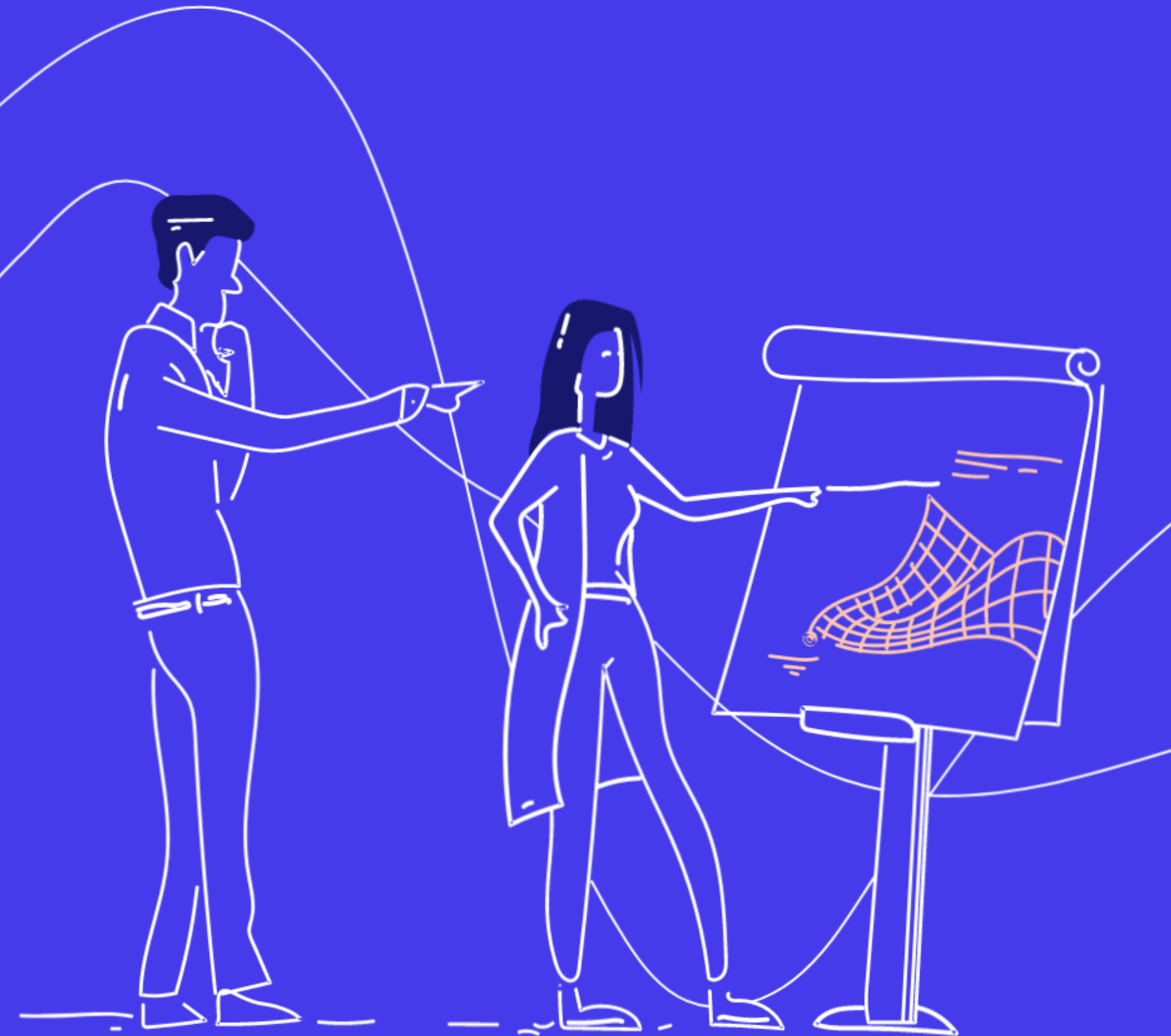




Simulation-Based Testing with Simulink



SciEngineer's training courses are designed to help organizations and individuals close skills gaps, keep up-to-date with the industry-accepted best practices and achieve the greatest value from MathWorks® and COMSOL® Products.

Simulation-Based Testing with Simulink

This one-day course describes techniques for testing Simulink model behavior against system requirements using Simulink Test, Simulink Requirements, and Simulink Coverage. This course focuses on verification and validation, developing test cases, analyzing test results and creating repeatable groups of tests.

Prerequisites

MATLAB Fundamentals and Simulink Fundamentals

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DURATION	LEVEL
1 day	Advanced

TOPICS

Day 1

- Verification and Validation in Model-Based Design
- Developing Test Cases
- Analyzing Test Results
- Building Test Suites

Verification and Validation in Model-Based Design

OBJECTIVE: Introduce verification and validation in the Simulink environment and discuss how it fits in to a typical project workflow using Model-Based Design.

- Continuous test and verification
- Types of verification
- Electronic throttle control project

Developing Test Cases

OBJECTIVE: Create time-based and logic-based test cases for a Simulink model.

- Defining test cases
- Generating test harnesses
- Creating and importing test inputs
- Incorporating logic in tests

Analyzing Test Results

OBJECTIVE: Analyze test results of a Simulink simulation, both during and after the simulation.

- Performing requirements-based assessments
- Logging, inspecting, and comparing test results
- Collecting model coverage

Building Test Suites

OBJECTIVE: Create repeatable groups of tests and automatically generate reports from the test results.

- Creating test files
- Configuring simulation, baseline, and equivalence tests
- Viewing and documenting test results



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knowledge**

