Beginning SolidWorks®   88 Hours

SolidWorks® has become a worldwide industry leader in affordable 3-D feature based parametric solid modeling software for mechanical design and engineering. SolidWorks® utilizes an intuitive windows user interface, one of the best in the industry, and is based on the powerful Parisolid® kernel. Users of Pro-E®, Unigraphics®, CATIA®, and other high-end CAD software are discovering the portability, shorter learning curve, and expanded power and capability of SolidWorks®.

In this course participants will learn how to create solid models using SolidWorks. Participants will learn solid modeling, assembly and sub-assembly modeling, and the creation of engineered drawings from those components and assemblies. The course will take the students from beginner to intermediate users preparing them for the CSWA SolidWorks Associate Certification.

Pre-requisites: Familiarity with computers is assumed (creating, downloading, and saving files, etc.).

The Feature-based Parametric Modeling Environment

- Setting up the design options and configuration
- Customizing SolidWorks® for your application
- Principles of feature based modeling
- Strategy for planning your model for design intent
- Sketching and parametric dimensioning techniques
- Model building using 3-D projection techniques

Beginner Solid Modeling Techniques

- Application of applied feature
- Using guide paths and pierce relations for complex lofts and sweeps
- Editing and modifying solid models.
- Creating hole features
- Editing solid features
- Application Project

Creating Assemblies

- Bringing parts into an assembly
- Using assembly mating relations
- Testing mating relations
- Exploding and collapsing the assembly
- Application Project

Creating Engineering Drawings and Detailing

- Using drawing templates and sheet formats
- Creating standard views from the solid model
- Adding detail auxiliary views
- Dimensioning and adding notes
- Inserting a Bill of Material (BOM)
- Geometric tolerancing
- Application Project

ETI instructor Paul Montgomery is a Certified Professional with SolidWorks Mechanical Design. He runs his own design consultant engineering and prototype manufacturing company, P&M Engineering. Paul is also a certified, apprentice-trained toolmaker, prototype machinist, and CNC Programmer with nearly 40 years of experience in the industry. His many years of experience, from manufacturing to design engineering, exposes students to practical design competency, utilizing many aspects of top-down design in tooling.

Employment Training Panel (ETP) State Funded Training*: $350.00 per eligible employee

Non-ETP COST: $2,638.00

WHEN:
Wednesdays
December 4, 2024 – May 14, 2025
5:00 pm to 9:00 pm
No class December 25 and January 1

WHERE:
College of the Canyons – Canyon Country Campus
17200 Sierra Highway
Canyon Country, CA 91351

For more information or to register, please contact Jocey Hogan at 661.362.5657 or jocey.hogan@canyons.edu

*For employees of eligible employers. Employees are not considered registered until all paperwork is received, a participant fee, per trainee, has been paid to the Santa Clarita Community College District and the Employment Training Panel has determined eligibility. State subsidy is contingent upon the trainee completing all the Employment Training panel requirements. Please contact the Employee Training Institute, 661.362.5657, for details on eligibility requirements.