Courses developed by MathWorks are built on exclusive product knowledge. Course developers and instructors work with product developers every day to gain exposure to new product capabilities. Expert instructors understand that not everyone learns in the same way. That’s why the team—engineers themselves with advanced degrees and years of industry experience—uses a variety of techniques to reinforce concepts and build proficiency.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>MATHWORKS TRAINING INFORMATION</th>
<th>SIMULINK</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Training Formats</td>
<td><strong>FUNDAMENTAL</strong></td>
</tr>
<tr>
<td>4 MATLAB Certification</td>
<td>9 Simulink for System and Algorithm Modeling</td>
</tr>
<tr>
<td>4 Guaranteed to Run</td>
<td>9 Simulink for Aerospace System Design</td>
</tr>
<tr>
<td>4 Training Credits</td>
<td>9 Simulink for Automotive System Design</td>
</tr>
<tr>
<td>4 Two Easy Ways to Register</td>
<td>9 Signal Processing with Simulink</td>
</tr>
</tbody>
</table>

## CURRICULUM PATHS

| 5 Code Generation/Embedded Systems                           | **INTERMEDIATE**                                                        |
| 5 Data Analysis and Statistics                                | 10 Integrating Code with Simulink                                       |
| 5 Modeling and Simulation                                   | 10 Physical Modeling of Multidomain Systems with Simscape              |

### Courses

#### MATLAB

<table>
<thead>
<tr>
<th><strong>FUNDAMENTAL</strong></th>
<th><strong>ADVANCED</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>6 MATLAB Fundamentals</td>
<td>10 Simulink Model Management and Architecture</td>
</tr>
<tr>
<td>6 MATLAB Fundamentals for Aerospace Applications</td>
<td>11 Verification and Validation of Simulink Models</td>
</tr>
<tr>
<td>6 MATLAB Fundamentals for Automotive Applications</td>
<td>11 Communication Systems Modeling with Simulink</td>
</tr>
<tr>
<td>6 MATLAB for Financial Applications</td>
<td>11 Generating HDL Code from Simulink</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>INTERMEDIATE</strong></th>
<th>11 Programming Xilinx Zynq SoCs with MATLAB and Simulink</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 MATLAB for Data Processing and Visualization</td>
<td></td>
</tr>
<tr>
<td>6 MATLAB Programming Techniques</td>
<td></td>
</tr>
<tr>
<td>7 Building Interactive Applications in MATLAB</td>
<td></td>
</tr>
<tr>
<td>7 Interfacing MATLAB with C Code</td>
<td></td>
</tr>
<tr>
<td>7 Statistical Methods in MATLAB</td>
<td></td>
</tr>
<tr>
<td>7 Optimization Techniques in MATLAB</td>
<td></td>
</tr>
<tr>
<td>7 Signal Processing with MATLAB</td>
<td></td>
</tr>
<tr>
<td>7 Image Processing with MATLAB</td>
<td></td>
</tr>
<tr>
<td>7 Parallel Computing with MATLAB</td>
<td></td>
</tr>
<tr>
<td>8 MATLAB to C with MATLAB Coder</td>
<td></td>
</tr>
<tr>
<td>8 Machine Learning with MATLAB</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>ADVANCED</strong></th>
<th><strong>POLYSPACE PRODUCTS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Designing LTE and LTE Advanced Physical Layer Systems with MATLAB</td>
<td></td>
</tr>
<tr>
<td>9 Time-Series Modeling in MATLAB NEW</td>
<td></td>
</tr>
</tbody>
</table>

## CODE generation

<table>
<thead>
<tr>
<th><strong>FUNDAMENTAL</strong></th>
<th><strong>ADVANCED</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Fundamentals of Code Generation for Embedded Applications</td>
<td>12 Embedded Coder for Production Code Generation</td>
</tr>
</tbody>
</table>

**STATEFLOW**

<table>
<thead>
<tr>
<th><strong>FUNDAMENTAL</strong></th>
<th><strong>ADVANCED</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Stateflow for Logic-Driven System Modeling</td>
<td></td>
</tr>
<tr>
<td>12 Stateflow for Automotive Applications</td>
<td></td>
</tr>
</tbody>
</table>

**POLYSPACE PRODUCTS**

<table>
<thead>
<tr>
<th><strong>ADVANCED</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11 Polyspace Code Prover for C and C++ Code Verification</td>
<td></td>
</tr>
</tbody>
</table>
MATHWORKS TRAINING INFORMATION

TRAINING FORMATS
For details and a full schedule, visit mathworks.com/2015training.

