

BUILD YOUR MATLAB AND SIMULINK SKILLS



Hindustan Institute of Technology and Science along with DesignTech and MathWorks have scheduled a series of live session for Faculty members and Research Scholars.



Days \ Weeks	Week 1	Week 2	Week 3	Week 4	Week 5
Day 1	Modern MATLAB for Engineering and Science 6th July	Data Processing and Visualization, 13th July	Engineering Mathematics with MATLAB 1, 20th July	MATLAB Grader, 30th July	System Level design with Simulink, 3rd August
Day 2	Basics of MATLAB, 9th July	Basics of image/signal processing, 16th July	Engineering Mathematics with MATLAB 2, 23rd July		Simulink Fundamentals, 6th August

The sessions starts on 6th July 2021 and ends on 6th August 2021.

Timings 3 PM – 4:30 PM IST

Scan QR Code for Registration link

Registration Link:

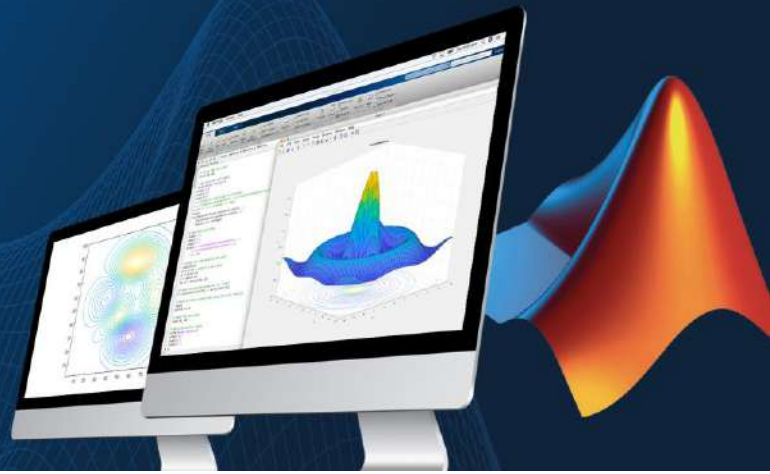
<http://tiny.cc/MathWorksEvents>



ACCELERATING LEARNING AND RESEARCH



HINDUSTAN
INSTITUTE OF TECHNOLOGY & SCIENCE
(DEEMED TO BE UNIVERSITY)



A Campus-Wide License provides unlimited use of MATLAB and Simulink to all students, faculty, staff, and researchers, on and off campus, on any device.

Gain access to:

- The same tools used by engineers and scientists
- Resources to increase MATLAB proficiency and complete assignments

Download what you need from your MATLAB portal:

<http://tiny.cc/MATLABHITS>

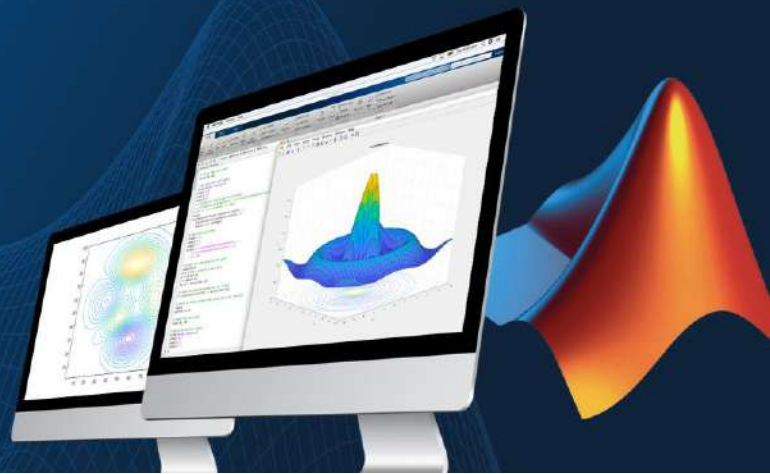
Scan QR Code



- ▶ **Get up to speed quickly with interactive online courses and tutorials. Free access is available in your MATLAB portal.**

Use MATLAB Grader to create interactive, autograded course assignments with instant learner feedback. Find out more at grader.mathworks.com.

