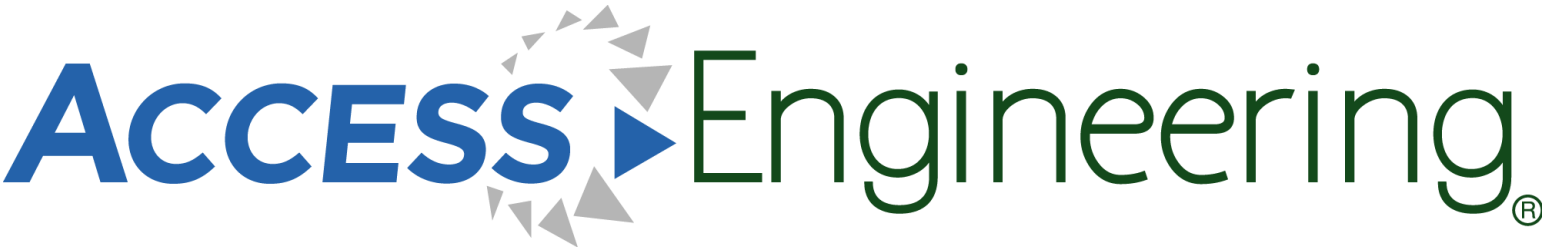
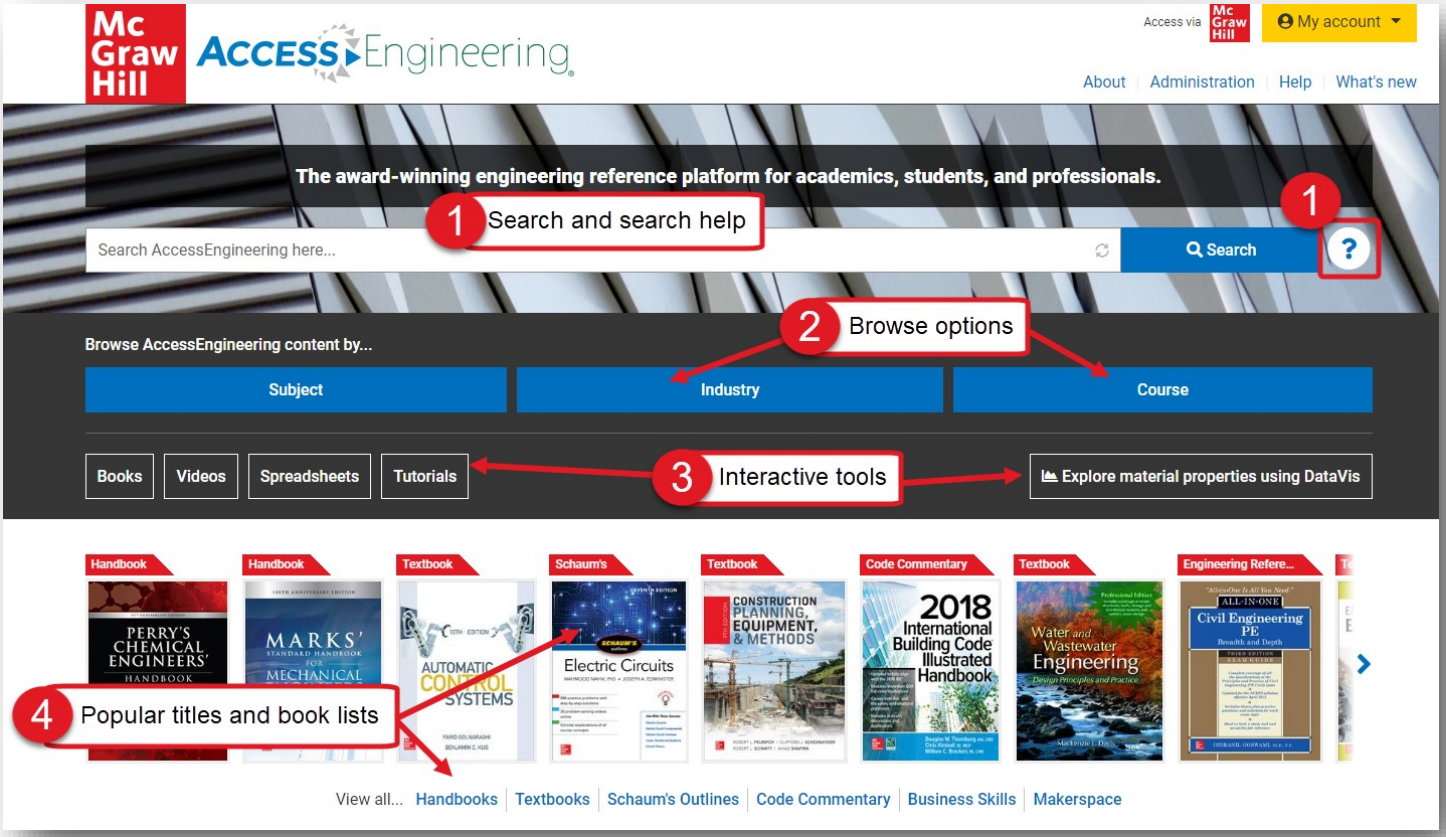


The award-winning engineering reference platform for academics, students, and professionals

Platform User Guide

Table of Contents

Homepage



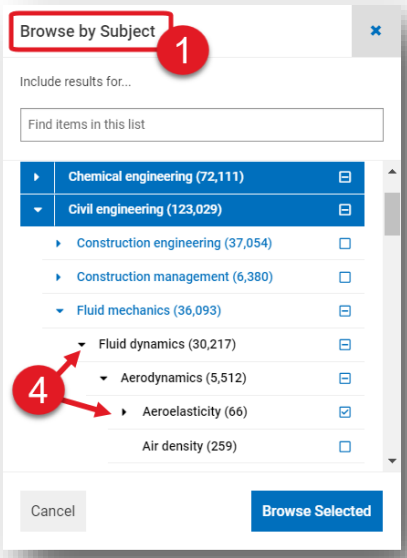
The AccessEngineering homepage is designed to help users understand what AccessEngineering is, what content it offers, and to allow them to start exploring the site.

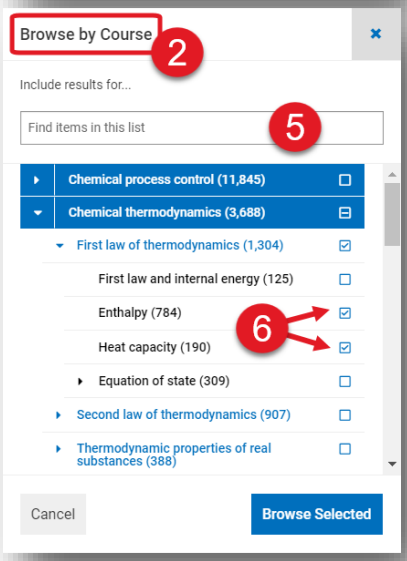
From the homepage, users can easily search or browse for content or view interactive tools. Since AccessEngineering is widely based on books, some of our most popular titles are prominently featured in a rotator display.

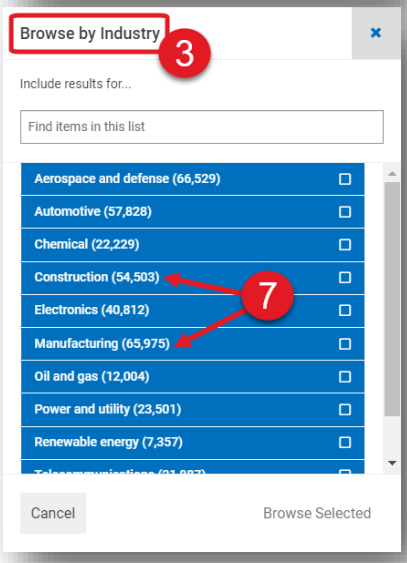
As shown in the image above, users can:

1. Start a search by entering terms into the general search bar and view the search help for tips on using Boolean, grouping, and wildcards.
2. Select a browse option to explore content tagged to our subject, industry, or course taxonomies.
3. Open a popular title or view lists of titles by book type.
4. Explore interactive tools such as the DataVis material properties tool, instructional videos, spreadsheet calculators, and tutorials.

Browsing







Dynamic browsing allows users to start exploring AccessEngineering's rich content by choosing relevant terms from our subject, industry, or course taxonomies.

