

Classroom Integration Guide for Instructors

The engineering technology learning simulation videos can be used in multiple ways. How you use them in your classroom is completely up to you. You can also download and modify the videos to meet your specific needs under the Creative Commons license.

Watch directly from Engineertech.org

The engineering technology simulations can be watched directly off of the engineertech.org website. Simply pick a topic from the dropdown, and find the simulation you want to view. Click the video and it will begin. This can be used through a projector in a classroom situation, or you can link directly to the video from your course.



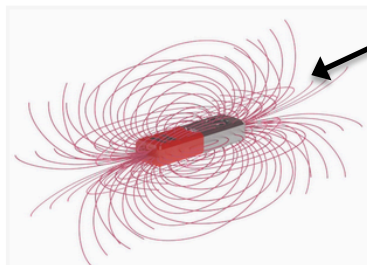
Open Courseware & Educational Resources for Instructors & Students

DC Circuit Analysis

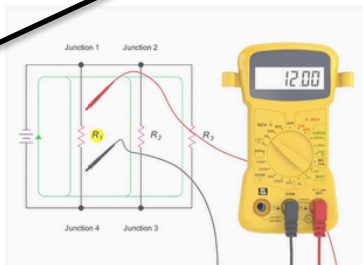
VIEW

Advanced Search >

DC Circuit Analysis



MAGNETISM AND ELECTRICITY



SERIES AND PARALLEL CIRCUITS

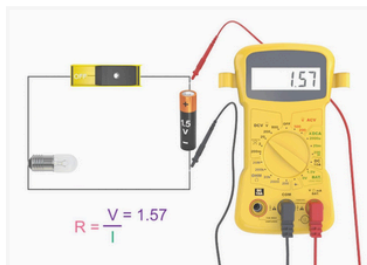
1st and 2nd x multiplier = Resistor Value

Color	Digits	Multiplier	Tolerance
black	0 0	10 ⁰	21%
brown	1 1	10 ¹	21%
red	2 2	10 ²	21%
orange	3 3	10 ³	
yellow	4 4	10 ⁴	
green	5 5	10 ⁵	
blue	6 6	10 ⁶	
violet	7 7	10 ⁷	
grey	8 8	10 ⁸	
white	9 9	10 ⁹	
gold		10 ⁻¹	±5%
silver		10 ⁻²	±10%

