

WHY MATHWORKS?

COURSE FORMATS

FOCUS AREAS

Data Science

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

REGISTRATION

DESTINATION: KNOWLEDGE

TRAINING SERVICES





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Course List

Partner with MathWorks on your learning journey. Find everything you need to get started, including course descriptions and additional information, at *mathworks.com/get-training*.

MATLAB®

FUNDAMENTAL

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

INTERMEDIATE

- Wireless Communications Systems Design with MATLAB and USRP® Software-Defined Radios
- Machine Learning with MATLAB ▲ TRENDING
- Deep Learning with MATLAB ▲ TRENDING
- 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 Preprocessing and Feature Extraction for Data Analytics with MATLAB ATRENDING
- Signal Processing with MATLAB
- Predictive Maintenance with MATLAB NEW
- Computer Vision with MATLAB
- Automated Driving with MATLAB ATRENDING
- Object-Oriented Programming with MATLAB

ADVANCED

- MATLAB to C with MATLAB Coder™
- Designing LTE and LTE Advanced Physical Layer Systems with MATLAB

SIMULINK®

FUNDAMENTAL

- Simulink for System and Algorithm Modeling
- Simulink for Automotive System Design
- Signal Processing with Simulink
- Simulink for Aerospace System Design

INTERMEDIATE

- Communication Systems Modeling with Simulink
- Control System Design with MATLAB and Simulink
- Integrating Code with Simulink
- Modeling Physical Systems with Simscape™
- Modeling Driveline Systems with Simscape
- Modeling Fluid Systems with Simscape
- Modeling Electrical Power Systems with Simscape
- Modeling Multibody Mechanical Systems with Simscape
- Power Electronics Control Design with Simulink and Simscape NEW

ADVANCED

- Programming Xilinx® Zynq® SoCs with MATLAB and Simulink
- Embedded Linux® and System Integration with Zynq
- Simulation-Based Testing with Simulink
- Design Verification with Simulink NEW
- Simulink Model Management and Architecture ▲ TRENDING
- Generating HDL Code from Simulink ▲ TRENDING
- DSP for FPGAs

STATEFLOW®

FUNDAMENTAL

- Stateflow for Logic-Driven System Modeling
- Stateflow for Automotive Applications

CODE GENERATION

FUNDAMENTAL

Testing Generated Code in Simulink

ADVANCED

- Generating HDL Code from Simulink ▲ TRENDING
- Programming Xilinx Zynq SoCs with MATLAB and Simulink
- Embedded Linux and System Integration with Zynq
- Embedded Coder® for Production Code Generation
- MATLAB to C with MATLAB Coder
- Software-Defined Radio with Zyng Using Simulink
- Real-Time Testing with Simulink Real-Time™ and Speedgoat Hardware

POLYSPACE® PRODUCTS

ADVANCED

• Polyspace for C/C++ Code Verification



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Why Invest in MathWorks Training?

We have the exclusive product knowledge to give you expert instruction. Our training employs industry-accepted best practices for adult learning and technical instruction. It covers the basics of working with MATLAB and Simulink as well as intermediate and advanced techniques that address complex workflows and niche applications.

Investing in proven training solutions from MathWorks produces numerous benefits for both the short and long term.

Improve efficiency and productivity.

The cost of engineers learning on their own can quickly exceed the cost of a class.

MathWorks has done the research and built a curriculum that enables users to leverage our tools and hit the ground running.

Learn from MATLAB and Simulink experts.

MathWorks training instructors are engineers themselves, with advanced degrees and years of industry experience. In addition, they hold instructor/facilitator certification.

Access the most up-to-date courses.

Course developers use new products months before they are released and are always current with the latest trends and software features, ensuring you stay competitive.

Get hands-on, personalized training and instruction.

Instructors use a variety of techniques—including a "presentation, practice, test" approach to learning—to reinforce concepts and build proficiency.

Achieve measurable results.

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%.



98%

of attendees rated our instructors as subject matter experts



95%

of attendees said coursework had real-world application to their jobs



96%

of attendees surveyed would recommend the course to a friend or colleague



144%

average increase in competence with MATLAB after training



60

average number of development hours to create one hour of training



104%

average increase in productivity with MATLAB after training



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Try a Course Now for Free

Introductory courses such as MATLAB Onramp and Simulink Onramp get you up to speed quickly and easily. Each highly interactive tutorial contains a set of learning objectives designed to help participants learn the essentials and master necessary skills right within the product. Our hands-on approach enables you to immediately practice, apply, and evaluate your knowledge.