Browse Options:

1. Browse by subject
   Drill down through 10 levels, starting from the major engineering disciplines, and choose from over 6,000 terms
2. Browse by course
   Choose terms from course outlines 5 levels deep for 30 common engineering courses, arranged to match a typical course syllabus
3. Browse by industry
   See content tagged to 11 interdisciplinary industries

To navigate the browse boxes:

4. Use the arrows to open subtopics
5. Search the taxonomies for specific terms
6. Select multiple terms using the checkboxes
7. See number of items tagged to each term

A Note on Taxonomies:

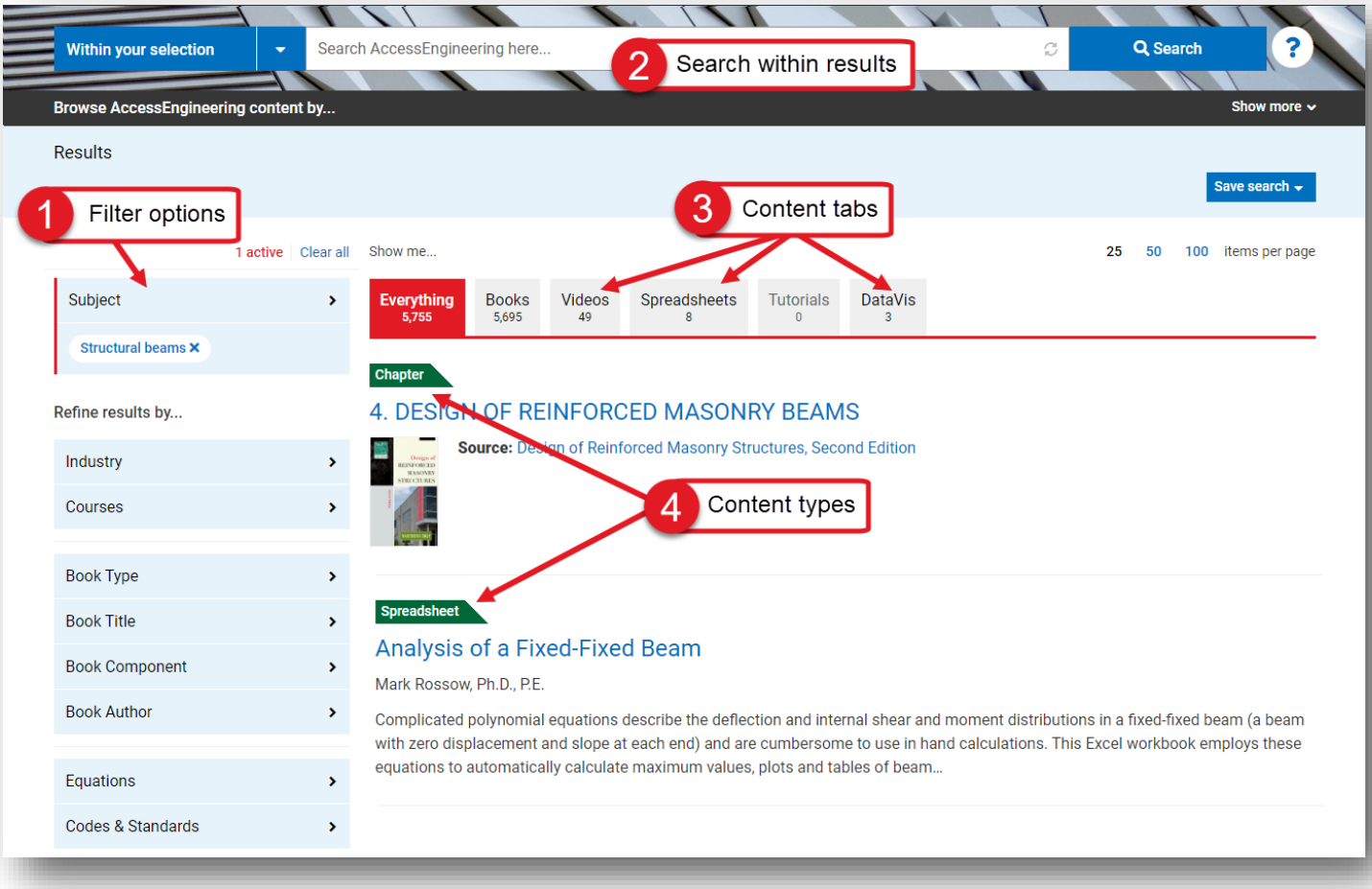
AccessEngineering's taxonomies were developed by Access Innovations, a company whose sole focus is taxonomy creation and implementation. Guidance and testing throughout the process was done by a team of 15 subject matter experts spanning every engineering discipline. Content was tagged to taxonomy terms using a semi-automated approach where taxonomy specialists manually wrote complex rules to incorporate context to differentiate between terms (ex: biological cell, battery cell, or fuel cell). Weighting was assigned to tags in the content to reflect the extent to which that content is about the particular term.

Browsing Results

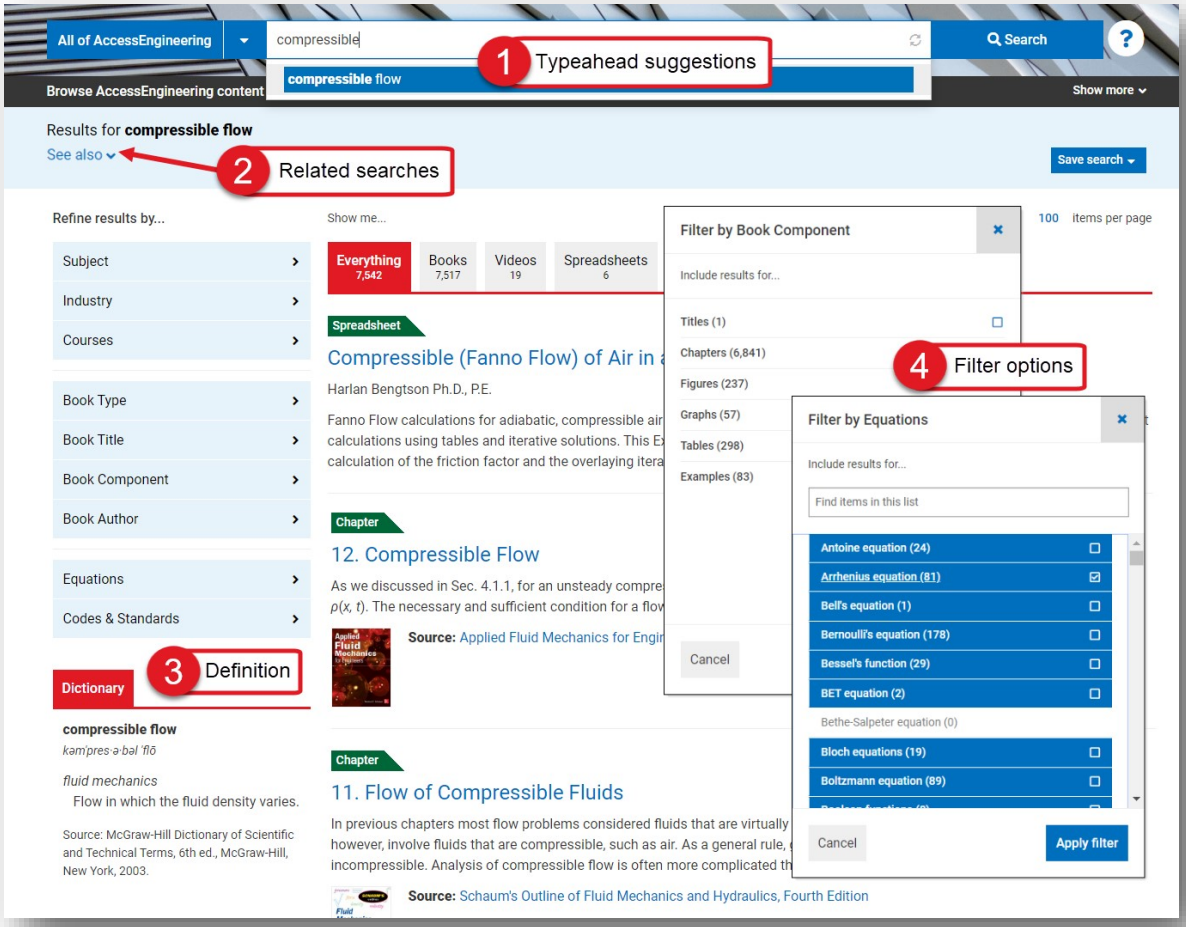
Results from browsing include content tagged to the term or terms selected in the browse window. Browsing a broader parent term will show results tagged to that term as well as results tagged to any child terms in the taxonomy. The results are ordered by taxonomy weights so the most relevant results that are most related to the selected terms show up first. From the results screen, users have several options to further narrow the results set.

