solidxperts | SOLIDWORKS

AUTOMATING TRAINING

COURSE OUTLINE

www.solidxperts.com

by SXP

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COURSE OUTLINE / AUTOMATING

DRIVEWORKS SOLO – 3 DAYS (21H)

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2. Lesson 2

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- Building Rules

4. Lesson 4

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6. Lesson 6

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- Enhancing your Forms
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- Documents

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- Drawings

Course Objectives : At the end of each course, students will know the capabilities of the software and will be able to use the learned features.
Training Course : Training is given in class at SolidXperts or online where each student has access to a workstation or online product version.
Methodology : Training is based on case studies demonstrated by the instructor. At the end of each lesson, time will be given for exercises.
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Instructor : SolidXperts trainers are Certified SolidWorks Instructors (CSWI) and authorized by Emploi-Québec.
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DRIVEWORKS ADMINISTRATOR – 4 DAYS (28H)

*This course is given using digital files only (no physical book is provided)

1. Lesson 1

- Creating a Group and Capturing Models

2. Lesson 2

- Building a user interface in DriveWorks Administrator

3. Lesson 3

- Building Rules

4. Lesson 4

- Running your Project

5. Lesson 5

- File Name and Relative Path Rules

6. Lesson 6

- Tables

7. Lesson 7

- Form Navigation
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- Static and Dynamic Control Properties
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8. Lesson 8

- Dynamic Replacement Files

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- Documents

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- Drawings

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- Specification Flow
- Preparing your Models for Automation

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- Linking to Data

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17. Lesson 17 (Advanced)

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18. Lesson 18 (Advanced)

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- Generation Tasks

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SWOOD DESIGN CREATOR – 3 DAYS (21H)

1. SWOOD Design Presentation

- Introduction to SWOOD Design
- Configuring
- Integration of SWOOD into SOLIDWORKS
- User Interface

2. SWOOD Panel Creation

- Creating a Panel
- Editing a Panel
- Curved Panels
- Other Methods of Creation

3. SWOOD Frame Creation

- Demonstration of a SWOOD FRAME
- Creating a SWOOD Frame with a Panel
- Editing a Frame
- Adding Extra Parameters
- Creating a New Frame from an Existing Frame
- Finalising and Saving Frames to Library

4. SWOODBox Creation

- Introduction to SWOODBoxes
- Intention and Principles when Creating a SWOODBox
- Presentation of SWOODBox Task Pane
- Demonstration of SWOODBox Insertion
- Creation and Saving a SWOODBox to Library
- SWOODBox Machining Definition
- Insertion of a SWOODBox
- Introduction to SWOODBox Scripts

5. SWOOD Connector Creation

- Accessing Connectors Library
- Creating a Simple Connector
- Creating a Compound Connector
- Introduction to Rule Creation in Scripts
- Inserting a Connector

6. SWOOD Profiles

- Creating a new Profile
- Applying created profile to Profile Library
- Applying a Profile to an Edge

7. Edge Bands

- Applying an Edge Band to a Panel
- Creating a Machining Profile with Edge Band
- Applying an Edge Band with a Machining Profile

8. Materials

- Creating a New Material
- Applying a Material (Panel, frame, click, and drag with or without driving thickness)
- Managing Materials
- Managing Materials through Panel Interface

9. Creating a Project with Multiple Frames

- Project Creation
- Copying a Frame
- Modifying Dimensions of Frames
- Creating Layout Sketches
- Inserting Frames onto Layout Sketch
- Creating Magnetic Insertion Points
- Creating a Layout with Magnetic Mates
- Modifying Layout Sketch
- Generate a Report

Annex : ToolsXperts Demo

- CutXperts
- EdgeXperts

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SWOOD DESIGN USER – 1 DAY (7H)

*Prerequisites : Basic knowledge of SOLIDWORKS Modeling

1. SWOOD and SOLIDWORKS

- About SWOOD and SOLIDWORKS
- Implementing SWOOD into SOLIDWORKS
- SOLIDWORKS Settings for SWOOD

2. Panel Design

- Panel Definition in SWOOD
- Edit Pannel Command and Library Features
- Manage Material Library
- Understanding the Material Library
- Edgebands and Shapes Management
- Panel Editing Interface

3. Frames

- What is a SWOOD Frame?
- Useful Interfaces

4. Connectors

- What is a SWOOD Connector
- Command and Library Interfaces
- Connectors Library Editing Window

5. SWOODBox

- What is a SWOODBOX?
- Useful Interfaces

6. Integration

- Integration Command Interface

7. SWOOD Reports

- Presentation
- Report Interfaces

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TOOLSXPERTS

- CutXperts
- EdgeXperts

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SWOOD CAM – 2 DAYS (14H)

*The "SWOOD Design - Essential" Training is required for this class.

1. Integrating SWOOD CAM into SOLIDWORKS

- Add-ins
- SWOOD Settings

2. SOLIDWORKS Settings for SWOOD CAM

- Required Configurations
- Managing Views
- Complex Assemblies
- Customizing Command Bar
- Dynamic Highlight
- Custom Property Files

3. Tool Creation

- Presentation of Tool Library
- Presentation of Aggregate Library
- Aggregate Properties
- Properties of Drill Bits
- Simple Tool Creation
- Modifying a Aggregate/Drill Block
- Blade Management

4. Program Settings and Automatic Operations

- Configuring each Phase of a Part File
- Origin
- Tool Insertion
- Creating a Machining Definition (Automatic contour)
- Creating an Automatic Drilling Definition (without selection)
- Creating an Automatic Grooving Definition (without selection)
- Creating an Automatic Pocket Operation
- Creating an Automatic Sawing Operation

5. Manual Operations

- Pocket Milling and Machine Pocket Milling
- Creating a Contour with Wall Selection
- Creating a Contour for Grooving/Rebating Operation
- Creating a Contouring Operation with a Chamfering Tool
- Demonstration of Tool Simulation
- Creating an Operation on a Sketch

6. 4 & 5 Axis Operations

- Surfacing, Contouring and Sawing
- Guide Line for Inclined Plane
- Inclined Pocket Milling Operations
- Interpolate C-Axis
- Chamfering
- Creating a 5-Axis follow-up Operation in OP0
- Creating a 3D Roughing Operation (Roughing & Finishing)

7. SWOOD Design Panel Integration with SWOOD CAM Operations

- Template Creation
- Creating a Frame with Machinings
- Creating a Partial Contouring Operation
- Positioning by Mates in Assembly Machining
- Positioning by Offsets in Assembly Machining
- Positioning by Repetition in Assembly Machining
- Transforming a Part into an Assembly

8. Link with SWOOD DESIGN

- Profile Machining
- Calibrating with and without Edge Bands
- Stock Following Edge Bands and Laminate

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SWOOD DESIGN ADVANCED CREATOR – 1 DAY (7H)

*The "SWOOD Design - Essential" Training is required for this class.

1. Introduction to Script Programming

- Organization of scripts
- Introduction to script programming
- Different levels of script application

2. Advanced SWOODBox

- Advanced SwoodBox presentation
- Creation of the parameters of a SwoodBox
- Creation of the rules of a SwoodBox
- Automate a SwoodBox with a script

3. Using SWOODCenter

- Library opening
- Simple element creation
- Compound element creation
- Introduction of rules with script
- Insertion of links

4. SWOOD Report

- Data export

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