Have MathWorksCome to You



Available worldwide, onsite training is ideal for larger groups or those who need customized instruction. We train thousands of customers every year, and cover a range of industrial applications. By tapping into a vast content library as well as developing material from scratch, instructors can tailor the curriculum with company- or industry-specific examples relevant to your team's specific goals and address challenges familiar to attendees.

MathWorks training services allow organizations to address their unique training needs using material that has been refined from our years of experience. As a result of this partnership, customers get more out of their learning investment and maximize their productivity.

"The quality of the training from
MathWorks was truly beyond my
expectations. The training materials,
examples, and exercises were prepared
to ensure quick ramp-up in learning
the tool. I feel more confident taking on
greater challenges in my job, and my
skills and job marketability have been
boosted as a result."

— ARASH SOLEIMANI,
BOMBARDIER TRANSPORTATION



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Find a Format to Suit Your Needs

Advance your MATLAB and Simulink skills how, when, and where it works best for you. Course formats accommodate a variety of learning styles and organizational requirements. If you don't see what you're looking for, MathWorks training staff are available to consult with you and develop a customized plan.



INSTRUCTOR-LED CLASSROOM

Courses are offered at MathWorks facilities, your location, and public sites around the world.

INSTRUCTOR-LED ONLINE

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

SEL SEL

SELF-PACED

Learn MATLAB and Simulink online with our interactive courses containing demonstrations, exercises, and quizzes. The flexible format suits busy schedules, and users have around-the-clock access for six months.



"The training we received onsite was customized to our needs, which accelerated our ramp-up. We learned how to make our code more robust, maintainable, and efficient."

- MARCUS VELTUM, HELABA INVEST



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Get Started on the Right Path

Learning paths aid in building a proper foundation with MATLAB and Simulink and enable you to get the most out of your products. The following pages provide a suggested sequence of courses based on your particular area of interest. For information on prerequisites and other focus areas not listed here, visit *mathworks.com/get-training*.



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Data Science

FUNDAMENTAL

MATLAB Fundamentals >> INTERMEDIATE MATLAB for Data Processing and Visualization 0 Machine Learning with MATLAB >>> Deep Learning with MATLAB >>> Statistical Methods in MATLAB Signal Processing and Feature Extraction for Data Analytics with MATLAB Predictive Maintenance with MATLAB Accelerating and Parallelizing MATLAB Code Optimization Techniques in MATLAB Processing Big Data with MATLAB



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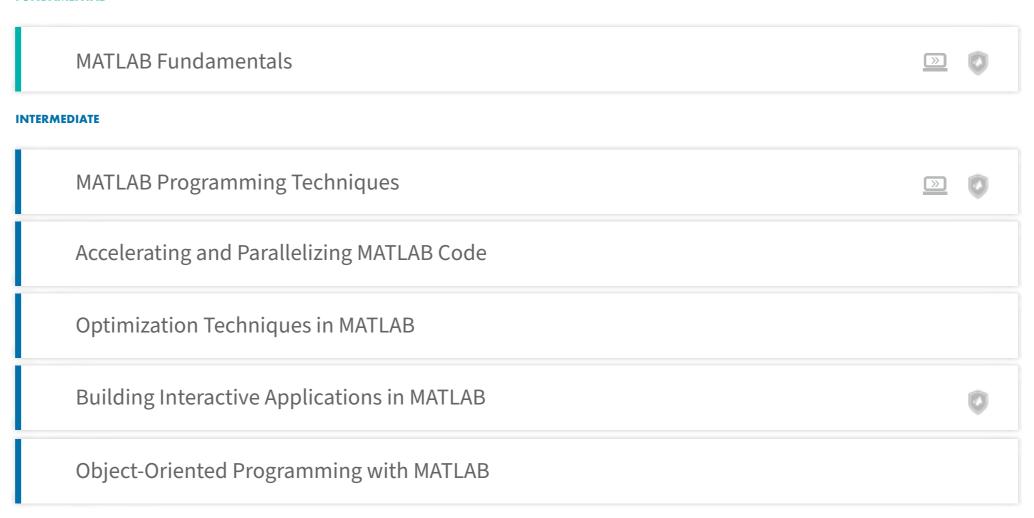
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mathworks.com/get-training

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Programming and Application Development

