



Expand Your Knowledge

TRAINING SERVICE

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.

[SCIENGINEER.COM](https://www.sciengineer.com)



Training service

THE VALUE OF AN EXPERIENCED TRAINING EXPERT

Our training courses are developed by training engineers with exclusive product knowledge gained from working closely with product developers. They acquire significant hands-on experience by using new products months before they are released and are always current on new capabilities.

Learn Relevant Skills

Each course contains a set of learning objectives designed to help participants quickly master necessary skills. Our hands-on approach allows participants to practice, apply, and evaluate their knowledge in the classroom.

Receive Expert Instruction

Our training employs industry-accepted best practices for adult learning and technical instruction, and has developed course content that facilitates a “Presentation, Practice, Test” approach to learning. All training engineers have been selected based on their theoretical knowledge, technical education, experience, and teaching ability.

Increase Team Success Rates

According to post-training surveys, teams who receive 40 hours of training meet project objectives three times as often as those who receive 30 hours or less. This increase in training time raises the likelihood of meeting objectives by 90%.

Training service

ACHIEVE A QUICK PROGRESS, ADVANCE YOUR SKILLS
AND LEARN THROUGH PRACTICE!

Let's start with identifying your learning path and selecting the perfect courses for you, best match-ing with the knowledge and the level of expertise you want to achieve. Our courses cover multiple areas and industries, tailored to meet your needs and delivered by engineers with field expertise and skilled in training techniques.

What is the difference between theory and practice? Well, in theory, nothing. But practice will help you better boost your knowledge.

With our hands-on training, you will dive deep into the features and work together in the software to achieve confidence and practical knowledge. You will learn best practices and useful tips and tactics through a live interactive session and immediately try these out along the trainer's guide.

Keep yourself up-to date on the latest MathWorks® and COMSOL® products with our training programs.

98% OF ATTENDEES RATED OUR INSTRUCTORS AS
SUBJECT MATTER EXPERTS

96% OF ATTENDEES SURVEYED WOULD RECOM-
MEND THE COURSE TO A FRIEND OR COLLEAGUE

144% AVERAGE INCREASE IN COMPETENCE WITH
MATLAB AFTER TRAINING

95% OF ATTENDEES SAID COURSEWORK HAD
REAL-WORLD APPLICATION TO THEIR JOBS

60 AVERAGE NUMBER OF DEVELOPMENT HOURS TO
CREATE ONE HOUR OF TRAINING

104% AVERAGE INCREASE IN PRODUCTIVITY WITH
MATLAB AFTER TRAINING

COMSOL

FUNDAMENTAL

- COMSOL Multiphysics

INTERMEDIATE

- Acoustics Modeling in COMSOL Multiphysics
- COMSOL Multiphysics Fluid Flow and Heat Transfer
- AC/DC Electromagnetics Simulations
- Heat Transfer Modeling in COMSOL Multiphysics
- Geometry, CAD and Meshing
- Structural Mechanics Intensive Course
- Optimization in COMSOL Multiphysics

MATLAB® and Simulink® FUNDAMENTALS

MATLAB FUNDAMENTALS

- MATLAB Fundamentals
- MATLAB Fundamentals for Aerospace Applications
- MATLAB Fundamentals for Automotive Applications

SIMULINK FUNDAMENTALS

- Simulink Fundamentals
- Simulink Fundamentals for Aerospace Applications
- Simulink Fundamentals for Automotive Applications

MATLAB®

FUNDAMENTAL

- MATLAB Fundamentals
- MATLAB Fundamentals for Automotive Applications
- MATLAB Fundamentals for Aerospace Applications

INTERMEDIATE

- Wireless Communications Systems Design with MATLAB and USRP Software-Defined Radios
- Machine Learning with MATLAB
- Deep Learning with MATLAB
- MATLAB for Data Processing and Visualization
- MATLAB Programming Techniques
- Statistical Methods in MATLAB
- Optimization Techniques in MATLAB
- Image Processing with MATLAB
- Building Interactive Applications in MATLAB
- Processing Big Data with MATLAB
- Accelerating and Parallelizing MATLAB Code
- Signal Pre-processing and Feature Extraction for Data Analytics with MATLAB
- Signal Processing with MATLAB
- Predictive Maintenance with MATLAB
- Computer Vision with MATLAB
- Automated Driving with MATLAB
- Object-Oriented Programming with MATLAB
- Deep Learning for Signals in MATLAB
- Sensor Fusion and Object Tracking with MATLAB
- Advanced MATLAB Application Development

