

ENRICHMENT COURSE SERIES

OVERVIEW

FLEXIBLE, ONLINE, INSTRUCTOR-LED TRAINING BUNDLE: \$895

For a one-time cost of \$895, take as many of our eligible Enrichment Courses as you'd like over the next year.

All courses included in this offer are custom, developed by our Application Engineers based on customer requests needing more options for user development beyond standard SOLIDWORKS training.

DETAILS

- Annual program, expires one year from purchase
- Named user contract (per student)
- The named student has a 12 month period to take any/all of the eligible courses
- Courses are taught by live instructors online through GoToWebinar
- No system requirements - students will access GoEngineer's training computers
- Training flexibility - all courses are just 4 hours

ELIGIBLE COURSES

SKETCH LIKE A PRO!

MASTERING THE SOLIDWORKS DESIGN LIBRARY

SOLIDWORKS EXTREME PART MODELING

MASTERING IMPORTED MODELS IN SOLIDWORKS

ADVANCED SHEET METAL FOR FABRICATION PROS

MASTERING PARTS & FEATURES

SOLIDWORKS ADVANCED WELDMENTS

MASTERING THE SOLIDWORKS USER INTERFACE FOR EFFICIENT DESIGN

3D MODELING FOR PLASTIC PART DESIGN

MASTERING DRAWINGS

LEARN THE BASICS OF SOLIDWORKS CAM



SKETCH LIKE A PRO

Class Syllabus

Lesson 1: Prepare SOLIDWORKS

- Auto-rotate view
- Enable on screen numeric input
- Additional Sketch settings
 - i. Scale Sketch on first dimension
 - ii. Display shaded planes

Lesson 2: Prepare Templates

- Annotations
- Dimensions
 - i. Precision/Tolerance
 - ii. Leading/Trailing zeroes
- Units
- Image Quality
- File Properties

Lesson 3: Customize SOLIDWORKS

- S Key / Shortcut Bars
- Keyboard
- Mouse Gestures
- Graphics Area

Lesson 4: Sketch Entities

- Construction Geometry
- Hold-click, click-click, double-click
- Quick create arc through line chain
- A key
- Infinite Line
- Midpoint Line
- SELECTABLE Midpoints
- ALL Rectangles w/ construction lines
- Easy shapes using Polygon tool
- Partial Ellipse
- Log sketch line
- Sketch Picture
- Auto Trace

Lesson 5: Sketch Selection

- Shaded Contours: Alt & Ctrl Alt
- Left vs. Right window selection box
- Ctrl select
- Relations at sketch points
- Tangent selection
- G Magnifying Glass

Lesson 6: Breadcrumbs / Confirmation Corner

- In an assembly
- In a part

Lesson 7: Constraints & Relations

- Fully Define Sketch
- Ctrl Override

Lesson 8: Dimensions

- First Dimension scaling
- Smart Dimension
- Ordinate dimensions
- Dimensioning across a centerline
- Arc Tangent Dimensions

Lesson 9: Sketch Tools

- Power Trim (trim, extend, endpoint)
- Normal To
- Detach Segment on Drag
- Thin Features
- Convert Entities
- Offset
- Dynamic Mirror vs regular Mirror
- Modify
- Check Sketch for Feature

Lesson 10: Splines

- Creating and controlling splines
- Enable spline tangency and handles
- Total Spline length



XTREME PART MODELING

Class Syllabus

Lesson 1: Productivity Tools

- Welcome Screen
- Performance Evaluation
- Customization
 - i. Mouse Gestures
 - ii. S-Key
 - iii. Toolbars (alt key)
- Color Scheme
 - i. Background
 - ii. Icons

Lesson 2: Sketches

- Shaded Contours
 - i. Alt Selection vs Alt Ctrl Select to Extrude
- Selection Contours
- Wrap Feature
- 3D Sketch
 - i. Mirror 3D Sketch Entities

Lesson 3: Multi-Body Parts

- Insert Part(s) into a Part
- Split parts
- Saving Bodies

Lesson 4: Scan to 3D

- Turning on add-in
- Meshing
- Extracting surfaces
- Creating Solids

Lesson 5: Importing 2D Geometry

- 2D to 3D Toolbar
- Block and Locate
- Intersect

Lesson 6: Patterns

- Curve Driven Patterns
 - i. Follow Surface
 - ii. Using Helix
- Fill Pattern
 - i. Inside Region
 - ii. Outside Region
- Variable Pattern

