



# CAD Technician

Certificate (36 SCH\*)

\*Semester Credit Hour

7/2023

## First Semester - 12 SCH

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

## Second Semester - 12 SCH

DFTG 1345 - Parametric Modeling and Design  
DFTG 2302 - Machine Drafting  
DFTG 2312 - Technical Illustration and Presentation  
DFTG 2340 - Solid Modeling/Design

## Third Semester - 12 SCH

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

## 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.

## 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.

## High School Endorsements

Business and Industry

## Additional Educational Opportunities

Associate in Applied Science, Bachelor of Arts in Applied Science

## 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

CAD Technician; Architectural CAD Designer; Mechanical CAD Designer; Civil CAD Designer; Pipe CAD Designer; Electrical CAD Designer; Surveyor CAD Technician; Graphics Designer; Rapid Prototyping Technician; Parametric Modeler; Building Information Modeler; Landscape Designer Technician; Interior Designer Technician.