As shown in the image below, users can:

1. Apply additional filters and view or remove active filters
2. Search within the current results set or use the dropdown to search the whole site
3. Filter by content type using the content tabs across the top
4. Quickly identify the content types of the results with the green content tags



Searching & Filtering



The general search bar is available from all AccessEngineering pages and can be toggled between searching within the current results or content and searching all of AccessEngineering.

Some special features of searching and search results include:

1. Typeahead suggestions while you type for matching taxonomy terms
2. Related search terms based on taxonomy relationships
3. Dictionary definitions of search terms from the McGraw-Hill Dictionary of Scientific & Technical Terms
4. Multiple options to further refine results through filters

Filters are available on the left side of the results screen and include options to filter by:

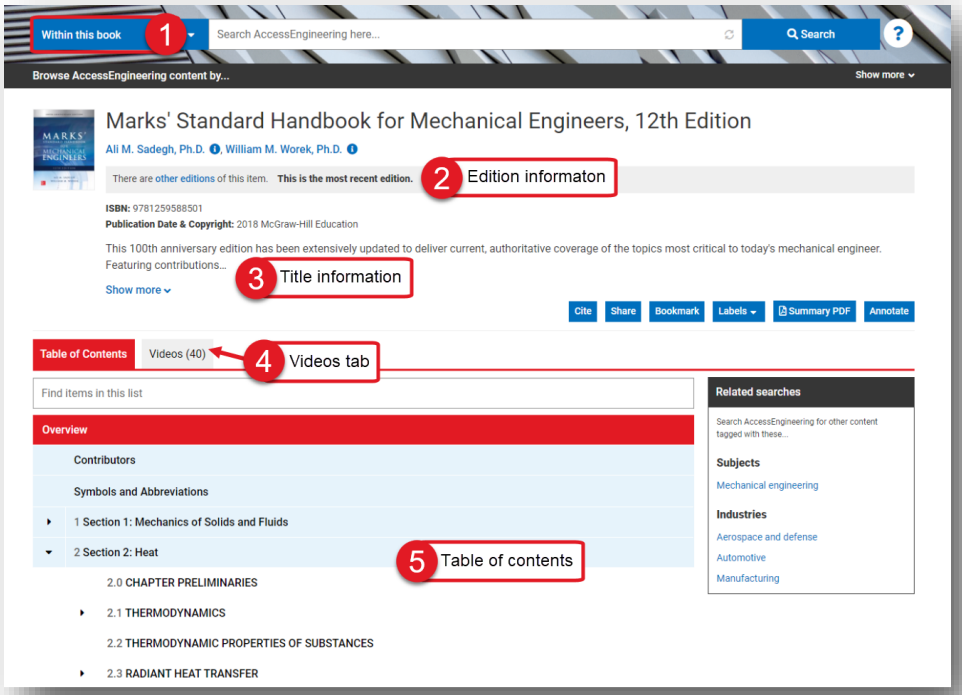
1. Additional taxonomy terms (subject, industry, course)
2. Book Type (handbook, textbook, etc.) and Book Title and Book Author
3. Book Component (chapters, figures, tables, example problems)
4. Equations and Codes & Standards commentary
   *The equation taxonomy used to tag common engineering equations takes into account synonyms and various ways the equation might be listed in the text (*ex: Manning equation vs. Manning formula*)

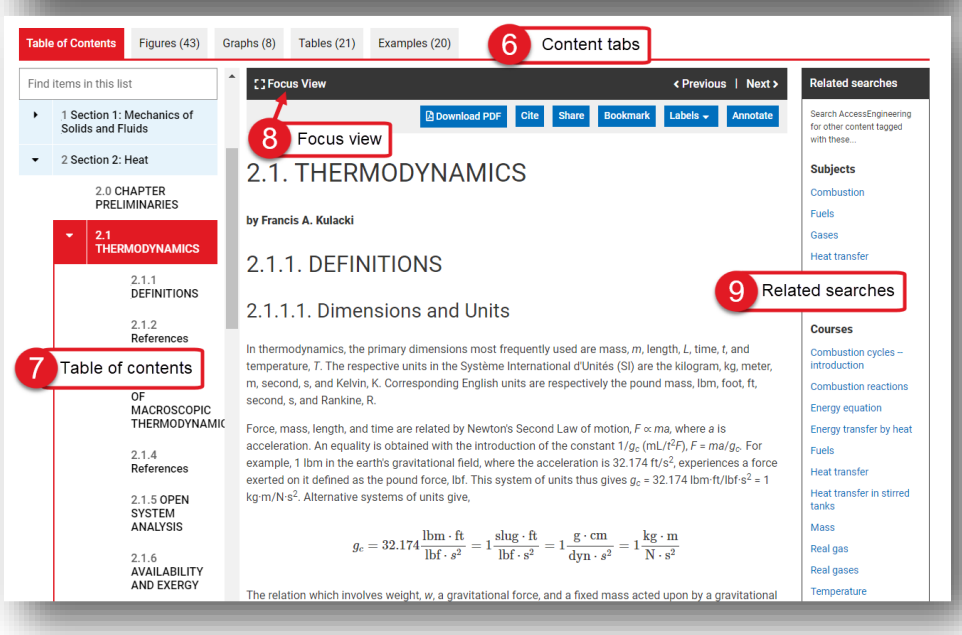
Content: Books

The book landing page (top image) is reached by clicking on a book title, either from the homepage or a list of search results.

From the book landing page:

1. Search within this book, or use the dropdown menu to search all of AccessEngineering
2. See edition information and links to older or newer editions
3. See additional information on the this title
4. View a list of all videos available in this title
5. Navigate through the chapters using the table of contents



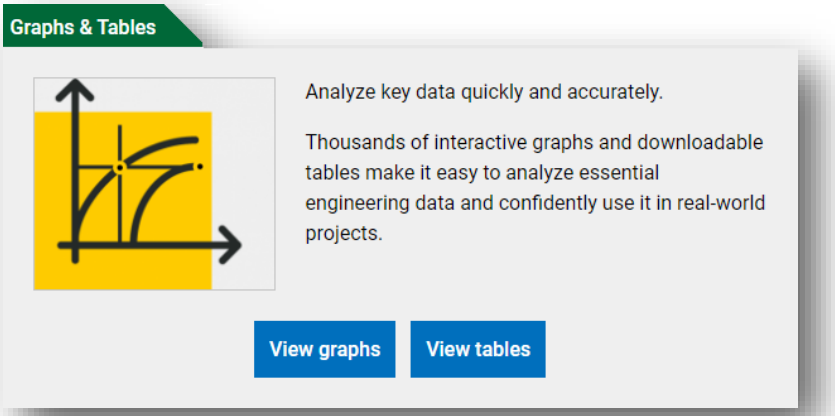


> ***A Note on Book Editions:***
>
> *Older editions of books are archived and still accessible on the site, but only content from the newest edition is included in the search results. All links to old editions will continue to function, and a list of all archived books can be found on the site footer.*

While viewing book content, there are several features available to enhance the user experience:

6. Content tabs highlight specific content types available in each section, including figures, graphs, tables, and example problems
7. Persistent table of contents remains visible and navigable while viewing book sections
8. Focus view removes visual clutter and expands the text content, and additional content tools allow users to download a PDF, get a citation or shareable link, and bookmark, label, or annotate the content
9. Related searches show taxonomy terms tagged to the current content for launching further searches

Content: Graphs & Tables



Interactive graphs and downloadable tables help users visualize and analyze data.

From the homepage, scroll down to the interactive tools section and click the button to view all available graphs or tables.

Graphs and tables also appear as individual items in search results and within the context of book sections.