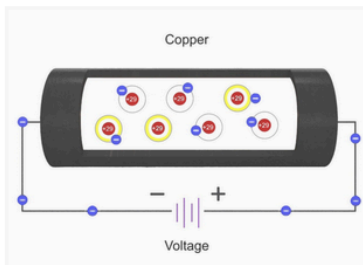
39 x .01 = 0.39Ω

Tolerance = ±10%

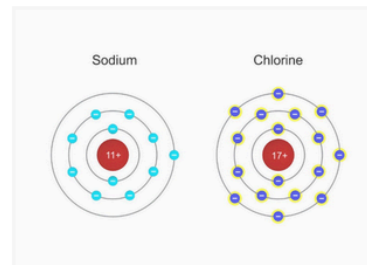
READING RESISTORS



OHMS LAW



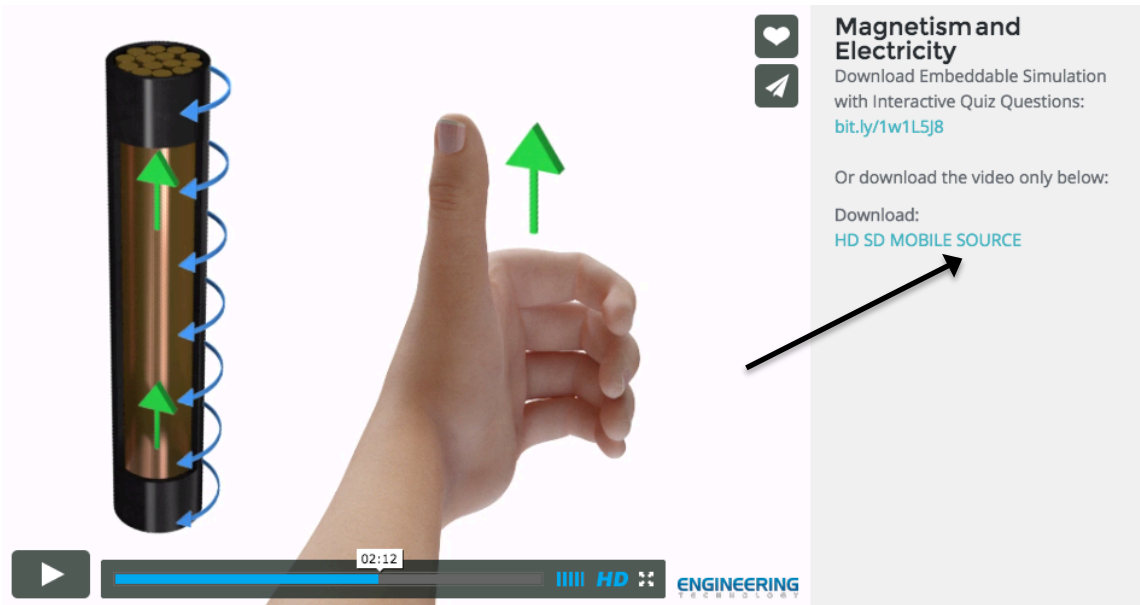
HOW CONDUCTORS WORK



MATTER AND ELECTRONS

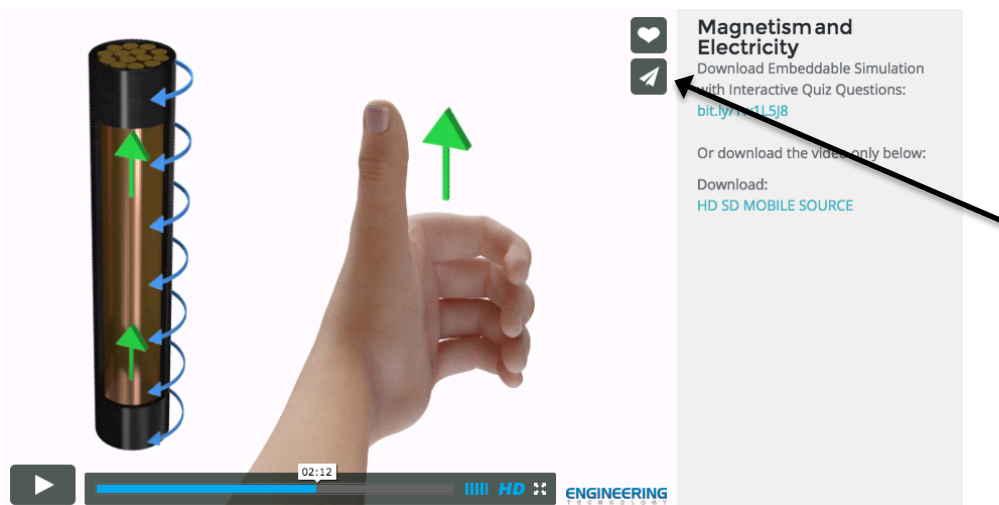
Download the Videos

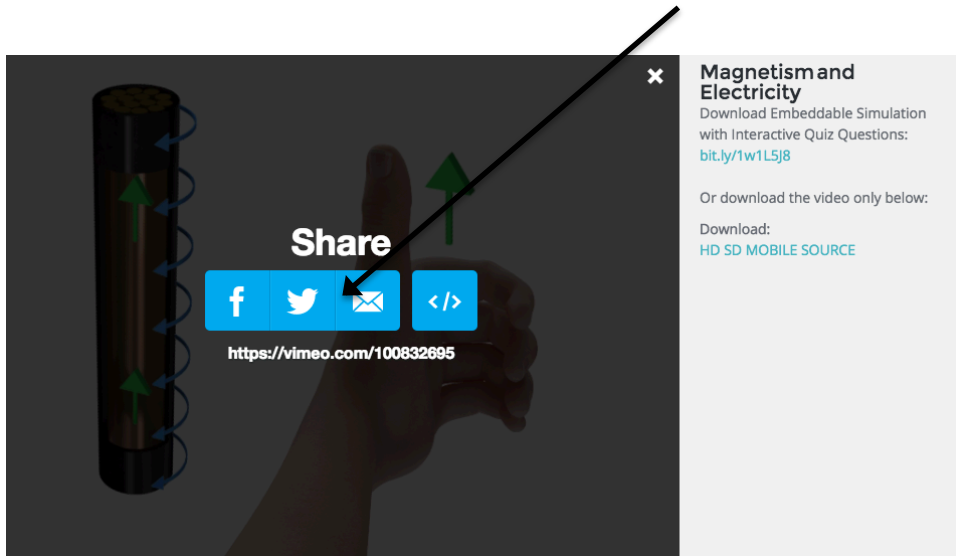