ADVANCED

- MATLAB to C with MATLAB Coder
- 5G Fundamentals with MATLAB
- Object-Oriented Design with MATLAB
- Modeling Radar Systems with MATLAB

Simulink®

FUNDAMENTAL

- Simulink Fundamentals
- Simulink Fundamentals for Automotive Applications
- Simulink Fundamentals for Aerospace Applications

INTERMEDIATE

- Integrating C Code with Simulink
- Power Electronics Control Design with Simulink and Simscape
- Battery Modeling and Algorithm Development with Simulink
- Reinforcement Learning in MATLAB and Simulink
- Simulink Model Management and Architecture
- Signal Processing with Simulink
- Simulation-Based Testing with Simulink
- Design Verification with Simulink
- System Composer for Architecture Modeling
- Simulink for Analog and Mixed-Signal Verification
- Code Generation for Classic AUTOSAR Software Components
- Control System Design with Simulink
- Embedded Coder for Production Code Generation
- Motor Control with Simulink and Simscape
- RF System Design Using MathWorks Tools
- Stateflow for Automotive Applications
- Stateflow for Logic-Driven System Modeling
- Code generation for AUTOSAR Adaptive applications

ADVANCED

- Programming Zynq SoCs with MATLAB and Simulink
- Generating HDL Code from Simulink
- DSP for FPGAs
- Model-Based Design for DO-178C/DO-331 Compliance
- Programming Zynq RFSocS Using Simulink
- Simulink for Analog Mixed-Signal Design
- Software-Defined Radio with Zynq using Simulink
- Applying Model-Based Design for ISO 26262

Simscape

INTERMEDIATE

- Modeling Driveline Systems with Simscape
- Modeling Electrical Power Systems with Simscape
- Modeling Multibody Mechanical Systems with Simscape
- Modeling Physical Systems with Simscape
- Modeling Fluid Systems with Simscape
- Motor Control with Simulink and Simscape
- Power Electronics Control Design with Simulink and Simscape

RoadRunner

INTERMEDIATE

- Designing 3D Scenes and Scenarios with RoadRunner

Polyspace

INTERMEDIATE

- Reviewing Polyspace Results
- Polyspace for C/C++ Code Verification

Speedgoat

ADVANCED

- Real-Time Testing with Simulink
Real-Time and Speedgoat Hardware
- Simulink Real-Time HDL Workflow
with Speedgoat Hardware

Explore Courses by Focus Areas

AI, DATA SCIENCE AND STATISTICS

PROGRAMMING AND APPLICATION
DEVELOPMENT

IMAGE PROCESSING AND COMPUTER
VISION

SIGNAL PROCESSING AND
COMMUNICATIONS

MODELING AND SIMULATION

CONTROL AND ALGORITHM DESIGN

PHYSICAL MODELING

HDL CODE GENERATION

C CODE GENERATION

VALIDATION & VERIFICATION

AI, Data Science and Statistics

INTERMEDIATE

- MATLAB for Data Processing and Visualization
- Machine Learning with MATLAB
- Deep Learning with MATLAB
- Statistical Methods in MATLAB
- Accelerating and Parallelizing MATLAB Code
- Predictive Maintenance with MATLAB
- Optimization Techniques in MATLAB
- Reinforcement Learning in MATLAB and Simulink
- Automated Driving with MATLAB
- Processing Big Data with MATLAB
- Computer Vision with MATLAB
- Deep Learning for Signals in MATLAB
- Sensor Fusion and Object Tracking with MATLAB

