

Engineering Design Technology, A.A.S.

The Associate in Applied Science Degree is a "job ready" degree and applies the technical and functional elements of several Drafting and Design fields. Students will take courses in the fundamentals of 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. Students will take other supporting classes and advanced courses in a minimum of two specialty areas of their choosing.

Program Requirements

Code	Title	Credit Hours
Total Credit Hours		65
General Education Requirements		19 Credits
English:		
ENGL 1010	Introduction to Academic Writing CC	3
or ENGL 1005	Literacies and Composition Across Contexts CC	
or MKTG 220G	Written Business Communication GI WE	
Mathematics:		
EGDT 1600	Technical Math Algebra	3
or MATH 1050	College Algebra QL	
or MATH 1055	College Algebra with Preliminaries QL	
EGDT 1610	Technical Math Geometry Trig	3
or MATH 1060	Trigonometry QL	
Humanities/Fine Arts/Foreign Language:		
PHIL 2050	Ethics and Values IH	3
or Any approved Humanities, Fine Arts, or Foreign Language Distribution Course		
Social and Behavioral Science:		
Any approved Social Science		3
Biology or Physical Science:		
PHYS 1010	Elementary Physics PP	3
Physical Education/Health/Safety or Environment:		
Any approved Physical Education, Health, Safety or Environmental course		1
Discipline Core Requirements		37 Credits
EGDT 1010	Electrical Drafting and Design	3
EGDT 1020	3D Architectural Modeling	3
EGDT 1040	Fundamentals of Technical Engineering Drawing	3
EGDT 1070	3 Dimensional Modeling Inventor	3
or EGDT 1071	3 Dimensional Modeling--Solidworks	
EGDT 1100	Architectural Drafting and Design	3
EGDT 1200	Mechanical Drafting and Design	3
EGDT 1300	Structural Drafting and Design	3
EGDT 1400	Surveying Applications and Field Techniques I	3
EGDT 2020	Descriptive Geometry	3
EGDT 2040	Piping Drafting	2
EGDT 2600	Applied Structures I - Statics	3
EGDT 2610	Applied Structures II - Strength of Materials	3
EGDT 285R	AEC Design Lecture Series	0.5
EGDT 2860	Cooperative Correlated Instruction Skills USA	0.5
EGDT 2870	Portfolio and Career Preparation	1
Elective Requirements		9 Credits
Choose a minimum of three courses from the following list for a minimum of 9 credits:		9

EGDT 2010	Advanced Electrical CAD (2)
EGDT 2100	Architecture Materials and Methods (3)
EGDT 2200	Advanced Mechanical (3)
EGDT 2300	Advanced Structural CAD (3)
EGDT 2400	Surveying Applications and Field Techniques II (3)
EGDT 2500	3 Dimensional Modeling--Civil 3D (3)
EGDT 281R	Internship (1-3)

Graduation Requirements

1. Completion of a minimum of 65 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, including a portfolio and exit interview.

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	
Complete one of the following:	3	
MATH 1050	College Algebra QL	
MATH 1055	College Algebra with Preliminaries QL	
EGDT 1600	Technical Math Algebra	
EGDT 1020	3D Architectural Modeling	3
EGDT 1040	Fundamentals of Technical Engineering Drawing	3
EGDT 1070 or EGD 1071	3 Dimensional Modeling Inventor or 3 Dimensional Modeling--Solidworks	3
EGDT 1400	Surveying Applications and Field Techniques I	3
EGDT 285R	AEC Design Lecture Series	0.5
Credit Hours	15.5	

Semester 2

Complete one of the following:	3	
ENGL 1010	Introduction to Academic Writing CC	
ENGL 1005	Literacies and Composition Across Contexts CC	
MKTG 220G	Written Business Communication GI WE	
EGDT 1010	Electrical Drafting and Design	3
EGDT 1100	Architectural Drafting and Design	3
EGDT 1200	Mechanical Drafting and Design	3
EGDT 1610	Technical Math Geometry Trig	3
EGDT 2860	Cooperative Correlated Instruction Skills USA	0.5
Credit Hours	15.5	

Second Year

Semester 3	Credit Hours	
Social/Behavioral Science	3	
PHYS 1010	3	
EGDT 1300	Structural Drafting and Design	3
EGDT 2020	Descriptive Geometry	3
EGDT 2040	Piping Drafting	2
EGDT 2600	Applied Structures I - Statics	3
EGDT 2870	Portfolio and Career Preparation	1
Credit Hours	18	

Semester 4

HLTH/PE/Safety/Env	1	
PHIL 2050	Ethics and Values IH	3
EGDT 2610	Applied Structures II - Strength of Materials	3
EGDT Elective	3	
EGDT Elective	3	

EGDT Elective	3
Credit Hours	16
Total Credit Hours	65

Program Learning Outcomes

1. Demonstrate knowledge of structural steel design and the AISC Standards
2. Demonstrate knowledge of mechanical design and engineering reference materials (Machinery's Handbook)
3. Demonstrate knowledge of architectural design, building codes, and construction methods and materials
4. Demonstrate knowledge of electrical design and the basic concepts of electricity and electronics
5. Demonstrate knowledge of civil design and related construction methods and materials
6. Demonstrate knowledge of surveying, surveying equipment, technology, and procedures
7. Demonstrate knowledge of algebra, trigonometry, plane and solid geometry, statics, and strength of materials
8. Combine cross disciplinary knowledge to solve predictable and unpredictable engineering design problems while utilizing the latest technologies available
9. Create quality, industry level design drawings for the various design disciplines
10. Use industry standard design software when producing design drawings
11. Cultivate an elevated commitment to work ethic, quality, productivity, and service