139**	ENG 101	
Drafting and Design Technology Elective*	ENG 130	
Drafting and Design Technology Elective*	Drafting and Design Technology Elective*	
	Humanities/Fine Arts Elective	
	History/Social and Behavioral Science Elective	

**All DDT coursework except DDT 117 and DDT 216 has a prerequisite of DDT 104 and DDT 111 except DDT 127 and DDT 232, which require only DDT 104.*

***DDT 150 and DDT 155 are co-requisites as well as DDT 130 and DDT 139.*

Note: Troy University Mechanical Engineering Students take DDT 104 for Engineering Graphics.

CERTIFICATE CURRICULUM (Wallace and Sparks Campuses)

<i>Course</i>	<i>Credit Hours</i>
Area I: Written and Oral Communications	6
ENG 101 English Composition I	3
SPH 106 Fundamentals of Oral Communication OR	
SPH 107 Fundamentals of Public Speaking	3
Area III: Natural Sciences, Mathematics, and Computer Science	6
CIS 146 Microcomputer Applications	3
MTH 100 Intermediate College Algebra	3
Area V: Career and Technical Courses	39
Required Orientation Courses	
ORI 101 Orientation to College OR	
ORI 105 Orientation and Student Success	1-3
ORI 104 WorkKeys® Assessment and Advisement	1
Required Field of Concentration Courses	
DDT 104 Basic Computer-Aided Drafting	3
DDT 111 Fundamentals of Drafting and Design Technology	3
DDT 117 Manufacturing Process	3
DDT 124 Basic Technical Drawing	3
DDT 127 Intermediate Computer-Aided Drafting and Design	3
DDT 128 Intermediate Technical Drawing	3
DDT 130 Fundamentals of Drafting for Related Trades	3
DDT 139 Fundamentals of Drafting for Related Trades Lab	3
DDT 150 Theory of Residential Drawing and Design	3
DDT 155 Drawing for Residential Construction	4
DDT 236 Design Project	3
DDT 237 Current Topics in CAD	3
Total Drafting and Design Technology Credits	37
Total Credits for Program Certificate	51

CERTIFICATE CURRICULUM (Easterling Correctional Facility)

<i>Course</i>	<i>Credit Hours</i>
Area I: Written and Oral Communications	3
COM 103 Introductory Technical English	3
Area III: Natural Sciences, Mathematics, and Computer Science	3
MAH 101 Introductory Mathematics I	3
Area V: Career and Technical Courses	
Required Field of Concentration Courses	
DDT 104 Basic Computer-Aided Drafting	3

DDT 111 Fundamentals of Drafting and Design Technology	3
DDT 117 Manufacturing Process	3
DDT 122 Advanced Technical Drawing	3
DDT 124 Basic Technical Drawing	3
DDT 127 Intermediate Computer-Aided Drafting and Design	3
DDT 128 Intermediate Technical Drawing	3
DDT 130 Fundamentals of Drafting for Related Trades	3
DDT 131 Machine Drafting Basics	3
DDT 134 Descriptive Geometry	3
DDT 139 Fundamentals of Drafting for Related Trades Lab	3
DDT 150 Theory of Residential Drawing and Design	3
DDT 155 Drawing for Residential Construction	4
DDT 236 Design Project	3
DDT 237 Current Topics in CAD	3
Total Drafting and Design Technology Credits	46
Total Credits for Program Certificate	52

Drafting and Design Technology Certificate

Suggested Course Sequence

<i>FIRST SEMESTER</i>	<i>SECOND SEMESTER</i>	<i>THIRD SEMESTER</i>
DDT 104	COM 103	DDT 150**
DDT 111	DDT 124*	DDT 155**
DDT 117*	DDT 127	Drafting and Design Technology Elective*
	DDT 128*	
	MAH 101	
<i>FOURTH SEMESTER</i>	<i>FIFTH SEMESTER</i>	
DDT 130**	DDT 134	
DDT 139**	Drafting and Design Technology Elective*	
Drafting and Design Technology Elective*		
Drafting and Design Technology Elective*		

**All DDT coursework except DDT 117 and DDT 216 has a prerequisite of DDT 104 and DDT 111 except DDT 127 and DDT 232, which require only DDT 104.*

***DDT 150 and DDT 155 are co-requisites as well as DDT 130 and DDT 139.*