The videos are also downloadable in multiple formats so you can edit and reuse them as the Creative Commons license allows. Simply download the video and reuse them for educational purposes.



Share on Social Media

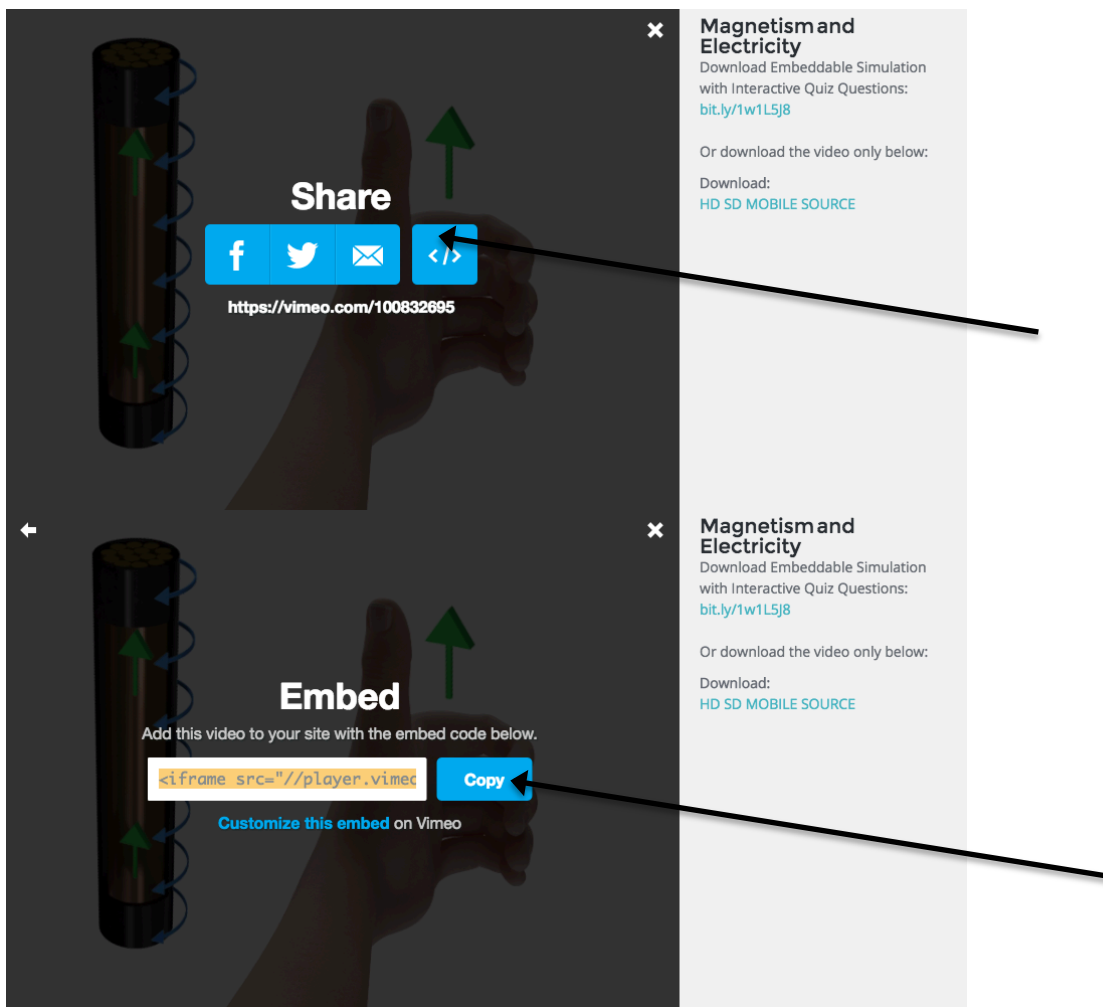
You can share the videos via social media. For example your classroom Facebook or Twitter page. Just click the share button on the video.





