



INVENTOR CABLE AND HARNESS DESIGN TRAINING

Objectives

The main objective of this course is to teach users the advance commands and tools necessary for professional 3D design focusing on Cable and Harness Design using Inventor. After completing this course users will be able to:

- ✓ Describe the functionality of Cable and Harness and the basic workflow to add and document cable and harness designs.
- ✓ Wire a harness assembly by adding or importing wires and cables, adding ribbon cables, adding route segments, and routing wires and cables through the segments.
- ✓ Refine a cable and harness design by editing the wires, cables, routes, or cable ribbons; by adding and editing splices; or by adding and editing virtual parts.
- ✓ Communicate your cable and harness to others by creating and annotating 2D drawings and exporting the design data.
- ✓ Create and manage the library file and configuration files.
- ✓ Create, author, and publish electrical parts and connectors to a custom Content Center library

Pre-requisites

This guide is designed for an Inventor User. It is recommended that you have a working knowledge of:

- Microsoft® Windows® 7, Microsoft® Windows® 8 or Microsoft® Windows® 10
- Completed the Fundamental Autodesk® Inventor® 2018
- Knowledge of part modeling, assembly modeling, and drawing view creation and annotation, is recommended.

Chapter 1: Getting Started Creating Cable and Harness Designs

- Creating Cable and Harness Designs
- Review and Navigate a Design
- Create a Harness Assembly

Chapter 2: Wire a Harness Assembly

- Adding Wires and Cables
- Routing Wires and Cables
- Importing Wire and Cable Data
- Adding Ribbon Cables
- Add Ribbon Cable Folds

Chapter 3: Refine a Cable and Harness Design

- Modifying Wires, Cables, Segments, and Ribbon Cables
- Edit Display, Settings, and Properties
- Add and Modify Points
- Check the Bend Radius
- Working with Splices
- Working with Virtual Parts

Chapter 4: Communicate the Design

- Creating Drawing Views of Cable and Harness Designs
- Annotating Nailboards
- Exporting and Reporting Design Data
- Create External Files of Exported and Reported Data

Chapter 5: Configure Library and Report Configuration Files

- Library Definitions and Library Files
- Create Library Definitions
- Configuration Files for Reports, Imports, and Exports
- Modify a Report Configuration File
- Create a Library Configuration File

Chapter 6: Create, Author, and Publish Electrical Content

- Defining Electrical Parts and Connectors
- Managing Libraries
- Create a Custom Library
- Creating Library Content
- Author an Electrical Part
- Publish to the Content Center
- Managing Library Content
- Copy and Move Content
- Add a Column to a Part Family
- Edit Family Data in Excel
- Create Family Members Using Material Guide