



# Create a MATLAB Enabled Campus

## MathWorks Licensing for Campus-Wide Use

At 5000 universities around the world, MATLAB is used extensively in teaching, research, and student projects in all fields of engineering, science, economics, and finance.

More than 500 of these universities have already upgraded to a Total Academic Headcount (TAH) license. This provides a common configuration of MATLAB products to all students and faculty for use in the classroom, home, or in lab and field research.

### The MATLAB Enabled Campus | Anytime, Anywhere Access for Everyone

The majority of the top technical universities are TAH campuses, including 22 of the world's 25 top-ranked universities—representing millions of MATLAB users.

#### These schools are among the hundreds that have upgraded:

Aalborg University	Princeton University	University of Cambridge
Cornell University	RWTH Aachen University	University of Melbourne
École Centrale de Lyon	Seoul National University	University of Michigan
Georgia Institute of Technology	Stanford University	University of Oxford
Johns Hopkins University	Technische Universiteit Eindhoven	University of Pennsylvania
KTH Royal Institute of Technology	Technische Universität München	University of Science & Technology of China
Lund University	Tokyo University of Science	University of Sydney
Massachusetts Institute of Technology	University of Applied Sciences Augsburg	University of Toronto
Ohio State University	University of California Berkeley	Vanderbilt University
		Woods Hole Oceanographic Institution

For students, knowing how to use MATLAB opens the door to a wide range of disciplines and modeling methods. MATLAB is listed as a common technical skill among LinkedIn members with an engineering background, and is listed as a required skill in thousands of technical job postings.

*“We wanted to standardize on one platform for the course, and we didn’t want to have to teach that as well,” said Dr. Joel Anstrom.*

*“With MathWorks tools, our students can do both modeling and analysis, and then develop an embedded controller without switching software platforms. That is invaluable.”*

*“We decided to adopt the TAH license after noticing a shift in many industries - including automotive, electronics, communication, and medical - from the C programming language to MATLAB and Simulink,” said Teruo Tanaka.”*

#### Standard Configuration

MATLAB and

- Bioinformatics Toolbox
- Control System Toolbox
- Curve Fitting Toolbox
- Data Acquisition Toolbox
- DSP System Toolbox
- Image Processing Toolbox
- Instrument Control Toolbox
- Optimization Toolbox
- Parallel Computing Toolbox
- Signal Processing Toolbox
- Statistics and Machine Learning Toolbox
- Symbolic Math Toolbox

Simulink and

- SimMechanics
- Simscape
- Simulink Control Design
- Stateflow

Expand the configuration with more than 50 products available as add-ons to the license.

#### Connect MATLAB and Simulink to Hardware: Project-Based Learning

Project-based learning uses active educational techniques and gives students hands-on experience working with hardware and software. By extending the approach to incorporate industry-standard software such as MATLAB and Simulink, instructors not only keep students motivated but also prepare them for a range of careers. MathWorks provides free support packages for I/O with MATLAB and automatic programming with Simulink. You can build and run a system on today's hot new hardware including Arduino, LEGO MINDSTORMS, and Raspberry Pi platforms.



## Total Academic Headcount License Features

- Available to all faculty, researchers, and students everywhere: at home and classroom, in lab and field research, and while travelling for academic and educational use.
- Covers all on-campus computing facilities, labs, classrooms, and research centers, as well as all faculty-owned and student-owned personal computers.
- Standard configuration includes MATLAB, Simulink, and 16 toolboxes and add-ons. Expandable with more than 50 products.
- Annual expense provides more predictable cost model for budget planning.
- One license eases license management and ensures software license compliance through central administration. Easily integrates into bring your own device (BYOD) programs.
- Pricing is proportional to the size of the student body and number of products licensed, which provides cost efficiencies per user.

*“With the Total Academic Headcount licenses, all faculty and students on campus have access to MATLAB, Simulink, and various toolboxes,” said Dr. Jakob Stoustrup. “On multidisciplinary projects, students with quite different educational backgrounds can work together more easily because they are using the same tools.”*

## IT Management Resources

**License Center.** Centralized license management:

- Manage user information
- Activate and deactivate software
- Retrieve license files and installation keys

**TAH Resource Kit.** Preview the kit at [mathworks.com/tahkit](http://mathworks.com/tahkit).

- Quick start guides and videos to support deployment of the license
- Templates for posters and email messages to notify user community about how to install and activate the tools
- Online resources to get users started

**MathWorks Installation Support.** Live help:

- Answers to your questions in the context of your IT environment

## User Self-Service

- Download licensed products and updates
- Access free tutorials at MATLAB Academy
- Manage license using the License Center
- Obtain technical support for faculty and researchers
- View current and archived documentation
- Obtain access to MATLAB prerelease and beta versions
- Download free hardware support packages for Arduino, Raspberry Pi, Lego, and more
- Use MATLAB Mobile on iPhone, iPad, or Android device

**Contact your MathWorks Account Representative for information and a price quote.**

## Scale MATLAB Applications to Computer Clusters, Data Centers, and HPC Centers

With MATLAB Distributed Computing Server, you can scale up parallel MATLAB applications built with Parallel Computing Toolbox to run on a cluster.

The MATLAB Distributed Computing Server add-on can run up to 32 workers (MATLAB computational engines) on each cluster for which you obtain a license key. Support for larger clusters is also available.

### Advantages for users

- Access to cluster resources through the familiar MATLAB environment
- Ability to run the same code on workstations and computer clusters
- Capability to batch execution of serial code as well as scaling of parallel code

### Advantages for IT

- Supports commonly used third-party schedulers, and provides a built-in scheduler for clusters that run MATLAB jobs
- Scale can be increased with a simple change of license file
- Infrastructure and documentation for sharing and exchange of code and data

MathWorks technical support team will help administrators with installation and integration for each cluster.

Ask your MathWorks Account Representative for details. Learn more at [mathworks.com/mdcs](http://mathworks.com/mdcs) or see the MATLAB Distributed Computing Server [Quick Start Guide](#).

## MATLAB Self-Paced Training

Learn MATLAB interactively with online courses through **MATLAB Academy**. The courses include demonstrations, quizzes, and hands-on MATLAB practice sessions. MATLAB Onramp, free to all licensed users, provides an introductory overview of the MATLAB programming language to get new users up and running quickly on critical capabilities. Contact your MathWorks Account Representative about campus-wide training options.