BUILD YOUR MATLAB AND SIMULINK SKILLS



Hindustan Institute of Technology and Science provides free access to interactive courses through Campus-Wide Online Training. Here are just some of the benefits:

- Learn at your own pace.
- Receive instant feedback.
- Share progress reports and course certificates.



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Make the most of your access—for the classroom, for research, and for your career:

- Onramp courses cover the basics of MATLAB and Simulink.
- MATLAB Fundamentals provides a comprehensive introduction to common features.
- Computational math courses use MATLAB to combine math applications with computing technologies.
- Additional courses span a range of contemporary and advanced topics:
 - Deep learning
 - Machine learning
 - Data visualization
 - Programming techniques

Scan QR Code



View the full list of courses and their durations
at mathworks.com/AcademicTraining.

MATLAB and Simulink Available on Campus

Hindustan Institute of Technology and Science offers MATLAB, Simulink and several add-ons products for use by faculty, academic researchers and students.

Use the MATLAB Portal as a landing page for downloads, learning resources, and more:

<https://www.mathworks.com/academia/tah-portal/hindustan-institute-of-technology-and-science-31239439.html>

Scan QR Code



How do I get MATLAB?

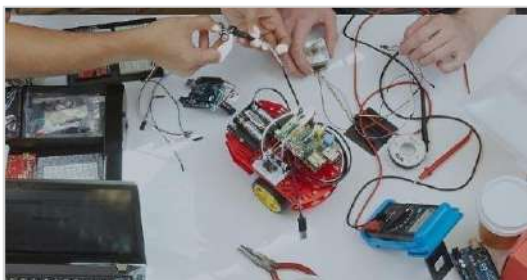
Download MATLAB through your Campus-Wide License. Follow the MATLAB Portal link, then click 'Sign in to get started'.



What can I do with MATLAB and Simulink?

mathworks.com/academia/students

Create cool projects, join student competitions, do innovative research, and more.



How are MATLAB and Simulink used in industry?

- blogs.mathworks.com/headlines
- mathworks.com/solutions

I'm new to MATLAB. Where should I start?

Learn the basics or get a refresher even before classes start. Check out MATLAB Onramp for an online, interactive, self-paced course (2 hours). Select 'Start learning now' on Portal.



Can I use MATLAB on my Phone or Web Browser?

mathworks.com/products/matlab-online

mathworks.com/products/matlab-mobile

Use MATLAB Online and the MATLAB Mobile app to run MATLAB from a browser or connect to a MATLAB session on the cloud.



Need help using MATLAB and Simulink?

Get Installation Help: mathworks.com/support

Watch Videos: mathworks.com/videos

Get Code Examples: mathworks.com/examples

MATLAB Community: mathworks.com/matlabcentral

Research with MATLAB

Tools and Reference Material for The Hindustan Institute of Technology and Science.

Researchers require platforms that let them explore and express new ideas, solve difficult problems, and create tools, leveraging a robust and flexible computational foundation.

MATLAB and Simulink are widely used across industries for research and product development, so you can apply your research to interesting and challenging real-world examples.

Find out more: mathworks.com/academia/research

What can MATLAB be used for?

- *Solutions by capability, application or industry*
- *Videos*

How do I use MATLAB?

- *Discovery pages with resources*
- *Examples*

Does MATLAB interface with ...?

- *Python, C/C++, .NET, Java*
- *Industrial, educational and mobile hardware*

Where do I get help?

- *Community File Exchange*
- *Community Discussion & Q&A*

Who else is using MATLAB?

