

# [MIT Open Courseware](#)

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## **Short summary**

A collection of courses and other learning materials for university students and graduates.

## **Link**

<https://ocw.mit.edu/index.htm>

## **Description**

MIT Open Courseware is the open source courseware collection site of the Massachusetts Institute of Technology. The platform contains courses mainly for undergraduate students and graduate professionals in a well-structured format, categorized by scientific areas of study. Hundreds of courses are available, along with podcasts, videos, academic-level commentaries on the latest research trends in a particular discipline or topic, interviews, etc.



FIND COURSES ▾

For Educators ▾

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Search



Search Tips

## Psychology and Economics

» View the new course



Image by Paul Slobier License: CC BY on Flickr.

Support OCW

Because I believe in the world class education that MIT is giving to the human society."



Arthur  
Self Learner  
Canada

GIVE NOW >

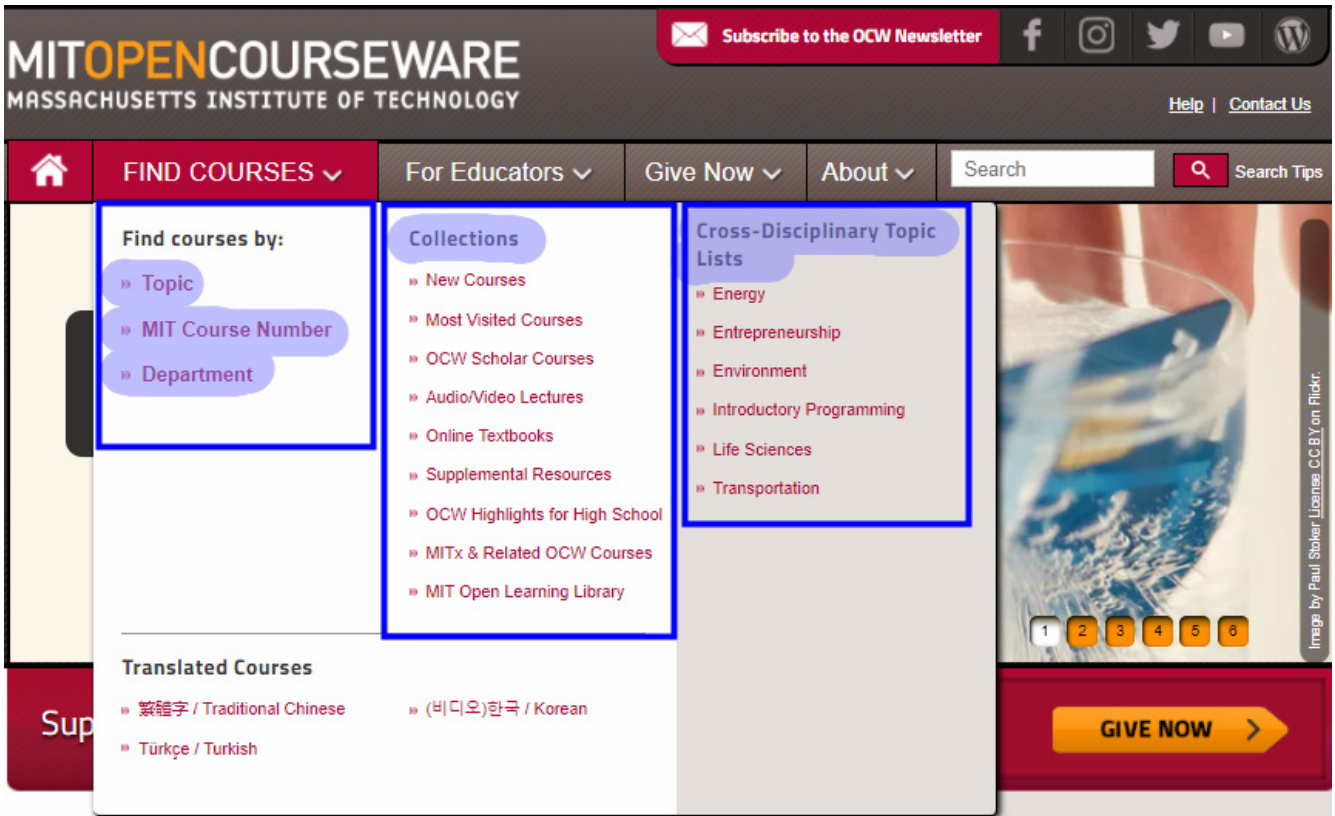
### FEATURED COURSES



» Find Courses

OCW makes the materials used in the teaching of MIT's subjects available on the Web.