Classroom training. Learn in a physical classroom setting. Courses are offered at MathWorks facilities and public sites around the world.

Live, online courses. Live, online courses are led in real time by MathWorks instructors and contain the same course content and materials used in the classroom setting.

Self-paced, online courses. Self-paced courses are prerecorded, interactive e-learning courses containing demonstrations, exercises, and quizzes that you complete at your own pace.

Training at your work site. MathWorks instructors tailor the curriculum based on your attendees’ learning styles and abilities. They create a curriculum that meets your team’s specific goals with company-specific or industry-specific examples.

MATLAB CERTIFICATION
Certification can help accelerate professional growth and achievement by establishing a standard of excellence that demonstrates MATLAB® proficiency to customers, industry peers, and employers. For organizations, certification is a strategic investment that pays off through increased productivity and project success. MATLAB training courses cover all concepts tested in exam questions.

GUARANTEED TO RUN
When you register for a course that is “Guaranteed to Run”, you can rest assured that the class will not be cancelled or rescheduled for any reason.

TRAINING CREDITS
Maximize your training budget by purchasing training credits, which give you discounts on future courses. You can apply credits to any classroom, onsite, or online training course within one year of purchase.

TWO EASY WAYS TO REGISTER
Visit: mathworks.com/2015training
Call: Australia: +61-2-8669-4700
India: +91-80-6632-6000
The Netherlands: +31-40-2156700
Nordic Region: +46-8-5051-6900
North and South America: 508-647-7000
Switzerland: +41-31-950-60-20
United Kingdom: +44-1223-226700

Fees include all course materials. Payment must be received at the time of registration to ensure your seat in the course.

The MathWorks BV is a Cedeo-approved training organization.

MathWorks is registered with GARP as an Approved Provider of Continuing Professional Education (CPE) credits.

For test locations, dates, and fees, visit mathworks.com/certification.
**CURRICULUM PATHS**

MathWorks training can help you get started by identifying a recommended order of courses. These paths are based on application, industry, or role. Here are four of our most popular curriculum paths.

For other paths not listed here, please visit mathworks.com/2015training.

<table>
<thead>
<tr>
<th>Path Description</th>
<th>Course 1</th>
<th>Course 2</th>
<th>Course 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Code Generation/Embedded Systems</strong></td>
<td>Simulink for System and Algorithm Modeling</td>
<td>Fundamentals of Code Generation for Embedded Applications</td>
<td>Embedded Coder for Production Code Generation</td>
</tr>
<tr>
<td><strong>Data Analysis and Statistics</strong></td>
<td>MATLAB Fundamentals</td>
<td>MATLAB for Data Processing and Visualization</td>
<td>Statistical Methods in MATLAB</td>
</tr>
<tr>
<td><strong>Modeling and Simulation</strong></td>
<td>MATLAB Fundamentals</td>
<td>Simulink for System and Algorithm Modeling</td>
<td>Stateflow for Logic-Driven System Modeling</td>
</tr>
<tr>
<td><strong>Signal Processing</strong></td>
<td>MATLAB Fundamentals</td>
<td>Signal Processing with MATLAB</td>
<td>MATLAB to C with MATLAB Coder</td>
</tr>
</tbody>
</table>
MATLAB

MATLAB Fundamentals
FUNDAMENTAL


This three-day course provides a comprehensive introduction to the MATLAB technical computing environment. This course is intended for beginning users and those looking for a review. Topics include:

• Data analysis
• Visualization
• Modeling
• Programming

Prerequisites: Undergraduate-level mathematics and experience with basic computer operations

MATLAB Fundamentals for Aerospace Applications
FUNDAMENTAL

Technical Computing

Based on the MATLAB Fundamentals outline, this three-day course offers hands-on aerospace examples and exercises that apply basic techniques to realistic problems in a variety of aerospace and defense applications.

