

Engineering Design Technology, A.S.

The Associate in Science Degree is a transferable degree and applies the technical and functional elements of several Drafting and Design fields without taking the advanced course work required in the Associate in Applied Science Degree. Students will take fundamental courses in drafting and design, industry standard two-dimensional and three-dimensional software, Architectural Design, Civil Design and Surveying, Electrical Design, Mechanical Design, and Structural Steel Detailing and Design.

Program Requirements

Code	Title	Credit Hours
Total Credit Hours		61
General Education Requirements		35 Credits
Complete the following:		
ENGL 1010 or ENGL 1005	Introduction to Academic Writing CC Literacies and Composition Across Contexts CC	3
ENGL 2010	Intermediate Academic Writing CC	3
Complete one of the following:		
MAT 1030	Quantitative Reasoning QL (3)	3
MAT 1035	Quantitative Reasoning with Integrated Algebra QL (6)	3
STAT 1040	Introduction to Statistics QL (3)	3
STAT 1045	Introduction to Statistics with Algebra QL (5)	3
MATH 1050	College Algebra QL (4) (MATH 1050 is a prerequisite for many classes in the program core.)	3
MATH 1055	College Algebra with Preliminaries QL (5)	3
MATH 1090	College Algebra for Business QL (3)	3
Complete one of the following:		
HIST 1700	American Civilization AS (3)	3
HIST 1740	US Economic History AS (3)	3
HIST 2700 & HIST 2710	US History to 1877 AS and US History since 1877 AS (6)	3
POLS 1000	American Heritage AS (3)	3
POLS 1100	American National Government AS (3)	3
Complete the following:		
PHIL 2050	Ethics and Values IH	3
HLTH 1100 or EXSC 1097	Personal Health and Wellness TE Fitness for Life TE	2
Complete the following:		
PHYS 1010 or PHYS 2010	Elementary Physics PP College Physics I PP	3
Complete the following distribution courses:		
Biology (Recommend BIOL 1010 General Biology)		3
Humanities (Recommend ENGL 2100 Technical Communication HH)		3
Social/Behavioral Science (Recommend COMM 1050 Introduction to Speech Communication)		3
Physical Science (Recommend GEO 1010 Introduction to Geology)		3
Fine Arts (Recommend EGDT 1720 Architectural Rendering)		3
Discipline Related Core		26 Credits
Complete a minimum of 26 credits from one the following tracks:		
Architectural Drafting and Design Track. (Students select this track if interested in a career in architectural drafting and design. Students also take these classes as part of the Bachelor of Architecture degree.)		
EGDT 1020	3D Architectural Modeling (3)	3
EGDT 1040	Fundamentals of Technical Engineering Drawing (3)	3
EGDT 1100	Architectural Drafting and Design (3)	3

EGDT 2100	Architecture Materials and Methods (3)
EGDT 2600	Applied Structures I - Statics (3) (MATH 1050 is a prerequisite for this course)
ARC 1010	Classical Architecture Workshop (3)
ARC 2110	Architecture Studio I (4)
ARC 2210	Architecture Studio II (4)
ARC 2220	Construction Documents and Specifications (3)
Civil Drafting and Design Track. (Students select this track if interested in a career in civil drafting and design. Students may also apply these courses to several focus areas within the Surveying and Mapping B.S. degree.)	
EGDT 1020	3D Architectural Modeling (3)
EGDT 1040	Fundamentals of Technical Engineering Drawing (3)
EGDT 1060	MicroStation Infrastructure Design (3)
EGDT 1300	Structural Drafting and Design (3)
EGDT 1400	Surveying Applications and Field Techniques I (3)
EGDT 1600 & EGDT 1610 or MATH 1060	Technical Math Algebra and Technical Math Geometry Trig (6) (MATH 1050 is a prerequisite for MATH 1060 Trigonometry) Trigonometry QL
EGDT 2040	Piping Drafting (2)
EGDT 2400	Surveying Applications and Field Techniques II (3) (MATH 1050, MATH 1060, or EGDT 1600 are prerequisites for this course)
EGDT 2500	3 Dimensional Modeling--Civil 3D (3)
Mechanical/Electrical Drafting and Design Track. (Students select this track if interested in a career in mechanical drafting and design.)	
EGDT 1010	Electrical Drafting and Design (3)
EGDT 1040	Fundamentals of Technical Engineering Drawing (3)
EGDT 1050	Intro to 3D Printing and Fabrication PP (2)
EGDT 1071 or EGDT 1070	3 Dimensional Modeling--Solidworks (3) 3 Dimensional Modeling Inventor
EGDT 1200	Mechanical Drafting and Design (3)
EGDT 2020	Descriptive Geometry (3)
EGDT 2200	Advanced Mechanical (3)
EGDT 2600	Applied Structures I - Statics (3) (MATH 1050, or EGDT 1600 and EGDT 1610 are prerequisites for this course)
EGDT 2610	Applied Structures II - Strength of Materials (3) (MATH 1050, or EGDT 1600 and EGDT 1610 are prerequisites for this course)
Structural Drafting and Design Track. (Students select this track if interested in a career in structural drafting and design.)	
EGDT 1020	3D Architectural Modeling (3)
EGDT 1040	Fundamentals of Technical Engineering Drawing (3)
EGDT 1100	Architectural Drafting and Design (3)
EGDT 1300	Structural Drafting and Design (3)
EGDT 1600 or MATH 1060	Technical Math Algebra (3) Trigonometry QL
EGDT 2300	Advanced Structural CAD (3) (MATH 1050, MATH 1060 or EGDT 1600 and EGDT 1610 are prerequisites for this course)
EGDT 2310	Structural Steel Modeling (3)
EGDT 2600	Applied Structures I - Statics (3) (MATH 1050, or EGDT 1600 and EGDT 1610 are prerequisites for this course)
EGDT 2610	Applied Structures II - Strength of Materials (3) (MATH 1050, or EGDT 1600 and EGDT 1610 are prerequisites for this course)
General Drafting and Design Track. (Students select this track if interested in a career in general techniques and principles.)	
Complete the following:	
EGDT 1020	3D Architectural Modeling (3)
EGDT 1040	Fundamentals of Technical Engineering Drawing (3)
EGDT 1071 or EGDT 1070	3 Dimensional Modeling--Solidworks (3) 3 Dimensional Modeling Inventor