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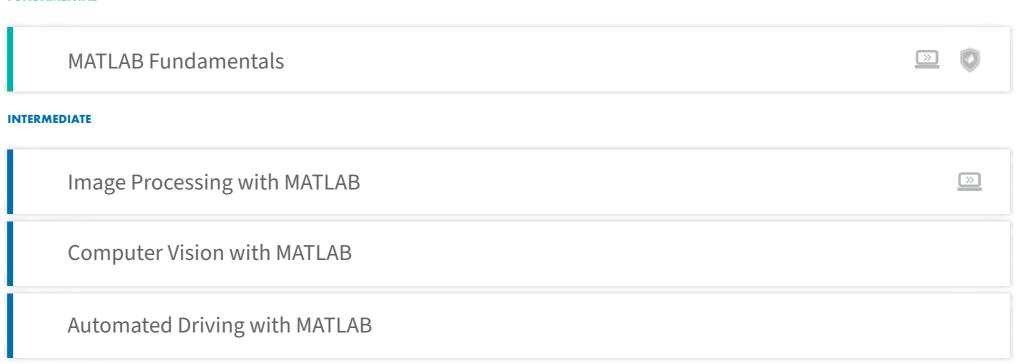
C Code Generation

REGISTRATION

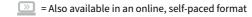
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Image Processing and Computer Vision

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Signal Processing and Communications

FUNDAMENTAL

MATLAB Fundamentals 0 >>> Signal Processing with Simulink

INTERMEDIATE

Signal Processing with MATLAB

Signal Processing and Feature Extraction for Data Analytics with MATLAB

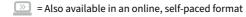
Wireless Communications Systems Design with MATLAB and USRP® Software-Defined Radios

Communications Systems Modeling with Simulink

ADVANCED

Designing LTE and LTE Advanced Physical Layer Systems with MATLAB

mathworks.com/get-training







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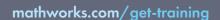
REGISTRATION

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Modeling and Simulation

FUNDAMENTAL

MATLAB Fundamentals >>> Simulink for System and Algorithm Modeling **INTERMEDIATE** Integrating Code with Simulink **ADVANCED** Simulink Model Management and Architecture Simulation-Based Testing with Simulink Design Verification with Simulink Real-Time Testing with Simulink Real-Time and Speedgoat Hardware









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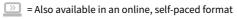
Control and Algorithm Design

FUNDAMENTAL

MATLAB Fundamentals >> Simulink for System and Algorithm Modeling Stateflow for Logic-Driven System Modeling

INTERMEDIATE

Control System Design with MATLAB and Simulink





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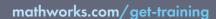
Physical Modeling

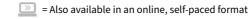
FUNDAMENTAL

MATLAB Fundamentals >>> Simulink for System and Algorithm 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









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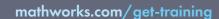
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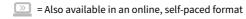
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HDL Code Generation

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MATLAB Fundamentals >>> Signal Processing with Simulink **ADVANCED** Growing HDL Code from Simulink DSP for FPGAs Programming Xilinx Zynq SoCs with MATLAB and Simulink Software-Defined Radio with Zynq Using Simulink Embedded Linux and System Integration for Zynq









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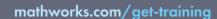
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C Code Generation

FUNDAMENTAL

MATLAB Fundamentals 0 >>> Simulink for System and Algorithm Modeling **ADVANCED** Real-Time Testing with Simulink Real-Time and Speedgoat Hardware Embedded Coder for Production Code Generation Code Generation for AUTOSAR Software Components MATLAB to C with MATLAB Coder Polyspace for C/C++ Code Verification









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MathWorks Training Information

ASSESS YOUR MATLAB AND SIMULINK KNOWLEDGE

Should you start with MATLAB Fundamentals or Simulink for System and Algorithm Modeling? Completing the recommended assessment prior to registering for a course will allow you to confirm what you know and confidently build the right curriculum for you. Contact your sales representative to see whether you qualify for this free service.

GUARANTEED TO RUN

We understand making plans to attend training sessions is a commitment on your part and that cancellations can be disruptive. When you register for a course that is "Guaranteed to Run," you can be confident that it won't be cancelled or rescheduled for any reason.

PURCHASE TRAINING IN VOLUME

Maximize your training budget by purchasing training in volume, which gives you discounts on future courses. Credits may be applied to any classroom, onsite, or online course within one year of purchase.

MATHWORKS CERTIFICATION PROGRAM

Obtain Certified MATLAB Associate or Certified MATLAB Professional status, and prove your 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.

For locations of the more than 700 testing centers, dates, and fees, visit mathworks.com/certification.





TWO EASY WAYS TO REGISTER

Visit: mathworks.com/get-training

Call: **Australia:** +61-2-8669-4700 **India:** +91-80-6632-6000

The Netherlands: +31-40-2156700 Nordic Region: +46-8-5051-6900 Switzerland: +41-31-950-60-20 United Kingdom: +44-1223-226700

United States and Canada: 508-647-7000



The MathWorks BV is a Cedeoapproved training organization.



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

For course descriptions, classroom offerings in your area, and a complete schedule, visit

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