

Autodesk Inventor Professional Cable and Harness Design

Course Description

In this course, students learn the fundamental principles and recommended workflows for creating and documenting 3D electrical parts and wire harness designs using Autodesk® Inventor® Professional. Students learn how to add electrical components, cables, and wires to a design, route wires through an assembly to create a harness, and create ribbon cables. Students also learn how to document the wire harness assembly in drawings and generate reports used to build the wire harnesses. Hands-on exercises representing real-world, industry-specific design scenarios are included.

Suggested Course Duration: 2 days
Onscreen Exercises Included? Yes

Objectives

The primary objective of this course is to teach students the recommended workflows and basic skills needed to design and document 3D electrical parts wire harness designs using Autodesk Inventor Professional.

Who Should Attend

This course is designed for experienced Autodesk Inventor users.

Prerequisites

Before taking this course, students should have a working knowledge of the following:

- Autodesk Inventor parametric part and assembly design.
- Mechanical design validation or mechanical engineering principles (recommended but not necessary).
- Microsoft® Windows® Vista, Microsoft® Windows® XP, or Microsoft® Windows® 2000.

Course Outline

Day 1

Getting Started Creating Cable and Harness Design

- Creating Cable and Harness Designs

Wire a Harness Assembly

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

Refine a Cable and Harness Design

- Modifying Wires, Cables, Segments, and Ribbon Cables
- Working with Splices
- Working with Virtual Parts

Day 2

Communicate the Design

- Creating Drawing Views of Cable and Harness Designs
- Annotating Nailboards
- Exporting and Reporting Design Data

Configure Library and Report Configuration Files

- Library Definitions and Library Files
- Configuration Files for Reports, Imports, and Exports

Create, Author, and Publish Electrical Content

- Defining Electrical Parts and Connectors
- Managing Libraries
- Creating Library Content
- Managing Library Content

Note: The suggested course duration is a guideline. Course topics and duration may be modified by the instructor based upon the knowledge and skill level of the course participants.

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