Searching the site is easy, but it also offers several options. You can search by topic. In this case, records are available by specialties. You can search by course code (i.e. the "bird language" reserved for MIT professors and students). You can also search by departmental logic. Additional ways to search for course materials that cannot be placed according to these filters are searching by collection and browsing by transdisciplinary subjects. The most appropriate ways of searching for an external user, searching are by subject, collection and transdisciplinarity.



The structure of the thematic search follows the logic of field (e.g. humanities) - science (e.g. history) - discipline (e.g. history of Europe). For the other two search methods, the search menu itself contains the grouping by subject without further subdivision. Clicking on the appropriate subject will bring up a list of records in that category. The results cover a very wide range of subjects, from business to neurobiology, and are therefore an excellent orientation and self-learning tool for teachers of English.

# Course Finder

Topic	MIT Course Number	Department
<p>TOPIC</p> <ul style="list-style-type: none"> <li>Business</li> <li>Energy</li> <li>Engineering</li> <li>Fine Arts</li> <li>Health and Medicine</li> <li><b>Humanities</b></li> <li>Mathematics</li> </ul>	<p>SUB-TOPIC</p> <ul style="list-style-type: none"> <li><b>History</b></li> <li>Language</li> <li>Linguistics</li> <li>Literature</li> <li>Philosophy</li> <li>Religion</li> </ul>	<p>SPECIALTY</p> <ul style="list-style-type: none"> <li>African History</li> <li>American History</li> <li>Ancient History</li> <li>Asian History</li> <li>Comparative History</li> <li><b>European History</b></li> <li>Historical Methods</li> </ul>
<p>Sort Courses by</p> <p>Course Number ▾</p>	<p>Filter by Feature</p> <p>Select Feature ▾</p>	<p>Filter by Level</p> <p>All Levels ▾</p>
Course #	Course Title	Level
4.671	Nationalism, Internationalism, and Globalism in Modern Art (Spring 2016)	Undergraduate
21G.056	Visual Histories: German Cinema 1945 to Present (Fall 2003)	Undergraduate
21G.059	European Thought and Culture (Spring 2008)	Undergraduate
21G.061	Advanced Topics: Plotting Terror in European Culture (Spring 2004)	Undergraduate

The site also provides materials for secondary school teachers. The second category in the main menu, "For Educators", is a teaching interface for secondary school teachers. This menu contains a whole range of interesting and educational material that can be used in secondary school teaching.



FIND COURSES ▾

For Educators ▾

Give Now ▾

About ▾

Search

## Online Textbooks

This page is an index to the online textbooks in MIT the textbook files.

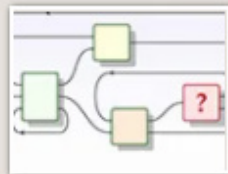
Some of these online textbooks are open-licensed notes which are so thorough that they serve as an

### FEATURED ONLINE TEXTBOOKS

EDITOR'S PICK

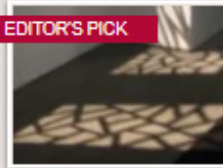


The Environment of the Earth's Surface



Applied Category Theory

EDITOR'S PICK



Introduction to Shape Grammars I

- » Chalk Radio Podcast
- » OCW Educator Portal
- » Instructor Insights by Department
- » Residential Digital Innovations
- » OCW Highlights for High School
- » Additional Resources

Clicking on the appropriate category will take you to the MIT OCW affiliated website, where you can find teaching materials available for secondary education. Here you can search in the same way as on the main site: by category, you will find a list of MIT courses that can be used in secondary education.



- » Biology
- » Chemistry
- » Engineering**
- » Humanities & Social Sciences
- » Mathematics
- » Physics

## Humanities and Social Sciences

In this section, we offer a variety of courses from across the MIT campus, specifically for high school students.