Lesson 7: Design Tables

- How to
- When to use



ADVANCED SHEET METAL FOR FABRICATION PROS

Class Syllabus

Lesson 1: Setup & Review

- System Option settings
- Document Property settings
- Templates
- Design Approach

Lesson 2: Design – Multi-Body

- Creating MB parts
- Modifying gauge thickness
- Getting the flat

Lesson 3: Corners

- Welded
- Closed
- Corner Relief
- Corner Break/Trim
- Manual Reliefs
- Flatten > Corners-Trim

Lesson 4: Tab and Slot

- Single Body
- Multi-Body

Lesson 5: Design Library

- Vent
- Custom cutout
- Forming Tools
- Custom forming tools

Lesson 6: Errors and Common Issues

- Old Architecture
- Cuts & Holes
- Reorder Bends
- Bend/Gauge Tables

Lesson 7: Finishing the Design

- Export to DXF/DWG
- Drawings
 - Settings
 - Understand the flat
 - Multi-body views
 - Cut-List properties



ADVANCED WELDMENT TRAINING

Class Syllabus

Lesson 1: Introduction to Weldments

- Weldment Operations:
- Structural Members:
 - i. Edit the Structural Member Feature
 - ii. Creating Groups
- Change the Alignment and Locations of Profile
- Trimming and Corner Treatment:
- Trim/Extend Operations

Lesson 2: Design – Multi-Body

Lesson 3: Additional Tools

- End Cap
- Weld Preparation
 - Weld Gaps
 - Chamfer
 - Adding Weld Symbols
- Weld Bead Tool
- Gusset Tool

Lesson 4: Weldment Profiles

- Downloading Standard
- Creating Weldment Profiles

Lesson 5: Insert Part

Lesson 6: Cut-List Properties

Lesson 7: Weldments and Drawings

- Drawing Cut-List Table
- Customize the Cut List Table
- Ballooning
- Drawing Views of Individual Bodies
- Converting Weldments



3D MODELING FOR PLASTIC PART DESIGN

Class Syllabus

Lesson 1: Little Known Capabilities in Everyday Features

- What is SWIFT?
 - i. FilletXpert
 - ii. DraftXpert
 - iii. Draft Analysis
 - iv. Parting Line Analysis

Lesson 2: Plastic Part Specific Features

- Lip & Groove
- Mounting Boss
- Snap Hook
- Vent



BASICS OF SOLIDWORKS CAM

Class Syllabus

Lesson 1: The Basic Workflow of SOLIDWORKS CAM

- o @c UX'GC @8K CF?G'75A
- c 'Cj Yfj]Yk 'cZH\Y'GC @8K CF?G'75A ' bhYfZJW
- c 'GYm]b['I d 'U'A UWX]bY/ 'GY'YW]b['U'Dcgh
- c 'Ghc W_8YZ]b]h]c b
- c 'GYm]b['I d 'h\Y 'DUfhA UWX]b]b['C f][]b '
- o A Yh\cXg'Zcf WYU]b['A UWX]bUV'Y : YUhi fYg
- o Generating Operation Plans
- o Generating Toolpaths
- o Simulating Toolpaths
- o Post Processing
- o Creating G-Code and the NC Editor

Lesson 2: Machinable Features and Operation Modification

- o Automatic Features
- o Clear Warnings
- o Operation Modification
 - i. Delete
 - ii. Reorder
 - iii. Sort
 - iv. Tool Modification
 - v. Changing Machining Parameters
- o Model Modifications

Lesson 3: Interactive Feature Creation



MASTERING THE SOLIDWORKS DESIGN LIBRARY

Class Syllabus

Lesson 1: Design Library Overview

- File Types
- Advanced Library
- Using Library Files

Lesson 2: Design Library File Management

- Default Design Library Location
- Creating a Design Library Structure
- File Location Settings

Lesson 3: Notes and Annotations

- Drawing Annotations
- Symbols
- Blocks
- Model Annotations

Lesson 4: Sketches

- Library Sketches
- Applying Library Sketches
- Updating Linked Library Feature

Lesson 5: Features

- Library Feature Creation

Lesson 6: Smart Components

- Smart Component Example
- Smart Component Creation



MASTERING IMPORTED MODELS IN SOLIDWORKS

Class Syllabus

Lesson 1: 3D Interconnect

- Disabling 3D Interconnect
- Legacy Translators
- Best file types for importing
- Hands on with Imported Files

