



Computer-Aided Design

AAS (60 SCH*)

*Semester Credit Hour

7/2023

First Semester - 15 SCH

PSYC 1300 - Learning Framework
DFTG 1309 - Basic Computer-Aided Drafting
DFTG 1305 - Technical Drafting
DFTG 2319 - Intermediate Computer-Aided Drafting
DFTG 1325 - Blueprint Reading and Sketching

Second Semester - 15 SCH

DFTG 1345 - Parametric Modeling and Design
DFTG 2312 - Technical Illustration and Presentation
DFTG 2302 - Machine Drafting
DFTG 2340 - Solid Modeling/Design
SPCH 1321 - Business & Professional Communication

Third Semester - 15 SCH

DFTG 1317 - Architectural Drafting - Residential
DFTG 2321 - Topographical Drafting
DFTG 2331 - Advanced Technologies in Architectural Design and Drafting
DFTG 2328 - Architectural Drafting - Commercial
ENGL 1301 - Composition I

Fourth Semester - 15 SCH

DFTG 1358 - Electrical/Electronic/Drawing
DFTG 2323 - Pipe Drafting
DFTG 2338 - Final Project - Advanced Drafting
MATH 1314 - College Algebra
DRAM 1310 - Introduction to Theater

Marketable Skills

Autodesk AutoCAD Civil 3D; Autodesk Revit; Bentley MicroStation; Trimble SketchUp Pro; Adobe Creative Suite; C; Microsoft.NET Framework; Adobe Illustrator; Adobe Photoshop; ESRI ArcGIS software; ESRI ArcView; Geomechanical design analysis GDA software; Topographic map software; Microsoft PowerPoint; Produce drawings, using computer-assisted drafting systems; Draft plans and detailed drawings for structures, installations, and construction projects; Coordinate structural, electrical, and mechanical designs and determine a method of presentation to graphically represent building plans; Analyze building codes, by-laws, space and site requirements, and other technical documents and reports to determine their effect on architectural designs.

High School Endorsements

Business and Industry

Expected Salary

Texas wage data: workers on average earn \$54,880; 10% of workers earn \$33,420 or less; 10% of workers earn \$81,880 or more.

Career Opportunities

Prepare detailed drawings of architectural and structural features of buildings or drawings and topographical relief maps used in civil engineering projects. Use knowledge of building materials, engineering practices, and mathematics to complete drawings. Architectural Designer, Architectural Drafter, Architectural Draftsman, Civil Drafter, CAD Designer, CADD Drafter, Drafting Technician, Draftsman, Draftsperson, Rapid prototyping technician, Parametric modeler.

Program Outcomes

- Operate a 2D CAD Design program.
- Read and interpret blueprints.
- Design and document in 3D with a parametric modeling program.
- Create construction and manufacturing documents using various CAD programs.
- Operate and maintain a 3D printer.

Additional Education Opportunities

Bachelor of Arts in Applied Science