



Automotive Training Grid



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.

| Role | Fundamental Topics | Core Topics | | | | | Add-On Topics | | | | | |
|--|---|---|--|--|--|---|---------------------------------|--|--|--|--|--|
| Function / Application / Algorithm Developer | MATLAB Fundamentals for Automotive Applications | Simulink Model Management and Architecture | Stateflow for Automotive Applications | | | | | Simulation-Based Testing with Simulink | | | | |
| Test Engineer | | | Simulation-Based Testing with Simulink | Design Verification with Simulink* | Real-Time Testing with Simulink Real-Time and Speedgoat Software | | | Polyspace for C/C++ Code Verification | | | | |
| (Embedded) Software Engineer | | | Simulink for Automotive System Design | Embedded Coder for Production Code Generation | Code Generation for AUTOSAR Software Components | | | | Integrating Code with Simulink | Real-Time Testing with Simulink Real-Time and Speedgoat Hardware | | |
| Systems Architect / Engineer | | | | Stateflow for Automotive Applications | | | | | Simulation-Based Testing with Simulink | | | |
| (Sensor) Data Scientist | MATLAB Fundamentals for Automotive Applications | MATLAB Programming Techniques | Statistical Methods in MATLAB | Signal Preprocessing and Feature Extraction for Data Analytics with MATLAB | Machine Learning with MATLAB | Deep Learning with MATLAB | Processing Big Data with MATLAB | Accelerating and Parallelizing MATLAB Code | Optimization Techniques in MATLAB | Object-Oriented Programming with MATLAB | | |
| Application | Fundamental Topics | Core Topics | | | | | Add-On Topics | | | | | |
| Physical Modeling | MATLAB Fundamentals for Automotive Applications | Modeling Physical Systems with Simscape | Modeling Driveline Systems with Simscape | Modeling Electrical Power Systems with Simscape | Modeling Fluid Systems with Simscape | Modeling Multibody Mechanical Systems with Simscape | | | | | | |
| Control Design | Simulink for Automotive System Design | Control System Design with MATLAB and Simulink | Stateflow for Automotive Applications | | | | | | | | | |
| Radar / Sensor | | MATLAB Fundamentals for Automotive Applications | Image Processing with MATLAB | Automated Driving with MATLAB | Deep Learning with MATLAB | | | MATLAB to C with MATLAB Coder | | | | |
| ADAS | | | | Computer Vision with MATLAB | | | | | | | | |
| Image / Vision | | | | | | | | | | | | |

The Value of an Experienced Training Expert

Our training courses are developed by MathWorks' team of 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%.



**Expand your
knowledge**