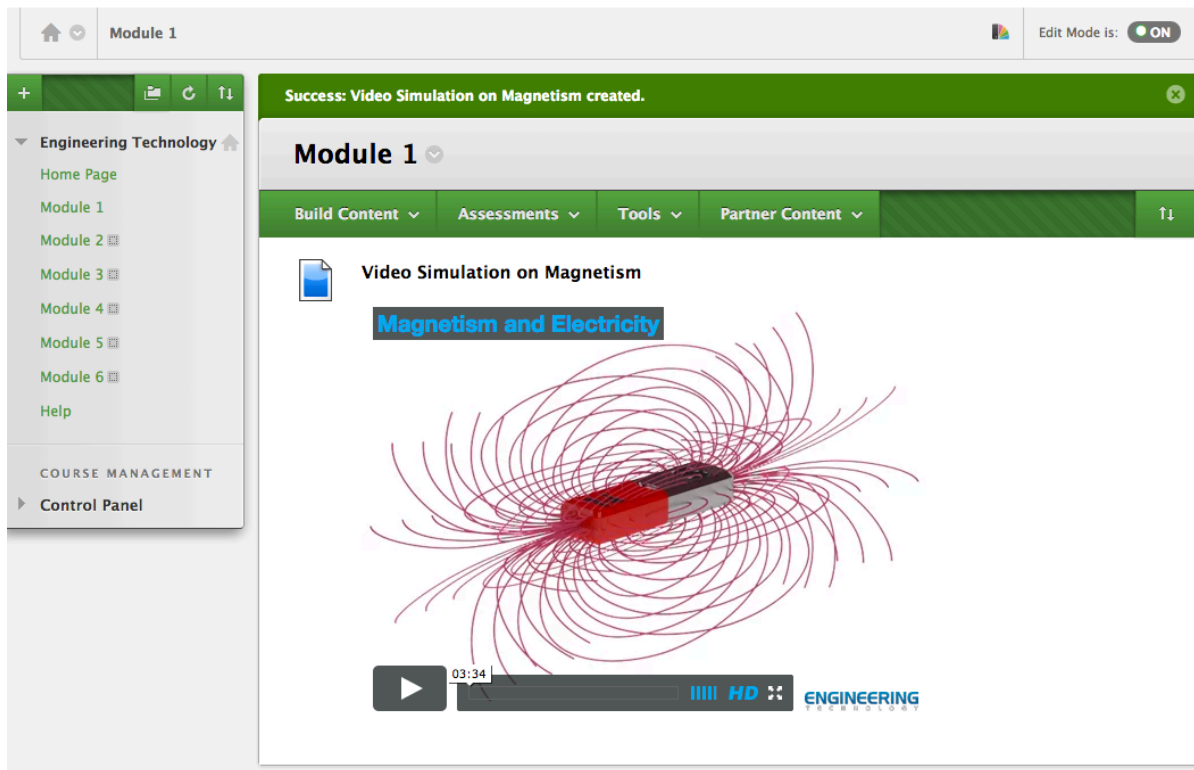
Embed into a Website or Online Course

You can also use the Vimeo embed code to embed the simulations in your online course or website. To do this, you simply click the embed button and copy the embed code.