Programming and Application Development

INTERMEDIATE

- MATLAB Programming Techniques
- Accelerating and Parallelizing MATLAB Code
- Building Interactive Applications in MATLAB
- Object-Oriented Programming with MATLAB
- Advanced MATLAB Application Development
- Processing Big Data with MATLAB
- MATLAB for Data Processing and Visualization

ADVANCED

- MATLAB to C with MATLAB Coder
- Object-Oriented Design with MATLAB

Image Processing and Computer Vision

INTERMEDIATE

- Image Processing with MATLAB
- Computer Vision with MATLAB
- Automated Driving with MATLAB
- Deep Learning with MATLAB

Signal Processing and Communications

INTERMEDIATE

- Signal Processing with MATLAB
- Signal Pre-processing and Feature Extraction for Data Analytics with MATLAB
- Wireless Communications Systems Design with MATLAB and USRP Software-Defined Radios
- Simulink for Analog and Mixed-Signal Verification
- Deep Learning for Signals in MATLAB
- RF System Design Using MathWorks Tools
- Signal Processing with Simulink

ADVANCED

- Simulink for Analog Mixed-Signal Design
- Modeling Radar Systems with MATLAB
- DSP for FPGAs
- Software-Defined Radio with Zynq using Simulink
- Programming Zynq RFSocS Using Simulink
- 5G Fundamentals with MATLAB

Modeling and Simulation

INTERMEDIATE

- Battery Modeling and Algorithm Development with Simulink
- Control System Design with Simulink
- Motor Control with Simulink and Simscape
- Stateflow for Logic-Driven System Modeling
- Stateflow for Automotive Applications
- Simulink Model Management and Architecture

ADVANCED

- Model-Based Design for DO-178C/DO-331 Compliance
- Applying Model-Based Design for ISO 26262

Control and Algorithm Design

INTERMEDIATE

- Reinforcement Learning in MATLAB and Simulink
- Battery Modeling and Algorithm Development with Simulink
- Control System Design with Simulink
- Integrating C Code with Simulink
- Simulink Model Management and Architecture
- Motor Control with Simulink and Simscape
- Power Electronics Control Design with Simulink and Simscape
- System Composer for Architecture Modeling
- Stateflow for Logic-Driven System Modeling
- Stateflow for Automotive Applications

ADVANCED

- Applying Model-Based Design for ISO 26262
- Model-Based Design for DO-178C/DO-331 Compliance

Physical Modeling

INTERMEDIATE

- Modeling Physical Systems with Simscape
- Modeling Multibody Mechanical Systems with Simscape
- Modeling Fluid Systems with Simscape
- Power Electronics Control Design with Simulink and Simscape
- Modeling Electrical Power Systems with Simscape
- Modeling Driveline Systems with Simscape
- Battery Modeling and Algorithm Development with Simulink
- Motor Control with Simulink and Simscape

HDL Code Generation

ADVANCED

- Simulink Real-Time HDL Workflow with Speedgoat Hardware
- Programming Zynq RF SoCs Using Simulink
- Generating HDL Code from Simulink
- DSP for FPGAs
- Software-Defined Radio with Zynq Using Simulink
- Programming Zynq SoCs with MATLAB and Simulink

C Code Generation

INTERMEDIATE

- Integrating C Code with Simulink
- Embedded Coder for Production Code Generation (2 days)
- Embedded Coder for Production Code Generation (3 days)
- Code Generation for Classic AUTOSAR Software Components
- Polyspace for C/C++ Code Verification
- Accelerating and Parallelizing MATLAB Code
- Reviewing Polyspace Results
- Code generation for AUTOSAR Adaptive applications

ADVANCED

- MATLAB to C with MATLAB Coder
- Applying Model-Based Design for ISO 26262
- Model-Based Design for DO-178C/DO-331 Compliance
- Programming Zynq RFSocS Using Simulink
- Programming Xilinx Zynq SoCs with MATLAB and Simulink
- Software-Defined Radio with Zynq using Simulink