Although normally associated with science and engineering, the Humanities, Arts, and Social Sciences (HASS) are a thriving and vital part of MIT. All undergraduates are required to complete eight courses in HASS departments by the time they graduate.

Learn more about [MIT's School of Humanities, Arts, and Social Sciences](#).

- » [Introductory MIT Courses](#)
- » [High School Courses Developed by MIT Students](#)



An antique map of the world, circa 1570. Image courtesy of [Changhua Coast Conservation Action](#) on flickr.



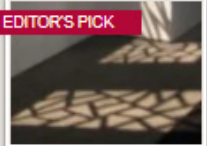
Returning to the Teachers' Surface, you will find podcasts and the OCW Educator Portal, which is also located in the Teachers' Zone.

## Online Textbooks

This page is an index to the online textbooks in MIT. Some of these online textbooks are open-licensed notes which are so thorough that they serve as an

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- » [Additional Resources](#)

### FEATURED ONLINE TEXTBOOKS

 <p><b>EDITOR'S PICK</b></p> <p>The Environment of the Earth's Surface</p>	 <p>Applied Category Theory</p>	 <p><b>EDITOR'S PICK</b></p> <p>Introduction to Shape Grammars I</p>
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### Online Textbooks by Department

On the OCW Educator Portal, you can find various homework and essay samples, audio-video lectures, exam questions, etc. related to each discipline for your teaching.

# OCW Educator Portal <sup>1</sup>

- [Notify me of Instructor Insights updates via RSS](#)
- [Other RSS feeds](#)

## Search Educational Resources

Teaching Materials

Instructor Insights

SUBJECT

- Civil and Environmental Engineering
- Comparative Media Studies/Writing
- Concourse
- Earth, Atmospheric, and Planetary Sciences <sup>2</sup>
- Economics

COURSE CONTENT

- Assignments <sup>3</sup>
- AV selected lectures
- AV special element video
- Exams
- Image Gallery
- Lecture notes
- Online textbooks

SPECIALTY

- activity (no examples)
- activity with examples
- presentations (no examples) <sup>4</sup>
- presentations with examples
- problem sets (no solutions)
- problem sets with solutions
- programming (no examples)

**Sort Courses by**

Course Number ▾

**Filter by Level**

All Levels ▾

Course #	Course Title	Level
12.000	<a href="#">Solving Complex Problems (Fall 2003)</a> <sup>5</sup>	Undergraduate
12.158	<a href="#">Molecular Biogeochemistry (Fall 2011)</a>	Undergraduate
12.445	<a href="#">Oral Communication in the Earth, Atmospheric, and Planetary Sciences (Fall 2010)</a>	Graduate

Opening the courses, assignments, etc. you are looking for is always done in the same way: you select the content you want to open from the list of results and, if it won't open with a single click, you can access the selected learning material by using the dialogue box that appears.



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Home » Courses » Find By Topic

## Course

### Solid Mechanics



1.050 is a sophomore-level engineering mechanics course, commonly labelled "Statics and Strength of Materials" or "Solid Mechanics I." This course introduces students to the fundamental principles and methods of structural mechanics. Topics covered include: static equilibrium, force resultants, support conditions, analysis of determinate planar structures (beams, trusses, frames), stresses and strains in structural elements, states of stress (shear, bending, torsion), statically indeterminate s...

View Course

Instructor(s) Prof. Louis Bucciarelli

As Taught In Fall 2004

Course Number 1.050

Level Undergraduate

Features Faculty introduction - video, Assignments: problem sets with solutions, Assignments: activity (no examples), Assignments: design (no examples)

TOPIC

Business

Energy

Engineering

Fine Arts

Health and Medicine

Humanities

Mathematics

Sort Courses by

Course Number

Course #	Course Title	Level
1.050	Solid Mechanics (Fall 2004)	Undergraduate
1.050	Engineering Mechanics I (Fall 2007)	Undergraduate
2.019	Design of Ocean Systems (Spring 2011)	Undergraduate
2.081J	Plates and Shells (Spring 2007)	Graduate

## Interface language

English