Lesson 2: Import Diagnostics

- Issues with Imported files
- Causes of Imported files issues
- Second opinions on imported files
- Hands on with Imported Files

Lesson 3: Direct Editing

- Direct Editing Toolbar
 - i. Adding the toolbar
 - ii. Explain the features
- Hands on with Direct Editing
- Mesh Modeling
 - i. Mesh Modeling Toolbar
 - a. Adding the toolbar
 - b. Explain the features
 - ii. Hands on with Mesh Modeling

Lesson 4: Removing Detail

- Ways to Remove Detail
- Process of Removing Detail from Imported Solids
- Hands on Removing Detail



MASTERING PARTS & FEATURES

Class Syllabus

Lesson 1: Sweeps and Lofts

Lesson 2: 3D Sketching and Curve Features

Lesson 3: Solid-Surface Hybrid Modeling



MASTERING THE SOLIDWORKS USER INTERFACE FOR EFFICIENT DESIGN

Class Syllabus

Lesson 1: The Command Manager

- Tailoring the Perfect Command Manager
- Top 20 Commands to Add
- Knowing How to Use Instant 2D and Instant 3D

Lesson 2: Customizing Onscreen Controls

- Mouse Gestures
- S Key
- Breadcrumbs
- Quick Measure
- Measure Active in Any Command
- In Context Toolbars
- Heads Up Toolbar

Lesson 3: Keyboard Shortcuts

- How to Add Keyboard Shortcuts
- Avoiding the Task Pane

Lesson 4: View Settings

Lesson 5: Property Tab / PDM Data Card

Lesson 6: Challenge / Knowledge Test



MASTERING DRAWINGS

Class Syllabus

Lesson 1: Drawings Setup

- Tables
- Templates and Sheet Formats
- Title Block Fields

Lesson 2: Views

- Section Views
 - i. Section View Assist
 - ii. Section View in Model
 - iii. Broken Out Section
 - iiii. Removed Section
- Auxiliary View
- Detail View

Lesson 3: Annotations

- Notes
- Balloons
- Dimensions
- Design Library

Lesson 4: Other Views and MBD

- Alternate Position Views
- Custom View Orientations
- Mirror View
- MBD 3D Views



GETTING STARTED AS A CAD ADMIN

Class Syllabus

Lesson 1: Resources

- GoEngineer.com resources
- Customer portal
- My.SolidWorks.com
- Public resources

Lesson 2: Support

- Contacting GoEngineer support and what to expect
- SRs and SPRs

Lesson 3: Licensing

- Licensing Types
- Identifying License Types
- License requirements and functionality

Lesson 4: Tools and Troubleshooting

- SOLIDWORKS copy settings wizard
- User registry reset
- SOLIDWORKS RX
- Task scheduler
- Benchmark and performance test tools
- IP config, ping and telnet
- Activation wizard
- Windows event logs Body



MASTERING CAD ADMIN: INSTALL, LICENSING & DASHBOARD

Class Syllabus

Lesson 1: Installation

- Install & uninstall
- Admin image creation
- Admin image options editor
- Installing & using the admin image
- Admin image server pack upgrade
- Network license manager install, firewall and port exceptions
- Copy settings wizard

Lesson 2: Licensing

- Activation options within SOLIDWORKS
- SOLIDWORKS activation wizard
- Online licensing setup
- Network license manager and options file

Lesson 3: The CAD Admin Dashboard



MASTERING CAD ADMIN: CUSTOM PROPERTIES, TOOLBOX, DRAWING PROPERTIES & BOM

Class Syllabus

Lesson 1: Custom Properties

- Drop down and properties.txt
- Task scheduler to apply properties
- Property tab builder

Lesson 2: Toolbox

- File locations
- User settings
- Customizing toolbox standards
- Adding custom properties
- Thread display property
- Adding properties manually
- Excel export and import to add properties

Lesson 3: Drawing Properties & BOM

- Linking custom properties
- Adding BOM columns
- Adding BOM rows
- Cell equations