- *User stories*
- *Technical articles & newsletters*



Support for Hindustan Institute of Technology and Science

Download MATLAB and Simulink –
<http://tiny.cc/MATLABHITS>

Scan QR Code



Trending topics:

- *Deep Learning with MATLAB*
- *Automated Driving*
- *Parallel and GPU Computing*
- *5G Communication Systems Modeling*
- *Arduino Engineering Kit*
- *MATLAB and Simulink for Neuroscience*
- *In the Headlines*



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Accelerating the pace of engineering and science

MATLAB Campus-Wide License Installation Guide

Hindustan Institute of Technology and Science

now offers a **Campus-Wide License** to *MATLAB, Simulink, and companion products*. All faculty, researchers, and students are eligible to download and install these products on their college computers as well as their personally-owned computers. Use the latest versions of MATLAB and Simulink and other MathWorks products to support your course work and research.



The next two sections outline instructions on obtaining access to MATLAB. You will first need to associate to the **Hindustan Institute of Technology and Science** MATLAB Campus-Wide License and then install MATLAB.

To associate to the Campus-Wide License, Open the Hindustan Institute of Technology and Science MATLAB [Portal](#) or simply scan the QR Code :

1. Click on Sign-In to get started
2. Sign in using your MathWorks Account with your **Hindustan Institute of Technology and Science** email address.
3. If you do not have a MathWorks Account with your **Hindustan Institute of Technology and Science** email address, click on Create Account
4. Complete the steps to create your MathWorks Account (If you have any trouble creating an account, contact MathWorks Customer Service via info@mathworks.in or +91-80-6632-6000)
5. Once logged in on the [Portal](#), you would automatically be associated to the **Hindustan Institute of Technology and Science** MATLAB Campus-Wide License.

Link and QR Code to access the Hindustan Institute of Technology and Science MATLAB Portal

Link: <https://in.mathworks.com/academia/tah-portal/hindustan-institute-of-technology-and-science-31239439.html>

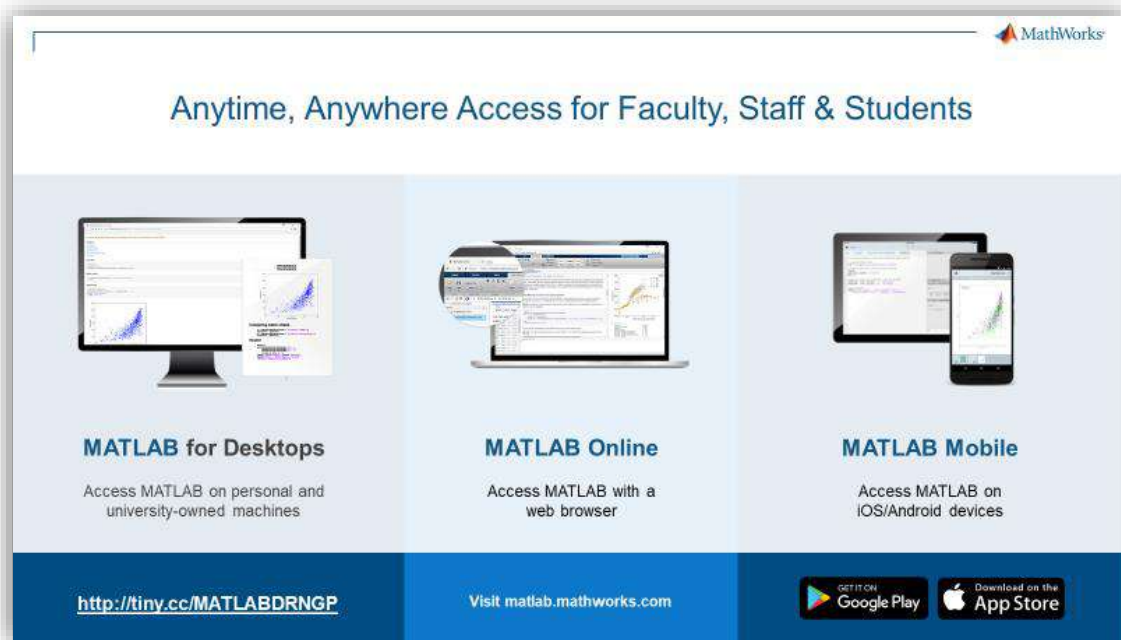
QR CODE:



Steps To Install MATLAB

- Click the download button for the current release. (Users can also download previous releases here).
- Choose a supported platform and download the installer.
- Run the installer.
- In the installer, select Log in with a MathWorks Account and follow the online instructions.
- When prompted to do so, select the Academic – Total Headcount license labeled Individual.
- Select the products you want to download and install.
- After downloading and installing your products, keep the Activate MATLAB checkbox selected and click Next.
- Select "Activate automatically using the internet."
- Log into your MathWorks account
- Select the Academic – Total Headcount license labeled Individual.
- Click "finish" to complete the activation process.

For any installation issues, contact the MathWorks Install Support team at: Info@mathworks.in or call + 91-80-6632-6000 (Option 3).



Anytime, Anywhere Access for Faculty, Staff & Students

MATLAB for Desktops
Access MATLAB on personal and university-owned machines
<http://tiny.cc/MATLABDRNGP>

MATLAB Online
Access MATLAB with a web browser
Visit matlab.mathworks.com

MATLAB Mobile
Access MATLAB on iOS/Android devices
GET IT ON [Google Play](#) | Download on the [App Store](#)

MATLAB Online- Use MATLAB in a web browser without installing, configuring, or managing any software.

<https://www.mathworks.com/products/matlab-online.html>

MATLAB Mobile- Evaluate MATLAB commands, create and edit files, visualize data, and view results – all from your iPhone, iPad, or Android device.

<https://www.mathworks.com/products/matlab-mobile.html>

MATLAB Drive- MATLAB Drive provides a common cloud-based storage location for your MATLAB file.

<https://in.mathworks.com/products/matlab-drive.html#explore-matlab-drive>

Learn to Use MATLAB and Simulink - MATLAB Onramp, Simulink Onramp and Deep Learning Onramp (free 2-hour overview of MATLAB) and other course offerings.

<https://www.mathworks.com/products/campus-wide-training.html>

MATLAB Help- Provides link to installation support and documentation.

https://www.mathworks.com/support/contact_us.html?s_tid=tah_po_helpbutton_rvce

Self-Paced, Online Training for MATLAB and Simulink


Getting Started

 <p>MATLAB Onramp FREE</p> <p>Get started quickly with the basics of MATLAB.</p> <p>Launch Details</p>	 <p>Simulink Onramp FREE</p> <p>Get started quickly with the basics of Simulink.</p> <p>Details</p>	 <p>Machine Learning Onramp NEW FREE</p> <p>Learn the basics of practical machine learning methods for classification problems.</p> <p>Launch Details</p>	 <p>Deep Learning Onramp FREE</p> <p>Get started quickly using deep learning methods to perform image recognition.</p> <p>Launch Details</p>	 <p>Stateflow Onramp NEW FREE</p> <p>Learn the basics of creating, editing, and simulating state machines in Stateflow.</p> <p>Details</p>
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Introduction – 8 Hours

Computational Mathematics

*Available only to users at universities that offer campus-wide online training access.

 <p>Introduction to Symbolic Math with MATLAB</p> <p>Get started quickly with an introduction to symbolic math.</p> <p>Launch</p>	 <p>Solving Nonlinear Equations with MATLAB</p> <p>Use root finding methods to solve nonlinear equations.</p> <p>Launch</p>	 <p>Solving Ordinary Differential Equations with MATLAB</p> <p>Use MATLAB ODE solvers to numerically solve ordinary differential equations.</p> <p>Launch</p>	 <p>Introduction to Linear Algebra with MATLAB</p> <p>Use matrix methods to solve systems of linear equations and perform eigenvalue decomposition.</p> <p>Launch</p>	 <p>Introduction to Statistical Methods with MATLAB</p> <p>Get started quickly with basic descriptive statistics and data fitting.</p> <p>Launch</p>
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Computational Mathematics with MATLAB – 9 Hours