Prerequisites: Undergraduate-level mathematics and experience with basic computer operations

MATLAB Fundamentals for Automotive Applications
FUNDAMENTAL

Technical Computing

Based on the MATLAB Fundamentals outline, this three-day course offers hands-on automotive examples and exercises that apply basic techniques to realistic problems in the automotive industry.

Prerequisites: Undergraduate-level mathematics and experience with basic computer operations

MATLAB for Financial Applications
FUNDAMENTAL

Computational Finance

Based on the MATLAB Fundamentals outline, this three-day course offers hands-on examples and exercises that apply basic techniques to financial applications. Topics include:

• Time-series analysis
• Fixed-income security valuation
• Portfolio management
• Options and derivatives
• Monte Carlo simulation

Prerequisites: Undergraduate-level mathematics, experience with basic computer operations, and knowledge of basic financial terminology and modeling techniques

MATLAB for Data Processing and Visualization
INTERMEDIATE

Computational Finance - Image and Video Processing - Technical Computing

This one-day course focuses on the details of data management and visualization techniques, from reading various formats of data files to producing customized publication-quality graphics. The course emphasizes creating scripts that extend the basic features provided by MATLAB. Topics include:

• Importing data
• Organizing data
• Visualizing data
• Exporting data

Prerequisites: MATLAB Fundamentals

MATLAB Programming Techniques
INTERMEDIATE

Technical Computing

This two-day course covers details of performance optimization as well as tools for writing, debugging, and profiling code. Topics include:

• Creating robust applications
• Structuring code
• Structuring data
• Creating custom toolboxes

Prerequisites: MATLAB Fundamentals

Average increase in competence with MATLAB after training

Based on 2013 data

109%
Building Interactive Applications in MATLAB
INTERMEDIATE
Technical Computing

This one-day course demonstrates how to create an interactive user interface for your applications in MATLAB. No prior experience in programming graphical interfaces is required. Topics include:

- Graphics objects
- User interface controls
- Callback functions
- Graphical user interface development environment (GUIDE)
- Application deployment

Prerequisites: MATLAB Fundamentals

Interfacing MATLAB with C Code
INTERMEDIATE

This one-day course covers details of interfacing MATLAB with user-written C code. Topics include:

- Source MEX-files
- Data exchange between MATLAB and MEX-files
- The MATLAB engine interface

Prerequisites: MATLAB Fundamentals and a basic working knowledge of the C programming language

Statistical Methods in MATLAB
INTERMEDIATE
Computational Biology - Computational Finance - Technical Computing

This two-day course provides hands-on experience performing statistical data analysis with MATLAB and Statistics Toolbox™. Examples and exercises demonstrate the use of appropriate product functionality throughout the analysis process, including:

- Data import and organization
- Exploratory analysis
- Confirmatory analysis
- Simulation

Prerequisites: MATLAB Fundamentals

Optimization Techniques in MATLAB
INTERMEDIATE
Computational Biology - Computational Finance - Image and Video Processing - Technical Computing

This one-day course introduces applied optimization in the MATLAB environment, focusing on using Optimization Toolbox™ and Global Optimization Toolbox. Topics include:

- Defining the problem
- Writing objective functions
- Defining constraints
- Choosing solvers and setting options
- Using global optimization methods

Prerequisites: MATLAB Fundamentals

Signal Processing with MATLAB
INTERMEDIATE
Digital Signal Processing

This two-day course shows how to analyze signals and design signal processing systems using MATLAB and Signal Processing Toolbox™. Parts of the course also use DSP System Toolbox™. Topics include:

- Creating and analyzing signals
- Using different spectral analysis tools
- Designing and analyzing filters
- Introduction to advanced filter design
- Filter implementation issues
- Processing streaming data with System objects™

Prerequisites: MATLAB Fundamentals

Image Processing with MATLAB
INTERMEDIATE
Image and Video Processing

This two-day course provides hands-on experience with performing image analysis. Examples and exercises demonstrate the use of appropriate MATLAB and Image Processing Toolbox™ functionality throughout the analysis process. Topics include:

- Importing and exporting images
- Removing noise
- Aligning images and creating a panoramic scene
- Detecting lines and circles in an image
- Segmenting objects
- Measuring shape properties
- Performing batch analysis over sets of images

