# Simulation-Based Testing with Simulink

## Prerequisites

*MATLAB Fundamentals* and *Simulink for System and Algorithm Modeling*

This course is intended for intermediate or advanced Simulink users.

<table>
<thead>
<tr>
<th>Day 1 of 1</th>
<th>Objective: Introduce verification and validation in the Simulink environment and discuss how it fits in to a typical project workflow using Model-Based Design.</th>
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</thead>
</table>
| Verification and Validation in 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 |