Core MATLAB

 <p>MATLAB Fundamentals</p> <p>Learn core MATLAB functionality for data analysis, modeling, and programming.</p> <p>Launch Details</p>	 <p>MATLAB for Data Processing and Visualization</p> <p>Create custom visualizations and automate your data analysis tasks.</p> <p>Launch Details</p>	 <p>MATLAB Programming Techniques</p> <p>Improve the robustness, flexibility, and efficiency of your MATLAB code.</p> <p>Launch Details</p>
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Core MATLAB Functionality & Data Science – 100 Hours

Data Science

 <p>Machine Learning with MATLAB</p> <p>Explore data and build predictive models.</p>	 <p>Deep Learning with MATLAB NEW</p> <p>Learn the theory and practice of building deep neural networks with real-life image and sequence data.</p>
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Note: Course Completion certificate provided upon *completing* the Each course.

Organized Alphabetically

5G Toolbox
Aerospace Blockset
Aerospace Toolbox
Antenna Toolbox
Audio Toolbox
Automated Driving Toolbox
AUTOSAR Blockset
Bioinformatics Toolbox
Communications Toolbox
Computer Vision Toolbox
Control System Toolbox
Curve Fitting Toolbox
Data Acquisition Toolbox
Database Toolbox
Datafeed Toolbox
DDS Blockset
Deep Learning HDL Toolbox
Deep Learning Toolbox
DSP System Toolbox
Econometrics Toolbox
Embedded Coder
Filter Design HDL Coder
Financial Instruments Toolbox
Financial Toolbox
Fixed-Point Designer
Fuzzy Logic Toolbox
Global Optimization Toolbox
GPU Coder
HDL Coder
HDL Verifier
Image Acquisition Toolbox
Image Processing Toolbox
Instrument Control Toolbox
Lidar Toolbox
LTE Toolbox
Mapping Toolbox
MATLAB
MATLAB Coder
MATLAB Compiler

MATLAB Compiler SDK
MATLAB Grader
MATLAB Parallel Server
MATLAB Production Server
MATLAB Report Generator
MATLAB Web App Server
Mixed-Signal Blockset
Model Predictive Control Toolbox
Model-Based Calibration Toolbox
Motor Control Blockset
Navigation Toolbox
Online Training Suite
OPC Toolbox
Optimization Toolbox
Parallel Computing Toolbox
Partial Differential Equation
Toolbox
Phased Array System Toolbox
Polyspace Bug Finder
Polyspace Code Prover
Powertrain Blockset
Predictive Maintenance Toolbox
Radar Toolbox
Reinforcement Learning Toolbox
RF Blockset
RF Toolbox
Risk Management Toolbox
Roadrunner
Roadrunner Asset Library
Robotics System Toolbox
Robust Control Toolbox
ROS Toolbox
Satellite Communications
Toolbox
Sensor Fusion and Tracking
Toolbox
SerDes Toolbox
Signal Processing Toolbox
SimBiology

SimEvents
Simscape
Simscape Driveline
Simscape Electrical
Simscape Fluids
Simscape Multibody
Simulink
Simulink 3D Animation
Simulink Check
Simulink Code Inspector
Simulink Coder
Simulink Compiler
Simulink Control Design
Simulink Coverage
Simulink Design Optimization
Simulink Design Verifier
Simulink Desktop Real-Time
Simulink PLC Coder
Simulink Real-Time
Simulink Report Generator
Simulink Requirements
Simulink Test
SoC Blockset
Spreadsheet Link
Stateflow
Statistics and Machine Learning
Toolbox
Symbolic Math Toolbox
System Composer
System Identification Toolbox
Text Analytics Toolbox
UAV Toolbox
Vehicle Dynamics Blockset
Vehicle Network Toolbox
Vision HDL Toolbox
Wavelet Toolbox
Wireless HDL Toolbox
WLAN Toolbox



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Organized by Application

MATLAB Product Family MATLAB

Application Deployment

MATLAB Compiler
MATLAB Compiler SDK
MATLAB Production Server
MATLAB Web App Server