Prerequisites: MATLAB Fundamentals

Parallel Computing with MATLAB
INTERMEDIATE

This two-day course introduces tools and techniques for distributing code and writing parallel algorithms in MATLAB. The course shows how to increase both the speed and the scale of existing code using Parallel Computing Toolbox™. Topics include:

- Speeding up computations
- Task-parallel programming
- Working with large data sets
- Data-parallel programming
- Increasing scale with multiple systems

Prerequisites: MATLAB Fundamentals

mathworks.com/2015training 7
The instructor demonstrated many features and functions in MATLAB and showed how you can solve complex problems even if you don’t have a strong mathematical or computational background. Without this course, I would not have discovered all those capabilities.

Dr. Svenja Caspers, Forschungszentrum Jülich GmbH
Designing LTE and LTE Advanced Physical Layer Systems with MATLAB

ADVANCED

Communications Systems - Digital Signal Processing

This three-day course provides an overview of the LTE and LTE Advanced physical layer. Using MATLAB and LTE System Toolbox™, attendees will learn how to generate reference LTE waveforms and build and simulate an end-to-end LTE PHY model. Topics include:

- Review of the advanced communications techniques forming the core of an LTE system:
  - OFDMA and SC-FDMA multi-carrier techniques
  - MIMO multi-antenna systems
- Descriptions of all of the signals and elements of the processing chain for the uplink and downlink LTE physical channels
- Methods for conformance testing with the standard

Prerequisites: MATLAB Fundamentals and knowledge of wireless communications systems

Time-Series Modeling in MATLAB

ADVANCED

Computational Finance

This one-day course provides a comprehensive introduction to time-series modeling using MATLAB and Econometrics Toolbox™. The course is intended for economists, analysts, and other financial professionals with some prior experience of MATLAB who need to create, estimate, simulate, and forecast econometric time-series models. Topics include:

- Identifying long-term and seasonal trends in time-series data
- Creating and fitting time series models to a data set
- Analyzing model dynamics using Monte Carlo simulations
- Forecasting data using fitted models

Prerequisites: MATLAB for Financial Applications and basic knowledge of time-series modeling concepts is strongly recommended

Simulink for System and Algorithm Modeling

FUNDAMENTAL

Control Systems - Embedded Systems - Mechatronics

If your application involves signal processing or communications, see Signal Processing with Simulink™.

This two-day course is for engineers who are new to system and algorithm modeling and design validation in Simulink. It demonstrates how to apply basic modeling techniques and tools to develop Simulink block diagrams. Topics include:

- Creating and modifying Simulink models and simulating system dynamics
- Modeling continuous-time, discrete-time, and hybrid systems
- Modifying solver settings for simulation accuracy and speed
- Building hierarchy into a Simulink model
- Creating reusable model components using subsystems, libraries, and model references

Prerequisites: MATLAB Fundamentals

Simulink for Aerospace System Design

FUNDAMENTAL

Control Systems - Embedded Systems - Mechatronics

Based on the Simulink for System and Algorithm Modeling outline, this two-day course is for aerospace engineers who are new to system and algorithm modeling and teaches attendees how to validate designs using Simulink.

Prerequisites: MATLAB Fundamentals, MATLAB Fundamentals for Aerospace Applications, or MATLAB Fundamentals for Automotive Applications

Simulink for Automotive System Design

FUNDAMENTAL

Control Systems - Embedded Systems - Mechatronics

Based on the Simulink for System and Algorithm Modeling outline, this two-day course is for automotive engineers who are new to system and algorithm modeling and teaches attendees how to validate designs using Simulink.

