



88 Hours

Beginning SolidWorks[®] 2017

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.

The Feature-based Parametric Modeling Environment

- Setting up the design options and configuration
- Customizing SolidWorks® for your application
- Principles of feature based modeling

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 Assemblies

- Bringing parts into an assembly
- Using assembly mating relations

Creating Engineering Drawings and Detailing

- Using drawing templates and sheet formats
- Creating standard views from the solid model
- Adding detail auxiliary views

- Strategy for planning your model for design intent
- Sketching and parametric dimensioning techniques
- Model building using 3-D projection techniques
- Creating hole features
- Editing solid features
- **Application Project**
- Testing mating relations
- Exploding and collapsing the assembly
- **Application Project**
- Dimensioning and adding notes
- Inserting a Bill of Material (BOM)
- Geometric tolerancing
- **Application Project**

ETI instructor Paul Montgomery has more than 30 years' experience in manufacturing, specializing in CAD design with SolidWorks and CATIA, CNC mill and lathe programming, set-up and operation, CAM programming, manual machining in a prototype/tool making capacity with expert level on all manual engine lathes and other related machining equipment and tools. In addition, Paul is an experienced instructor and has been manager of training and development for a major aerospace manufacturing company. Paul continues to create and deliver engaging and effective training programs in most machining topics.

Employment Training Panel (ETP) State Funded Training*: \$350.00 per eligible employee Non-ETP COST: \$2,638.00

WHEN: **Tuesdays & Thursdays** 5:00 pm to 9:00 pm April 3, 2018 – June 14, 2018

WHERE: **College of the Canyons Center for Applied Competitive Technology** 25571 Rye Canyon Road Valencia, CA

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.