

Autodesk Inventor Cable and Harness Design

Course Length: 2 days

The Autodesk Inventor Cable and Harness Design training course instructs students in the use of the Autodesk Inventor Cable and Harness environment. Through a hands-on, practice-intensive curriculum, students acquire the knowledge needed to design physical cables and harnesses for electrical systems in almost any kind of product or machine. With specific tools to incorporate cable and harness into digital prototypes, the Autodesk Inventor Cable and Harness Design software enables you to calculate accurate path lengths, avoid small-radius bends, and help ensure that electrical components fit into the mechanical assembly before manufacturing.

Topics Covered

- 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 Centre library.

Prerequisites

This training course is designed for experienced users of the Autodesk Inventor software. The following is recommended:

- Students should have completed the Autodesk Inventor Introduction to Solid Modelling learning course or have an equivalent understanding of the Autodesk Inventor user interface and working environments.
- Knowledge of part modelling, assembly modelling, and drawing view creation and annotation, is recommended.

Training Guide Contents

Chapter 1: Getting Started Creating Cable and Harness Designs

- Lesson: Creating Cable and Harness Designs

Chapter 2: Wire a Harness Assembly

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

Chapter 3: Refine a Cable and Harness Design

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

Chapter 4: Communicate the Design

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

Chapter 5: Configure Library and Report Configuration Files

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

Chapter 6: Create, Author, and Publish Electrical Content

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