Interactive Graphs:

1. Pinpoint values on a curve or input specific values into the boxes.

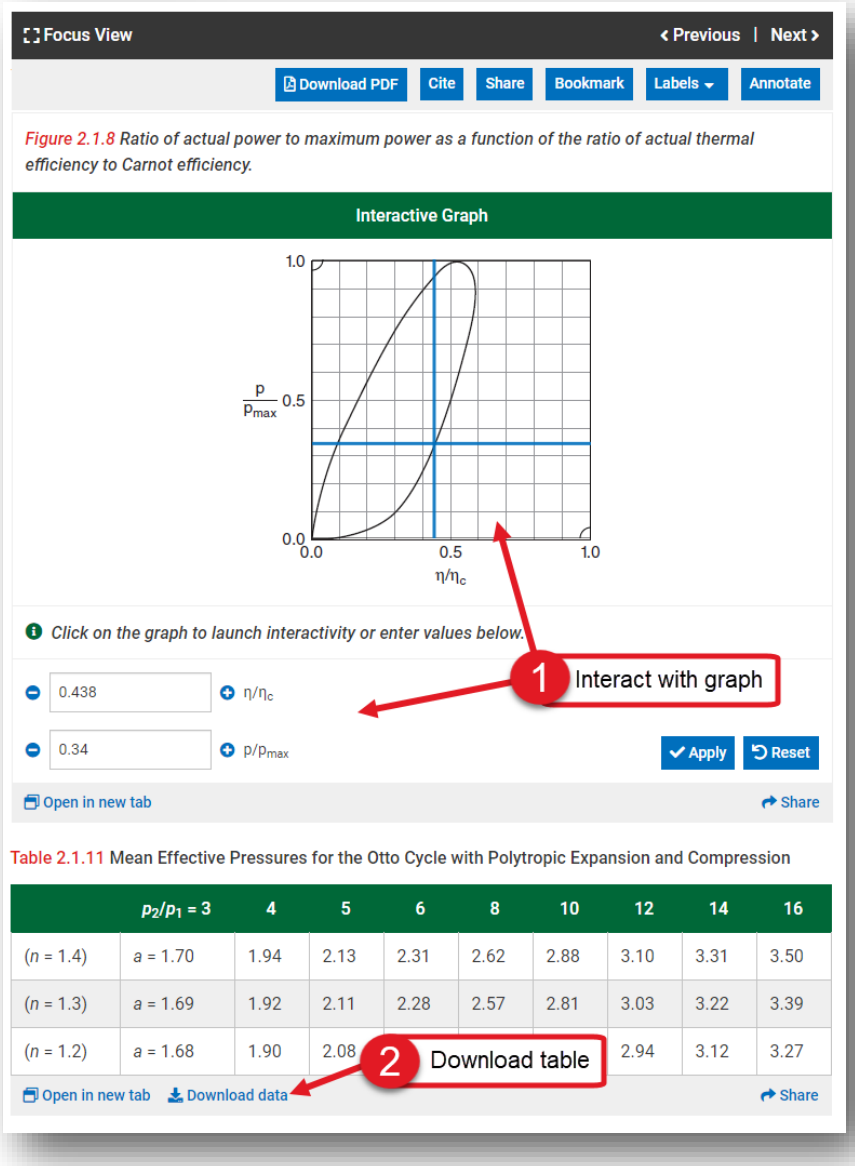
Downloadable Tables:

2. Download data from tables in an Excel spreadsheet for further data manipulation or analysis.

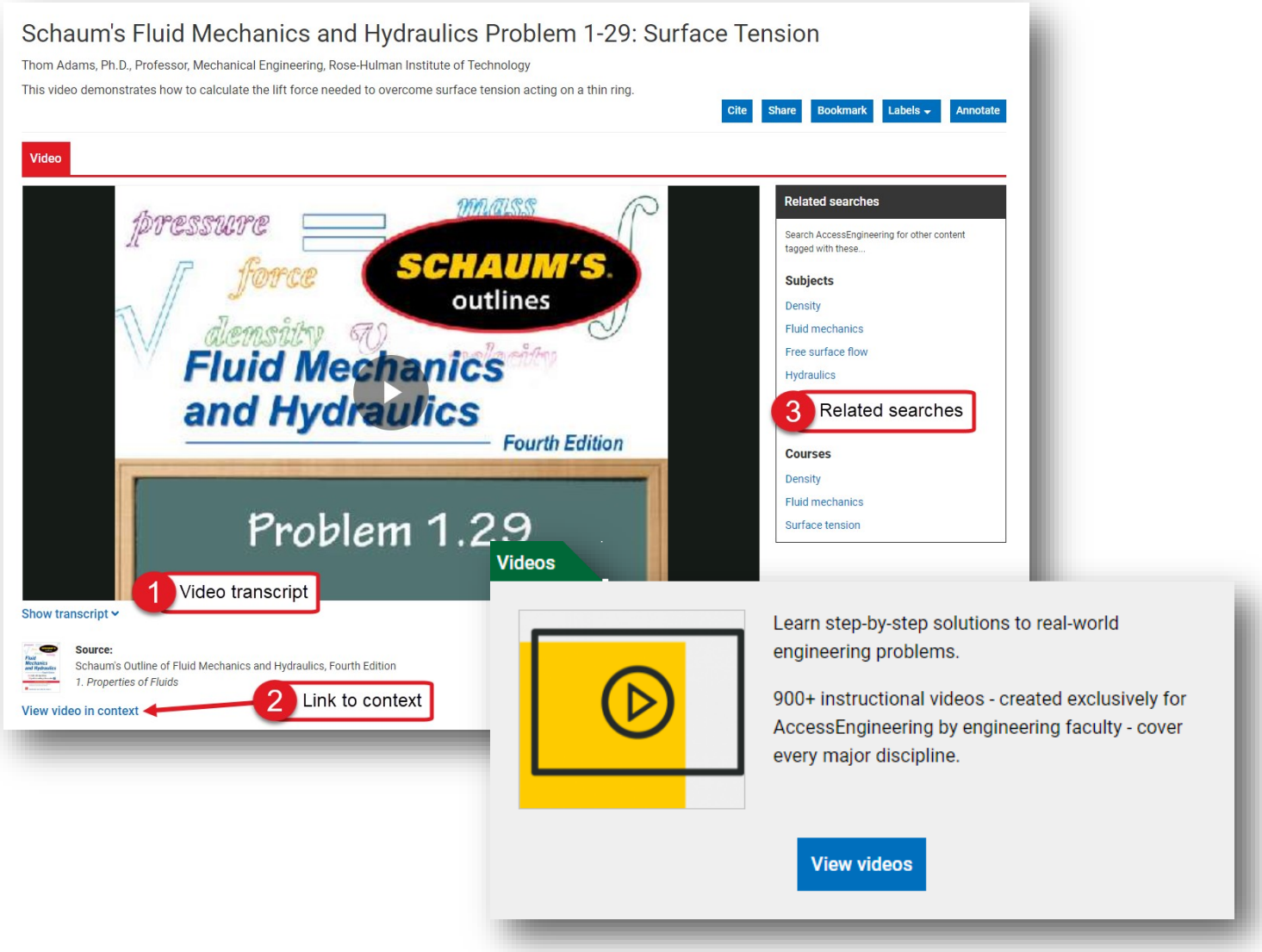
For both Graphs and Tables:

Graphs and tables can be viewed in context or in a separate browser tab. Click Share to generate a URL to link directly to a particular graph or table

The content tabs at the top of a book section provide a list of all graphs or tables in the current book section. From a list of search results, select the appropriate book component filter to view just graphs or tables available for that search.



Content: Videos



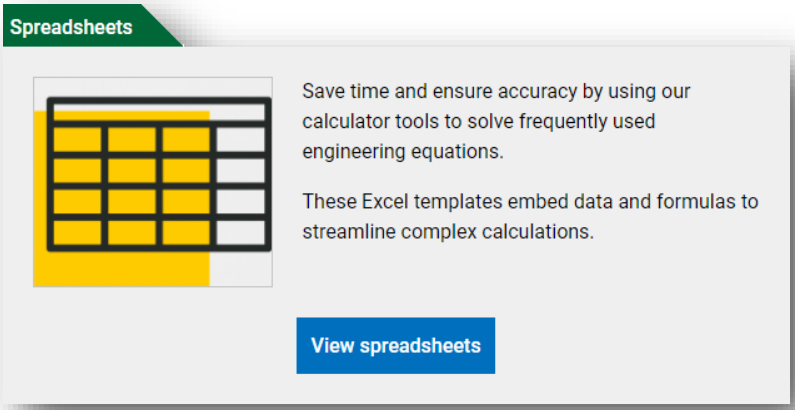
AccessEngineering has over 900 instructional videos created by engineering faculty that show step-by-step solutions to example problems.

A list of all videos can be found in the interactive tools section of the homepage, or by clicking the videos button at the top of the homepage. Videos are highlighted as a content type on the content tabs of search results and the top of book content pages.