Code Generation

Embedded Coder
Filter Design HDL Coder
Fixed-Point Designer
GPU Coder
HDL Coder
HDL Verifier
MATLAB Coder

Parallel Computing

MATLAB Parallel Server
Parallel Computing Toolbox

Reporting and Database Access

Database Toolbox
MATLAB Report Generator

Simulink Product Family

Simulink

Application Deployment

Simulink Compiler

Code Generation

AUTOSAR Blockset
DDS Blockset
Embedded Coder
Fixed-Point Designer
HDL Coder
HDL Verifier
Simulink Code Inspector
Simulink Coder
Simulink PLC Coder

Physical and Event-Based Modeling

SimEvents
Simscape
Simscape Driveline
Simscape Electrical
Simscape Fluids
Simscape Multibody
Simulink 3D Animation
Stateflow

Real-Time Simulation and Testing

Simulink Desktop Real-Time
Simulink Real-Time

Reporting

Simulink Report Generator

Systems Engineering

System Composer

Verification, Validation, and Test

Polyspace Bug Finder
Polyspace Code Prover
Simulink Check
Simulink Coverage
Simulink Design Verifier
Simulink Requirements
Simulink Test

Application Products

Aerospace

Aerospace Blockset
Aerospace Toolbox
UAV Toolbox

AI, Data Science, and Statistics

Deep Learning Toolbox
Deep Learning HDL Toolbox
Predictive Maintenance Toolbox
Reinforcement Learning Toolbox
Statistics and Machine Learning Toolbox
Text Analytics Toolbox

Automotive

Automated Driving Toolbox
AUTOSAR Blockset
Model-Based Calibration Toolbox
Powertrain Blockset
RoadRunner
RoadRunner Asset Library
Vehicle Dynamics Blockset
Vehicle Network Toolbox

Autonomous Systems

Automated Driving Toolbox
Navigation Toolbox
RoadRunner
RoadRunner Asset Library
Robotics System Toolbox
ROS Toolbox
Sensor Fusion and Tracking Toolbox
UAV Toolbox

Code Verification

Polyspace Bug Finder
Polyspace Code Prover

Computational Biology

Bioinformatics Toolbox
SimBiology

Computational Finance

Database Toolbox
Datafeed Toolbox
Econometrics Toolbox
Financial Instruments Toolbox
Financial Toolbox
Risk Management Toolbox
Spreadsheet Link

Control Systems

Control System Toolbox
Fuzzy Logic Toolbox

Control Systems (cont.)

Model Predictive Control Toolbox
Motor Control Blockset
Predictive Maintenance Toolbox
Reinforcement Learning Toolbox
Robust Control Toolbox
Simulink Control Design
Simulink Design Optimization
System Identification Toolbox

FPGA, ASIC, and SoC Development

Deep Learning HDL Toolbox
Filter Design HDL Coder
Fixed-Point Designer
HDL Coder
HDL Verifier
SoC Blockset
Vision HDL Toolbox
Wireless HDL Toolbox

Image Processing and Computer Vision

Computer Vision Toolbox
Image Processing Toolbox
Lidar Toolbox

Math and Optimization

Curve Fitting Toolbox
Global Optimization Toolbox
Mapping Toolbox
Optimization Toolbox
Partial Differential Equation Toolbox
Symbolic Math Toolbox

RF and Mixed Signal

Antenna Toolbox
Mixed-Signal Blockset
RF Blockset
RF Toolbox
SerDes Toolbox

Signal Processing

Audio Toolbox
DSP System Toolbox
Phased Array System Toolbox
Radar Toolbox
Signal Processing Toolbox
Wavelet Toolbox

Test and Measurement

Data Acquisition Toolbox
Image Acquisition Toolbox
Instrument Control Toolbox
OPC Toolbox
Vehicle Network Toolbox

Wireless Communications

5G Toolbox
Communications Toolbox
LTE Toolbox
Satellite Communications Toolbox
WLAN Toolbox

Academic Resources

MATLAB Grader
Online Training Suite



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Accelerating the pace of engineering and science