

AUTONOMOUS MACHINES

Cross-Departmental

Interdisciplinary

Hands-on

Project-centric

Toward your dreams

Design, fabricate, program, and control robots, drones, and other cool autonomous machines!

In the New Engineering Education Transformation (NEET) **Autonomous Machines (AM) thread**, you will acquire **interdisciplinary, applied learning experience** through a series of projects with escalating complexity:

SOPHOMORE YEAR

Individual projects that focus on sensor usage and integration, basic fabrication, and structured programming for robotic applications.

JUNIOR YEAR

Introduction to the Robot Operating System (ROS), and a group project that focuses on autonomous navigation algorithms that utilize GPS, LIDAR, and vision sensing.

SENIOR YEAR

A class project working with our industry partners that solves a meaningful real-world problem in autonomous systems and robotics.



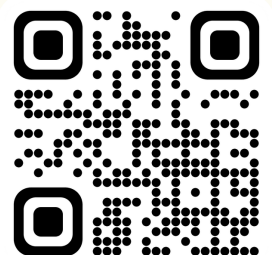
AM LEAD INSTRUCTOR

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AM Founding Lead Instructor, Lecturer
MIT School of Engineering

AM FACULTY LEAD

Professor Jonathan How
AM Founding Faculty Lead,
NEET Associate Director
MIT School of Engineering

LEARN MORE



THREAD REQUIREMENTS

Earn a certificate in your chosen thread!

SOPHOMORE YEAR

Fall or IAP:

- 16.632A | Introduction to Autonomous Machines I (6 units)

Spring (Choose ONE from the following):

- 16.632B | Introduction to Autonomous Machines II (6 units)
- 2.007 | Design & Manufacturing I (with an autonomy requirement; 12 units)

JUNIOR YEAR

Fall

- 16.633 | NEET Junior Seminar: Autonomous Machines (3 units)

Spring (Choose ONE from the following)

- 2.124[J]/6.4200[J]/16.405[J] | Robotics: Science and Systems (12 units)
- 2.12 | Introduction to Robotics (12 units)
- 6.390 | Introduction to Machine Learning (12 units) or any other ML class

SENIOR YEAR

Fall or Spring (Project can span 1-2 semesters depending on the scope + breadth):

- 16.634 | NEET Senior Seminar: Autonomous Machines (6 units)
- 16.85 | Design and Testing of Autonomous Vehicles (12 units)*

**Course 16.85 offered every 3 semesters.*

FOUNDATION SUBJECTS

Intro to Programming (Choose ONE from the following):

- 6.100A + 6.100B, 2.086, or 6.1010

Controls (Choose ONE from the following):

- 2.004, 6.3100, or 16.06

SOPHOMORES eligible
to APPLY NOW at

neet.mit.edu

by 11:59 PM,
Sunday, September 27!



Follow the action on Instagram at @mit_neet!