Videos can be viewed in context from a book section, and they also have their own landing pages. Some features of the videos are shown in the image above:

1. All videos offer closed captioning and full transcripts
2. Links from the video landing page allow you to view the video in context
3. Each video is tagged with its own taxonomy terms which are shown as related search options

Content: Spreadsheets

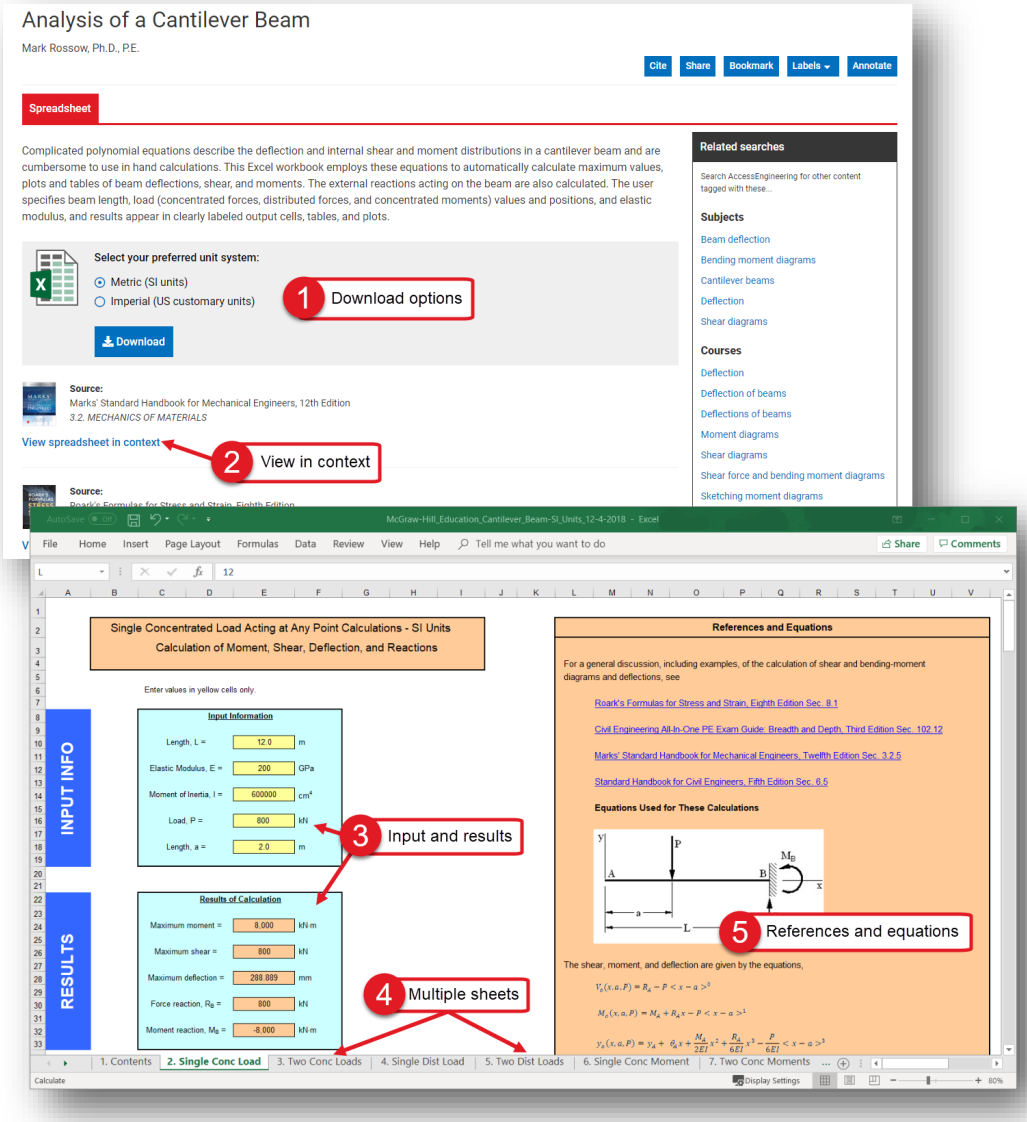


AccessEngineering's Excel spreadsheet calculators contain embedded data and formulas to streamline complex calculations.

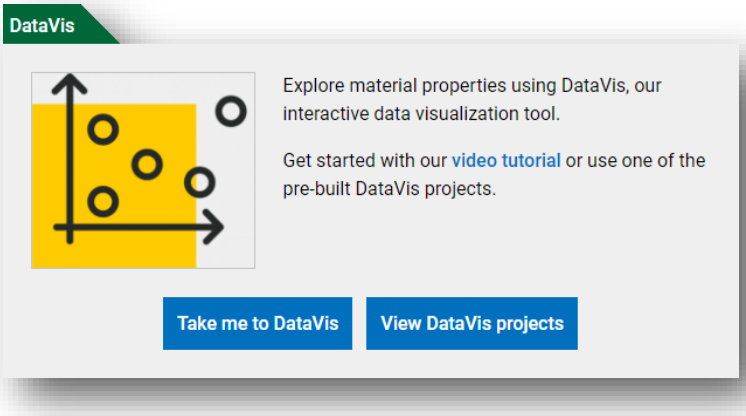
Spreadsheet calculators have their own landing page and taxonomy terms. A list of available spreadsheets can be found in the interactive tools section of the homepage.

Some features of AccessEngineering's spreadsheet calculators include:

1. Toggle between Metric and Imperial units before downloading
2. View spreadsheet in context
3. Utilize multiple sheets within each spreadsheet for variations of complex equations
4. Input values and see changes in results values and any associated diagrams
5. Find additional information on equations used and links to source titles



Content: DataVis



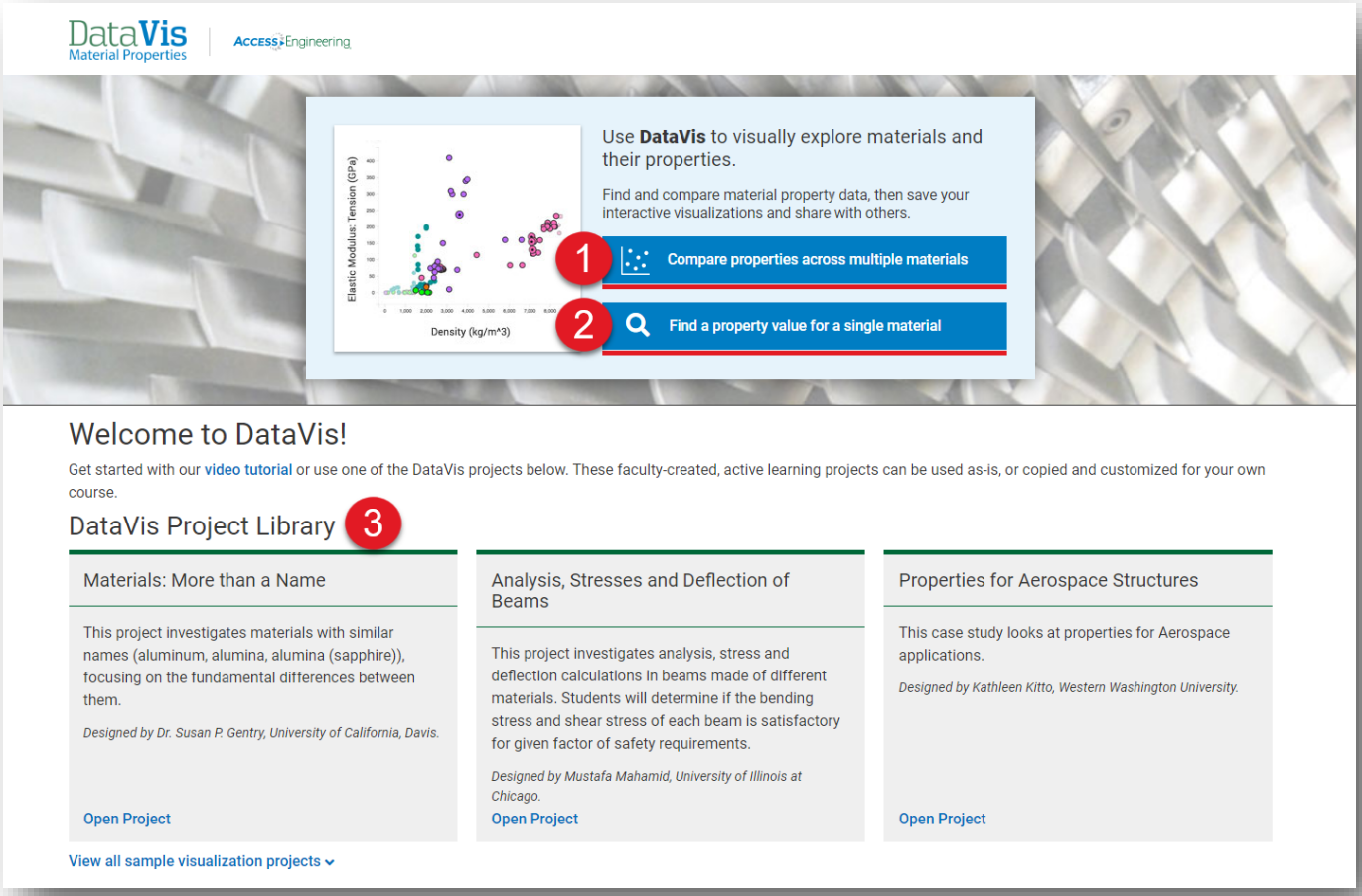
DataVis is AccessEngineering's powerful data search and visualization tool for material properties.