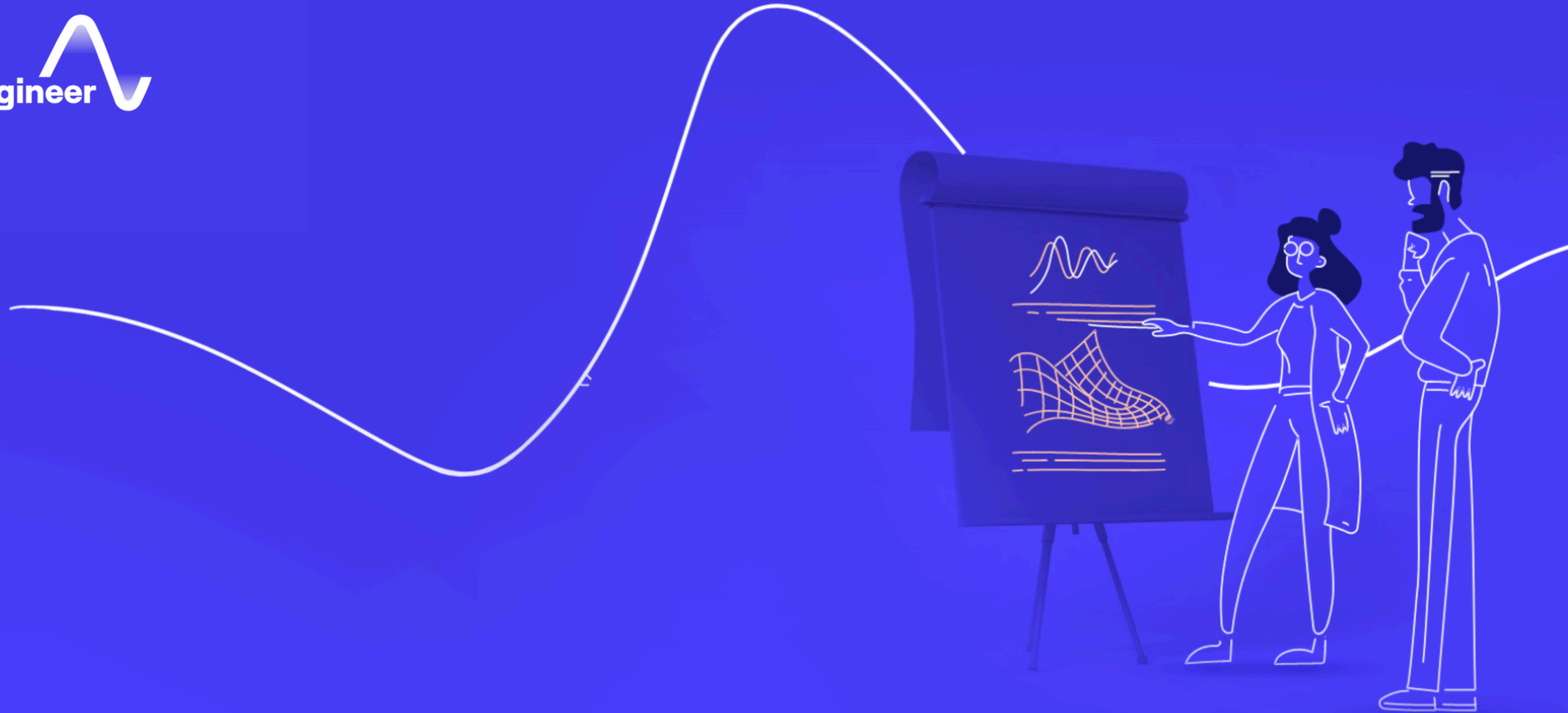
Validation & Verification

INTERMEDIATE

- Polyspace for C/C++ Code Verification
- Reviewing Polyspace Results
- Design Verification with Simulink
- Simulink for Analog and Mixed-Signal Verification
- Simulation-Based Testing with Simulink

ADVANCED

- Model-Based Design for DO-178C/DO-331 Compliance
- Real-Time Testing with Simulink Real-Time and Speedgoat Hardware
- Applying Model-Based Design for ISO 26262



Course formats support a wide range of learning styles and organizational requirements. If you can't find what you're looking for, our training staff will work with you to establish knowledge gaps and develop a customized plan tailored to your unique needs.