Prerequisites: MATLAB Fundamentals, MATLAB Fundamentals for Aerospace Applications, or MATLAB Fundamentals for Automotive Applications

Signal Processing with Simulink

FUNDAMENTAL

Digital Signal Processing

This three-day course covers basic modeling techniques and tools for developing Simulink block diagrams for signal processing applications. Topics include:

- Modeling single-channel and multichannel discrete dynamic systems
- Implementing sample-based and frame-based processing
- Modeling mixed-signal (hybrid) systems
- Developing custom blocks and libraries
- Modeling condition-based systems
- Performing spectral analysis with Simulink
- Integrating filter designs into Simulink
- Modeling multirate systems
- Incorporating external code
- Automating modeling tasks

Prerequisites: MATLAB Fundamentals and Signal Processing with MATLAB
Integrating Code with Simulink
INTERMEDIATE
Communications Systems - Control Systems - Digital Signal Processing - Embedded Systems - Mechatronics

This one-day course presents multiple methods for integrating C code and MATLAB code into Simulink models. Topics include:

- Writing C MEX S-functions
- Integrating MATLAB code
- Integrating C code

Prerequisites: MATLAB Fundamentals and Simulink for System and Algorithm Modeling

Physical Modeling of Multidomain Systems with Simscape
INTERMEDIATE
Control Systems - Mechatronics

This one-day course discusses how to model systems in several physical domains and combine them into a multidomain system in the Simulink environment using Simscape™. Topics include:

- Creating models in various physical domains, such as electrical, mechanical, and hydraulic
- Interpreting Simscape diagrams
- Combining Simulink models and Simscape models
- Modeling energy transfer between different physical domains
- Creating user-defined Simscape components

Prerequisites: MATLAB Fundamentals and Simulink for System and Algorithm Modeling

Physical Modeling of Electrical Power Systems with SimPowerSystems
INTERMEDIATE
Control Systems - Mechatronics

This one-day course discusses how to model electrical power systems in the Simulink environment using SimPowerSystems™. Topics include:

- Creating three-phase systems with passive components
- Creating three-phase systems with electrical machines
- Analyzing and controlling electrical power systems
- Modeling power electronic components
- Speeding up simulation of electrical models

Prerequisites: MATLAB Fundamentals, Simulink for System and Algorithm Modeling, and Physical Modeling of Multidomain Systems with Simscape

Physical Modeling of Multibody Mechanical Systems with SimMechanics
INTERMEDIATE
Control Systems - Mechatronics

This one-day course discusses how to model rigid-body mechanical systems in the Simulink environment using SimMechanics™. Topics include:

- Modeling simple multibody systems
- Combining Simulink, Simscape, and SimMechanics blocks
- Creating reusable models of mechanical systems

Prerequisites: MATLAB Fundamentals and Simulink for System and Algorithm Modeling

MATLAB and Simulink for Control Design Acceleration
INTERMEDIATE
Control Systems - Embedded Systems - Mechatronics

This two-day course provides a general understanding of how to accelerate the design process for closed-loop control systems using MATLAB and Simulink products. Topics include:

- Control system design overview
- System modeling
- System analysis
- Control design
- Controller implementation

Prerequisites: MATLAB Fundamentals and Simulink for System and Algorithm Modeling

Simulink Model Management and Architecture
ADVANCED
Control Systems - Embedded Systems - Mechatronics

This two-day course describes techniques for applying Model-Based Design in a common design workflow. It provides guidance on managing and sharing Simulink models when working in a large-scale project environment. Topics include:

- Implementing interface control of Simulink subsystems and models
- Managing requirements in Simulink models
- Partitioning models using Simulink subsystems, libraries, and model references
- Establishing and enforcing modeling standards
- Formally verifying model behavior
- Documenting a Simulink model

Prerequisites: MATLAB Fundamentals and Simulink for System and Algorithm Modeling
Verification and Validation of Simulink Models

ADVANCED

Control Systems - Embedded Systems - Mechatronics

This one-day course describes techniques for testing and formally verifying Simulink model behavior. Topics include:

• Recalling the role of verification and validation in Model-Based Design
• Configuring Simulink models for testing
• Testing a Simulink model for accuracy and coverage
• Formally verifying model behavior
• Publishing test results

Prerequisites: MATLAB Fundamentals and Simulink for System and Algorithm Modeling. This course is intended for intermediate or advanced Simulink users. Familiarity with creating MATLAB scripts and functions is recommended.

Communication Systems Modeling with Simulink

ADVANCED

Communications Systems

This one-day course uses hands-on examples to demonstrate how to design end-to-end communication systems using Simulink, Communications System Toolbox™, and DSP System Toolbox. Topics include:

• Modeling a communication system
• Analyzing the bit error rate (BER) of a communication system
• Adding channel impairments
• Designing receiver algorithms

Prerequisites: MATLAB Fundamentals, Signal Processing with MATLAB, and Signal Processing with Simulink.