Designed by faculty, DataVis displays property data in interactive dot-plots and scatterplots across a carefully curated dataset of over 200 materials and 65 properties.

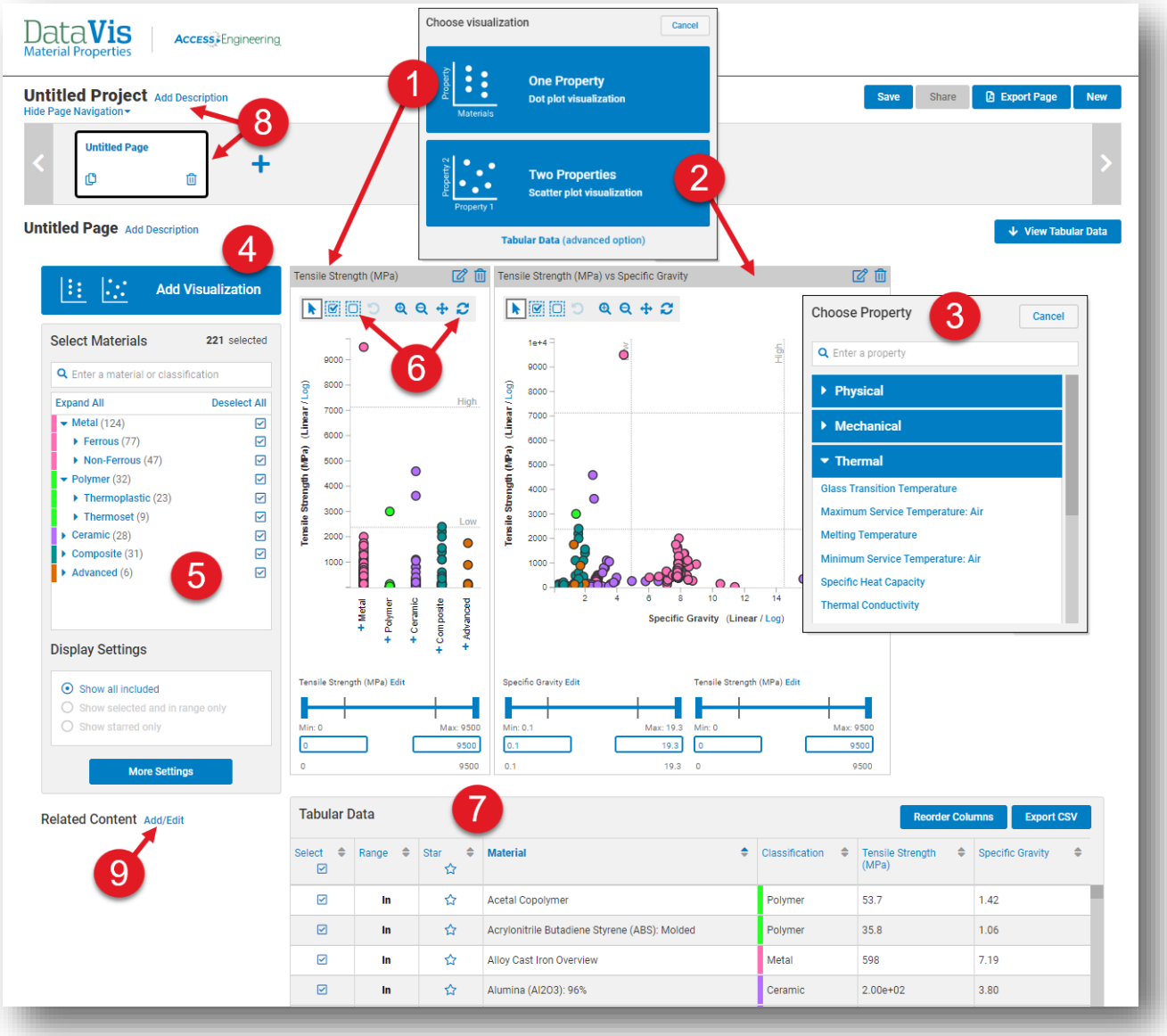
The Take me to DataVis button opens the DataVis homepage, shown below:

1. Compare properties across multiple materials in an interactive plot
2. Easily find a property value for a single material
3. Open a sample project from our library of pre-existing faculty created projects

The View DataVis projects button opens a list of available projects. DataVis projects also appear in search and browse results and can be found on the DataVis tab.



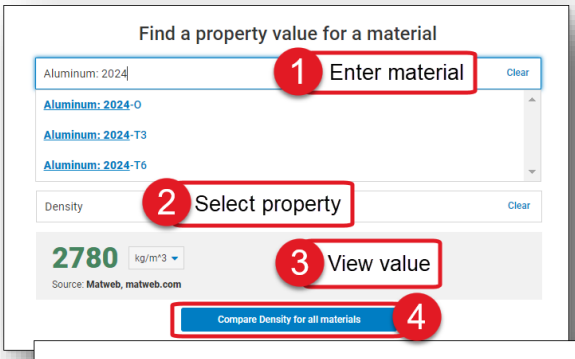
Content: DataVis



The image above shows the options available to compare properties:

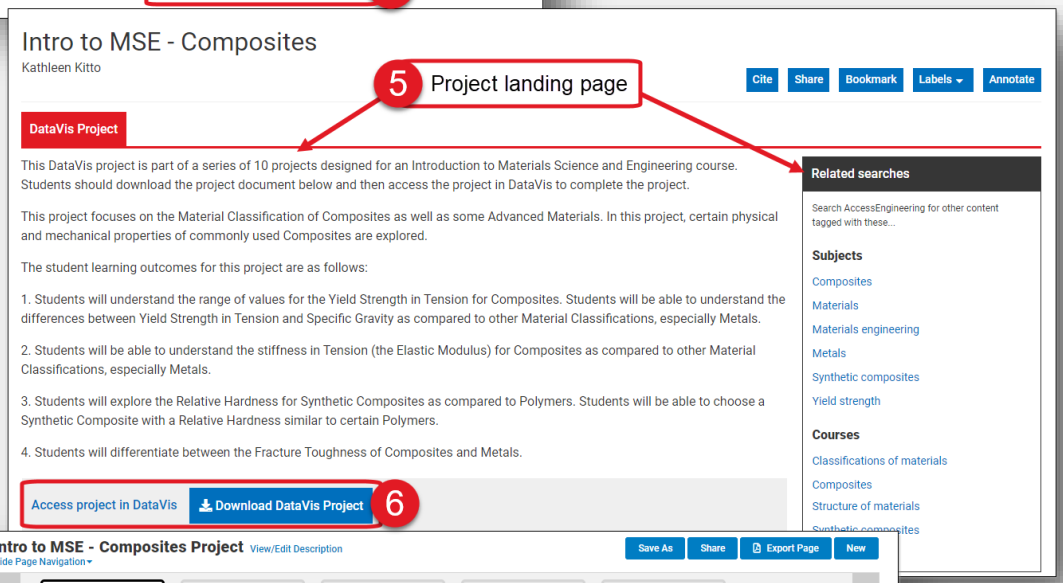
1. Select the one property option to view a dot-plot
2. Select two properties to view a scatterplot
3. Choose one or two properties from the list provided or use the search bar
4. Add more visualizations of either type to your workspace
5. Select specific materials from the five classifications or search for a specific material
6. Select materials in a certain range using the plot toolbar at the top or the sliding scale and min/max input at the bottom
7. View, reorder, or export tabular data on the materials and properties selected
8. Add descriptions and additional pages to create a project to save or share
9. Add related content, from AccessEngineering or elsewhere, for reference or further reading