EGDT 1300	Structural Drafting and Design (3)
EGDT 1400	Surveying Applications and Field Techniques I (3)
Choose 11 Credits of Electives from the following: (Some courses may have additional prereqs.)	
ARC 1010	Classical Architecture Workshop (3)
ARC 2110	Architecture Studio I (4)
ARC 2210	Architecture Studio II (4)
EGDT 1010	Electrical Drafting and Design (3)
EGDT 1050	Intro to 3D Printing and Fabrication PP (2)
EGDT 1060	MicroStation Infrastructure Design (3)
EGDT 1100	Architectural Drafting and Design (3)
EGDT 1200	Mechanical Drafting and Design (3)
EGDT 1300	Structural Drafting and Design (3)
EGDT 1600	Technical Math Algebra (3)
EGDT 1610	Technical Math Geometry Trig (3)
EGDT 1720	Architectural Rendering FF (3)
EGDT 2020	Descriptive Geometry (3)
EGDT 2040	Piping Drafting (2)
EGDT 2100	Architecture Materials and Methods (3)
EGDT 2200	Advanced Mechanical (3)
EGDT 2300	Advanced Structural CAD (3)
EGDT 2310	Structural Steel Modeling (3)
EGDT 2400	Surveying Applications and Field Techniques II (3)
EGDT 2500	3 Dimensional Modeling--Civil 3D (3)
EGDT 2610	Applied Structures II - Strength of Materials (3)
EGDT 281R	Internship (1-3)
EGDT 285R	AEC Design Lecture Series (0.5)
EGDT 2860	Cooperative Correlated Instruction Skills USA (0.5)

Graduation Requirements

1. Completion of a minimum of 61 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

Graduation Plan

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in Wolverine Track (<http://www.uvu.edu/wolverinetrack/>).

First Year

Semester 1		Credit Hours
EGDT 1070 or EGD 1071	3 Dimensional Modeling Inventor or 3 Dimensional Modeling--Solidworks	3
EGDT 1040	Fundamentals of Technical Engineering Drawing	3
ENGL 1010 or ENGH 1005	Introduction to Academic Writing CC or Literacies and Composition Across Contexts CC	3
Complete one of the following:		3
MAT 1030	Quantitative Reasoning QL	
MAT 1035	Quantitative Reasoning with Integrated Algebra QL	
STAT 1040	Introduction to Statistics QL	
STAT 1045	Introduction to Statistics with Algebra QL	
MATH 1050	College Algebra QL	
MATH 1055	College Algebra with Preliminaries QL	
MATH 1090	College Algebra for Business QL	
Complete one of the following:		3
HIST 2700	US History to 1877 AS	

HIST 2710	US History since 1877 AS	
HIST 1700	American Civilization AS	
HIST 1740	US Economic History AS	
POLS 1000	American Heritage AS	
POLS 1100	American National Government AS	
Credit Hours		15
Semester 2		
EGDT 1020	3D Architectural Modeling	3
EGDT 1200	Mechanical Drafting and Design	3
EGDT 1300	Structural Drafting and Design	3
ENGL 2010	Intermediate Academic Writing CC	3
PHIL 2050	Ethics and Values IH	3
Credit Hours		15
Second Year		
Semester 3		
EGDT 1100	Architectural Drafting and Design	3
EGDT Elective		2
HLTH 1100 or EXSC 1097	Personal Health and Wellness TE or Fitness for Life TE	2
Biology		3
Fine Arts		3
Physical Science		3
Credit Hours		16
Semester 4		
EGDT Elective		3
EGDT 1400	Surveying Applications and Field Techniques I	3
Additional Science		3
Humanities		3
Social/ Behavioral Science		3
Credit Hours		15
Total Credit Hours		61

Program Learning Outcomes

1. Graduates will be proficient in 5 major industrial areas of design and drafting.
2. Graduates will be conversant in the subject matter of all drafting disciplines at a 75% or higher level as demonstrated by oral presentation and display of samples of work completed while in the EGDT program