Generating HDL Code from Simulink

ADVANCED

Communications Systems - Digital Signal Processing - FPGA Design

This two-day course shows how to generate and verify HDL code from a Simulink model using HDL Coder™ and HDL Verifier™. Topics include:

• Preparing Simulink models for HDL code generation
• Generating HDL code and test bench for a compatible Simulink model
• Performing speed and area optimizations
• Integrating handwritten code and existing IP
• Verifying generated HDL code using test bench and cosimulation

Prerequisites: Signal Processing with Simulink.

Programming Xilinx Zynq SoCs with Matlab and Simulink

ADVANCED


This two-day course focuses on developing and configuring models in the Simulink® environment and deploying on Xilinx® Zynq™-7000 all programmable SoCs. The course is designed for Simulink users who intend to generate, validate, and deploy embedded code and HDL code for software/hardware design using Embedded Coder® and HDL Coder®. A ZedBoard™ is provided to each attendee for use throughout the course. The board is programmed during the class and is yours to keep after the training. Topics include:

• Zynq platform overview and environment setup
• Parameter tuning with External Mode
• Processor-in-the-loop verification
• Data interface with real-time application
• Developing device drivers

Prerequisites: Simulink for System and Algorithm Modeling (or Simulink for Automotive System Design or Simulink for Aerospace System Design) and Model Management and Verification in Simulink. Knowledge of C and HDL programming languages.

POLYSPACE PRODUCTS

Polyspace Code Prover for C and C++ Code Verification

ADVANCED

Embedded Systems

This two-day course discusses the use of Polyspace Code Prover™ to prove code correctness, improve software quality metrics, and ensure product integrity. Topics include:

• Creating a verification project
• Reviewing and understanding verification results
• Emulating target execution environments
• Handling missing functions and data
• Managing unproven code (color-coded in orange by Polyspace products)
• Applying MISRA® rules
• Reporting

Prerequisites: Strong knowledge of C or C++
# STATEFLOW

**Stateflow for Logic-Driven System Modeling**

**FUNDAMENTAL**

| Control Systems | Embedded Systems | Mechatronics |

This two-day course shows how to implement complex decision flows and finite-state machines using Stateflow®. The course focuses on how to employ flow graphs, state machines, and truth tables in Simulink designs. Topics include:

- Modeling complex logic flows
- Modeling state machines
- Implementing hierarchical state machines
- Implementing multiprocessing state machines
- Using events in state charts
- Calling functions from state charts
- Implementing truth tables
- Managing the Stateflow design interface

**Prerequisites:** MATLAB Fundamentals and Simulink for System and Algorithm Modeling. Knowledge of C programming is helpful.

# CODE GENERATION

**Fundamentals of Code Generation for Embedded Applications**

**FUNDAMENTAL**

| Communications Systems | Control Systems | Digital Signal Processing | Embedded Systems |

This one-day course provides a working introduction to designing and testing embedded applications with Simulink Coder™ and Embedded Coder®. Themes of simulation speedup, parameter tuning in the deployed application, structure of embedded code, code verification, and execution profiling are explored in the context of Model-Based Design. Topics include:

- Simulation speedup with code generation
- Parameter Tuning with External Mode
- Code generation
- In-the-Loop verification
- Code execution profiling

**Prerequisites:** Simulink for System and Algorithm Modeling (or Simulink for Automotive System Design or Simulink for Aerospace System Design). Knowledge of C programming language.

# CODE GENERATION

**Embedded Coder for Production Code Generation**

**ADVANCED**

| Communications Systems | Control Systems | Digital Signal Processing | Embedded Systems |

This three-day course provides hands-on techniques in generating high-quality embedded code from Simulink models using Embedded Coder and customizing the generated code to meet optimization and code integration requirements. Topics include:

- Generated code module and data structure
- Code generation options and optimizations
- Integrating generated code with external code
- Customizing data characteristics
- Advanced customization techniques
- Deploying embedded code

**Prerequisites:** Simulink for System and Algorithm Modeling (or Simulink for Automotive System Design or Simulink for Aerospace System Design) and Model Management and Verification in Simulink