Content: DataVis



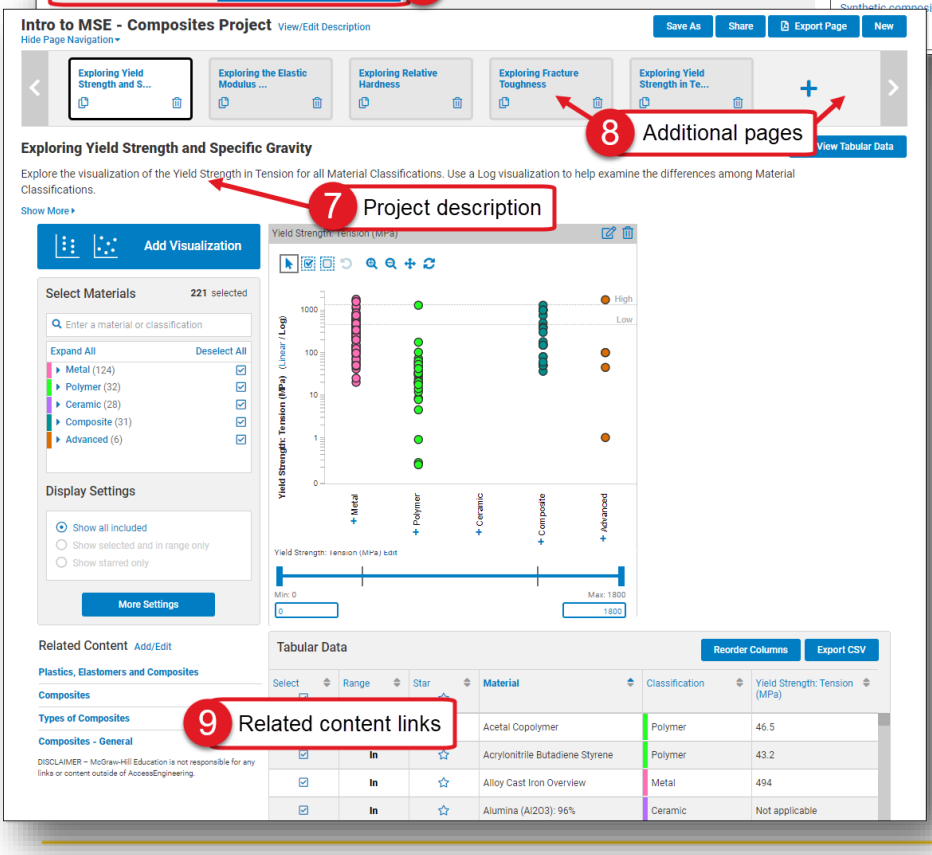
To find a property value for a material, click the option on the DataVis homepage.

1. Typeahead suggests specific materials
2. Select the desired property
3. See the associated value, with source, or change the units
4. Click compare to bring up the interactive dot-plot for the selected property



Pre-existing DataVis project were created by faculty to demonstrate specific concepts. Select from the library of projects on the DataVis homepage or use the DataVis tab in search results to view relevant projects.

All content in the projects can be edited to create your own version, which can be saved to your projects and shared.

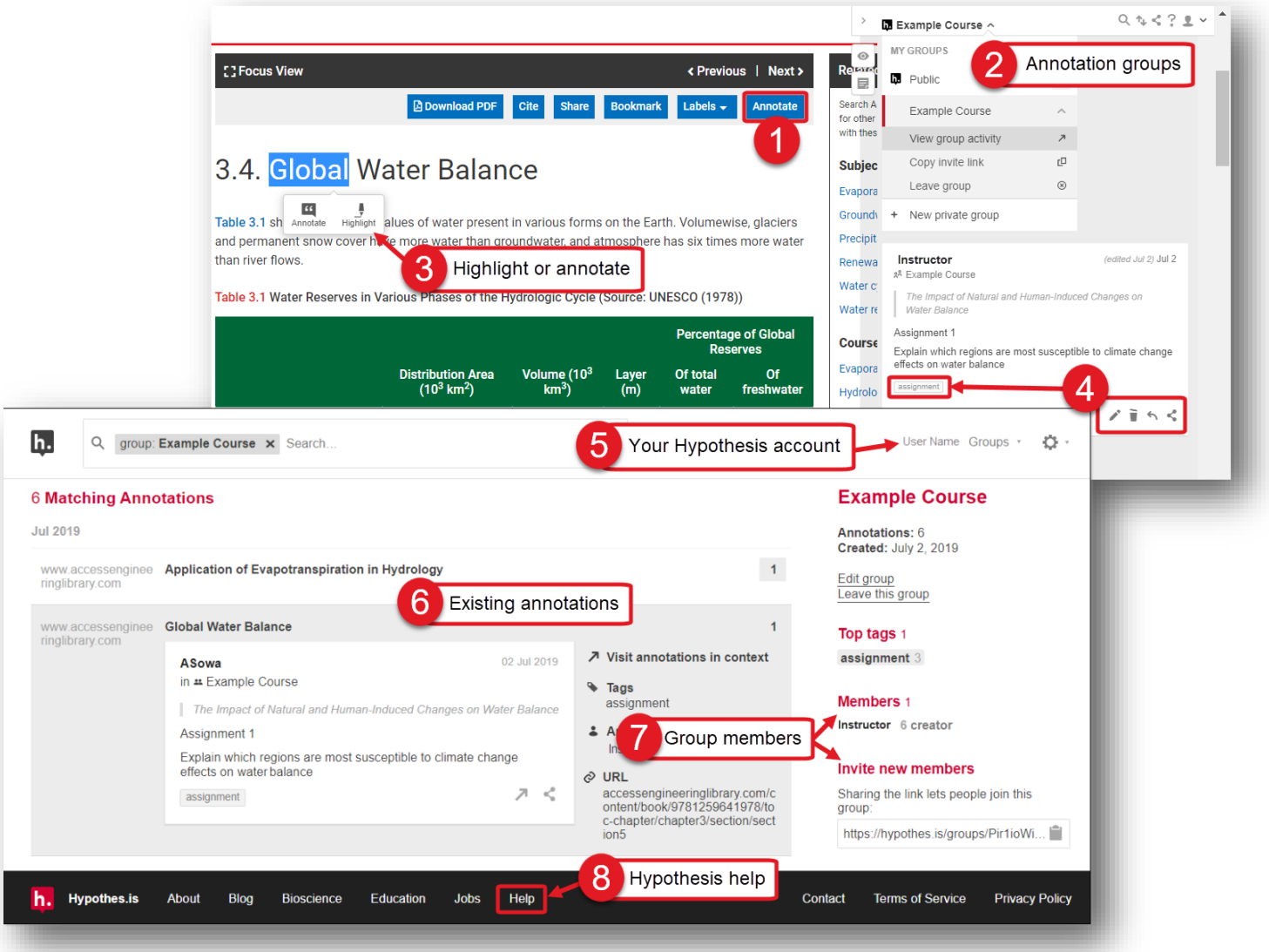


To the left is an example of a pre-existing project:

5. Projects have their own landing page, with a description and related searches
6. Access the project in DataVis or download as a Word file
7. In DataVis, each project page has a description providing context for the visualizations
8. Projects contain multiple pages to walk through complex concepts
9. Related content links to sources or additional context for the project

Annotations

For annotating content on AccessEngineering, we've teamed up with Hypothesis, an open source annotation tool that can be used across any digital resource. Create a free Hypothesis account to save and access annotations in AccessEngineering and across any other websites you use.



To annotate in AccessEngineering:

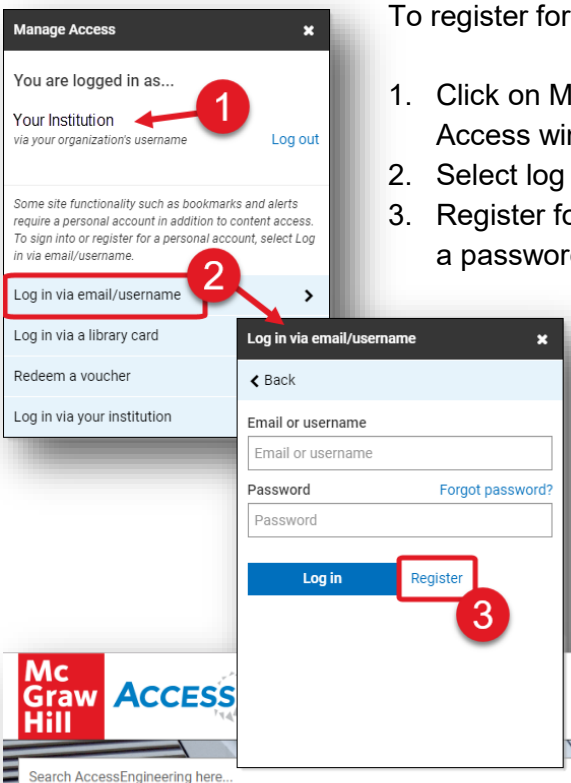
1. Click the Annotate button from any content page to open the Hypothesis toolbar
2. Choose a group to share annotations with or save to your personal account
3. Select text quickly highlight or add an annotation
4. Categorize your annotations with tags, edit or delete your annotations, or reply to annotations in a group

To manage annotations in your Hypothesis account:

5. Click on your account to see all your annotations across different resources or across different groups
6. View annotation content and link to visit in context
7. Display current group members or invite new members with the shareable link
8. Get additional help on using Hypothesis from their FAQs and tutorials

Personal Account

AccessEngineering has several features which are available only after signing up for a free personal account. Personal accounts are an optional feature and are not required to view or use any of the content on the site. Personal accounts do not replace authentication via your institution; you must first be logged in through your institution to use AccessEngineering.