The embed code looks like this: `<iframe src="//player.vimeo.com/video/100832695" width="500" height="375" frameborder="0" webkitallowfullscreen mozallowfullscreen allowfullscreen></iframe>`

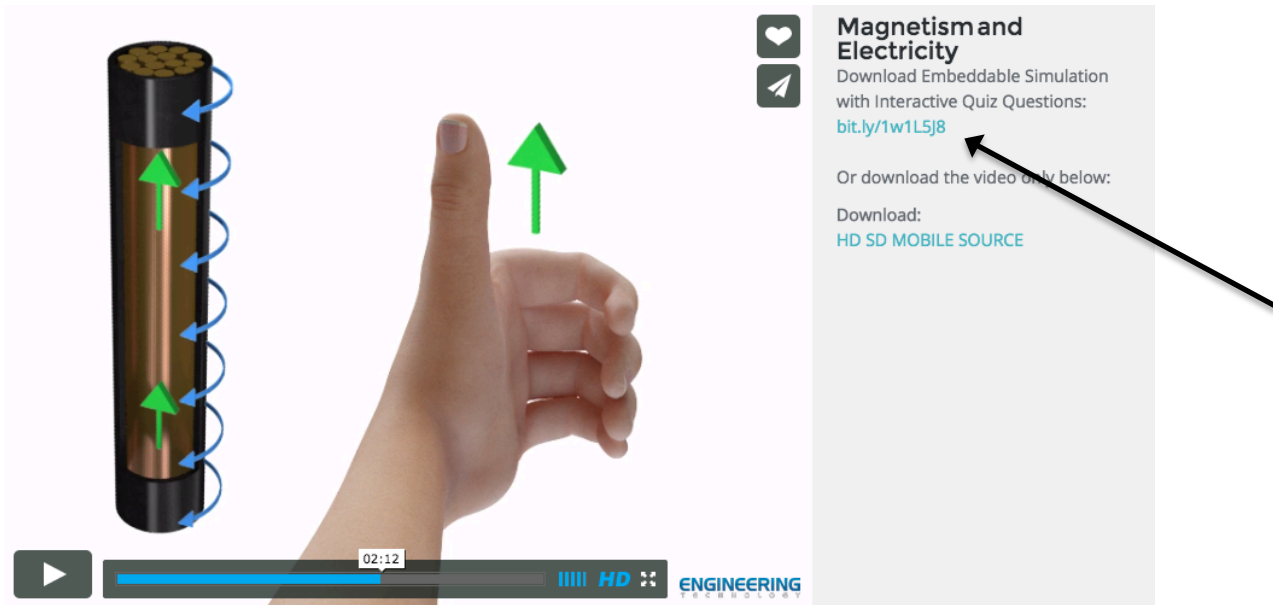
Go to your online course or website and simply paste the HTML code into your editor. Save, and your students now have the simulation available in their course. Below is an example of embedding the video into Blackboard.



The screenshot displays a Blackboard course interface. At the top, a green notification bar reads "Success: Video Simulation on Magnetism created." Below this, the course title "Module 1" is visible. A navigation menu on the left includes "Engineering Technology" with sub-items for "Home Page" and "Module 1" through "Module 6", along with "Help" and "COURSE MANAGEMENT" options like "Control Panel". The main content area features a video player titled "Video Simulation on Magnetism" with the subtitle "Magnetism and Electricity". The video player shows a 3D simulation of a red bar magnet with red magnetic field lines. The video player interface includes a play button, a progress bar at 03:34, and "HD" and "ENGINEERING" logos.

