



## Description

Have you ever thought about becoming an engineer? Or perhaps you see yourself as an inventor who designs something to help people in everyday life. In this course, students use the same computer software that professionals use.

The course is designed to present students the ergonomics of the workplace, basic drafting, professional development, creation of a professional portfolio, and the fundamentals of computer software.

The computer software is meant to assist students in their goals of becoming a design engineer in just about any field - from electrical technician to manufacturing engineer. Students with an interest in self-paced learning (commonly found in college and university settings), drawing/sketching, math, working with computers, and hands-on experience would benefit from this career major.

The course equips students with knowledge and skills to perform in basic, professional workforce settings. This course specializes in engineering - which will lead to many other careers.

## Application

Applicants must complete a Southern Tech Application for Admission. Additional information and applications are available at the Southern Tech campus and online at [www.sotech.edu](http://www.sotech.edu). Enrollment for this career major is open to partnering High Schools (juniors/seniors) and Adults.

## Tuition

High School Student: Free. Adult Student (in-district): \$2.50 per hour; Adult Student (Out-of-District): \$5 per hour; and Adult Student (Out-of-State): \$7.50 per hour. Additional costs may include books, supplies, and miscellaneous fees.

## Financial Aid and Scholarships

Financial aid and scholarships are available for qualifying students.

## Student Organization

SkillsUSA

## Schedule

Adults (Half Time) 8:00-11:00 AM or 12:45-3:45 PM  
Adults (Full Time) 8:00-11:00 AM and 12:45-3:45 PM  
High School Students: 8:00-11:00 AM or 12:45-3:45 PM

## Program Details

### Computer Aided Design – Mechanical

Course	Hours
Fundamentals of CADD	120
Engineering CADD	120
Principles of CADD	165
Drawing & Document Management	90
Workforce Staging	30
Manufacturing CADD	120
Advanced Presentation Graphics Animation	80
CAD Mechanical Level 1	65
CAD Mechanical Level 2	65
CAD Mechanical Level 3	65
CAD Mechanical Level 4	65
CAD Mechanical Level 5	65
<b>Total</b>	<b>1050</b>
<i>Estimated time to complete (Full Time)</i>	<i>1 year</i>
<i>Estimated time to complete (Half Time)</i>	<i>2 years</i>

## Targeted Certifications and/or Credentials

- AutoCAD Certified User
- AutoDesk Inventor Certified User
- Tooling U-SME Fundamentals of Additive Manufacturing
- Certified SOLIDWORKS Associate (CSWA)

**Certifications may vary by Program and are subject to change without notice.**

## Employment Options

*The following list is associated with the approved SOC (Standard Occupational Classification) for this program and does not necessarily represent immediate opportunities; additional training may be required for some options listed.*

CAD Designer (Computer Aided Design Designer), CAD Operator (Computer Aided Design Operator), CAD/CAM Specialist (Computer Aided Design/Computer Aided Manufacturing Specialist), Design Drafter, Designer, Drafter, Installation Drafter, Mechanical Designer, Mechanical Drafter, Project Designer – Approximate Pay Potential: \$16-38/Hour.