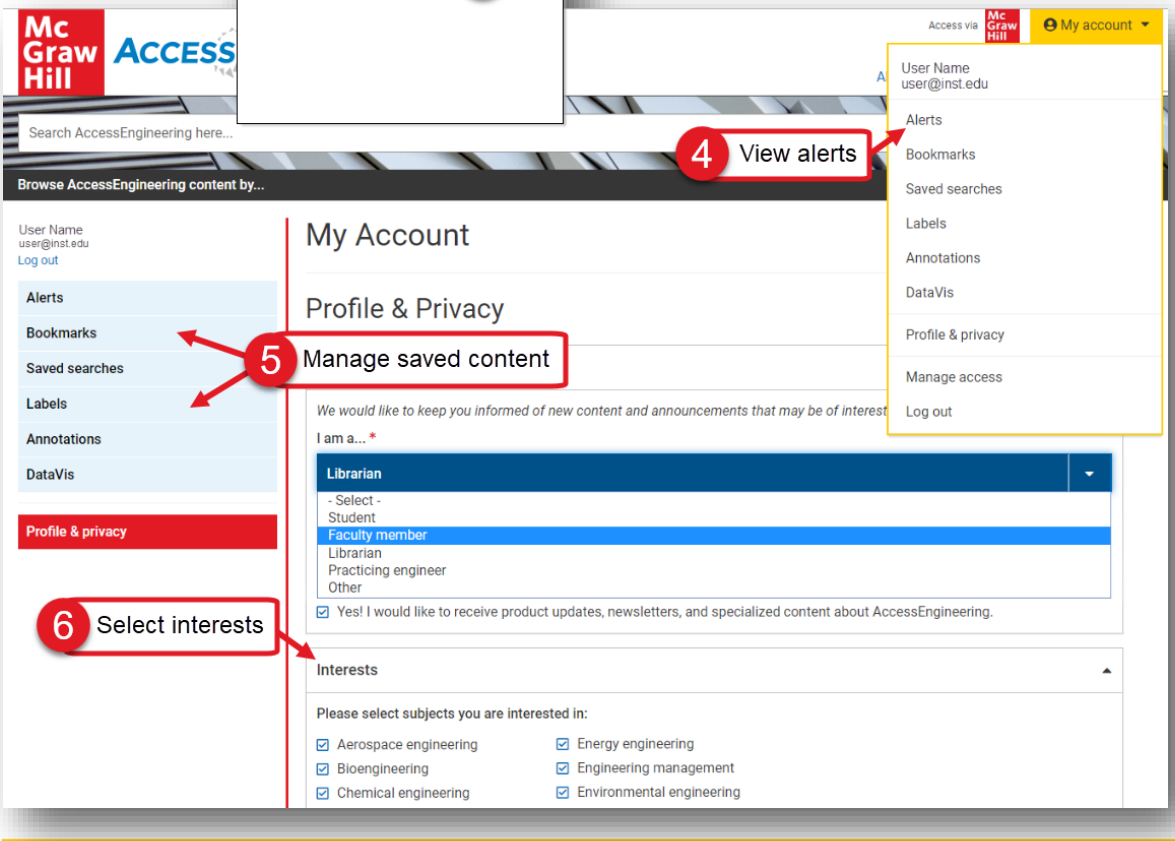


To register for a free personal account:

1. Click on My Account in yellow at the top of any page to open the Manage Access window, where you will see your subscribing organization information
2. Select log in via email/username
3. Register for an account by entering your name, email address, and creating a password

Personal account features include:

4. Create alerts for saved searches, new content or spreadsheet updates
5. Add bookmarks or labels to content to organize and easily retrieve content
6. Select your interests to receive updates when new content is added in those areas

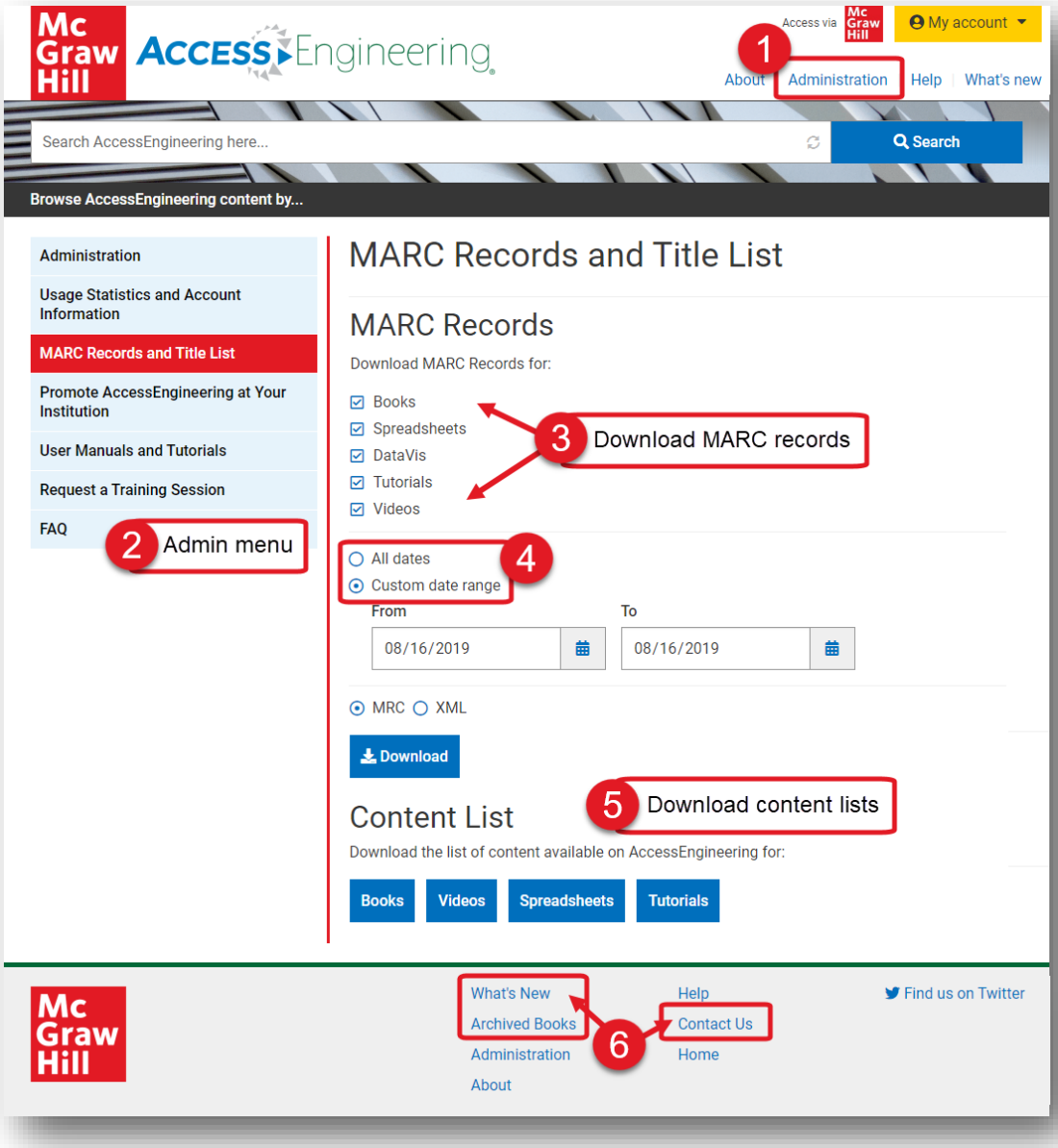


Administration

The Administration portal contains a wealth of resources for using and promoting AccessEngineering at your institution.

Features of the Administration portal are shown here:

1. Access the portal from any page using the header link
2. Use the menu to find information on usage statistics, get promotional materials and user manuals, or attend an upcoming training session. Custom training is also available by request.
3. Download MARC records for all content types
4. Select a custom date range for your MARC download
5. View content lists for all content types on the site
6. See additional information in the footer, including links to new books, archived books, and a contact form



Need additional assistance?

Contact McGraw-Hill Education's User Services team
at userservices@mheducation.com
for questions on using the platform,
requests for additional training, or
help with promoting usage at your institution.