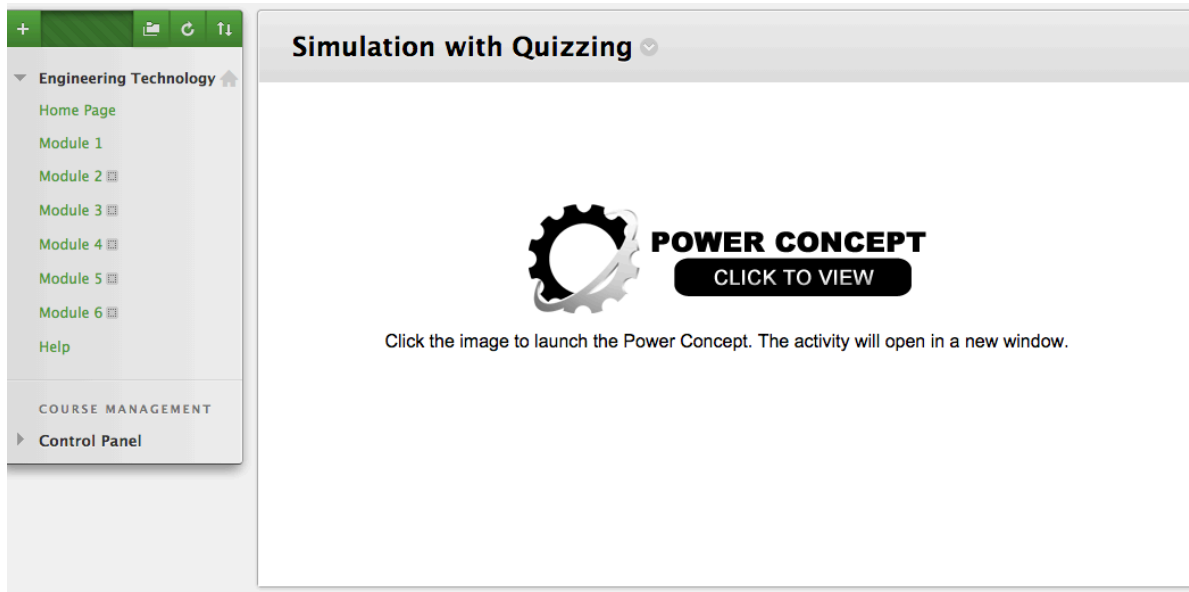
Online Course and Learning Management System Integration

The simulations are all packaged with interactive quizzes if you decide to use this option. These can be added to your learning management system (LMS) or linked from a web page. To use in your learning management system, simply download the packaged .zip file from the description window as shown here.



Go to your online course and upload the zip file to the appropriate section. Every LMS is different, so you may need to check with your LMS administrator to know how to upload it into your course. If you need a SCORM file or other format, please contact Lucid Way tim@lucidway.com for information on how to obtain this file format.

Choose the launcher.html file as the file to open. This will create a launch page as shown below.



“Click to View” and you can see the video with quiz questions is embedded into your online course.

The screenshot shows a web browser window with the title "ABSOLUTE ENCODER" and the URL https://www.coursesites.com/bbcswebdav/pid-7526715-dt-content-rid-22939227_1/courses/engrtechlucid/story.html. The page content includes:

ABSOLUTE ENCODER 508 RESOURCES HELP

A light source located on the opposite side of the photocells passes light through a capture plate. As the encoder disc rotates, light is either transmitted or blocked according to the pattern. **Click and Drag the three names to the red line that represents this process.**

LED LIGHT SOURCE CAPTURE PLATE PHOTO DETECTOR

The diagram shows a 3D model of an absolute encoder assembly. A central shaft is connected to a circular disc with a pattern of slots. Three red lines represent light paths: one from an LED light source on the left, one through a capture plate in the middle, and one to a photo detector on the right. The disc's rotation causes the light to be either transmitted through the slots or blocked by the disc's body.

SUBMIT

For other questions and inquiries, contact us on the engineertech.org website or Lucid Way E-learning Group directly at tim@lucidway.com