Platform User Guide

AccessEngineering:

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

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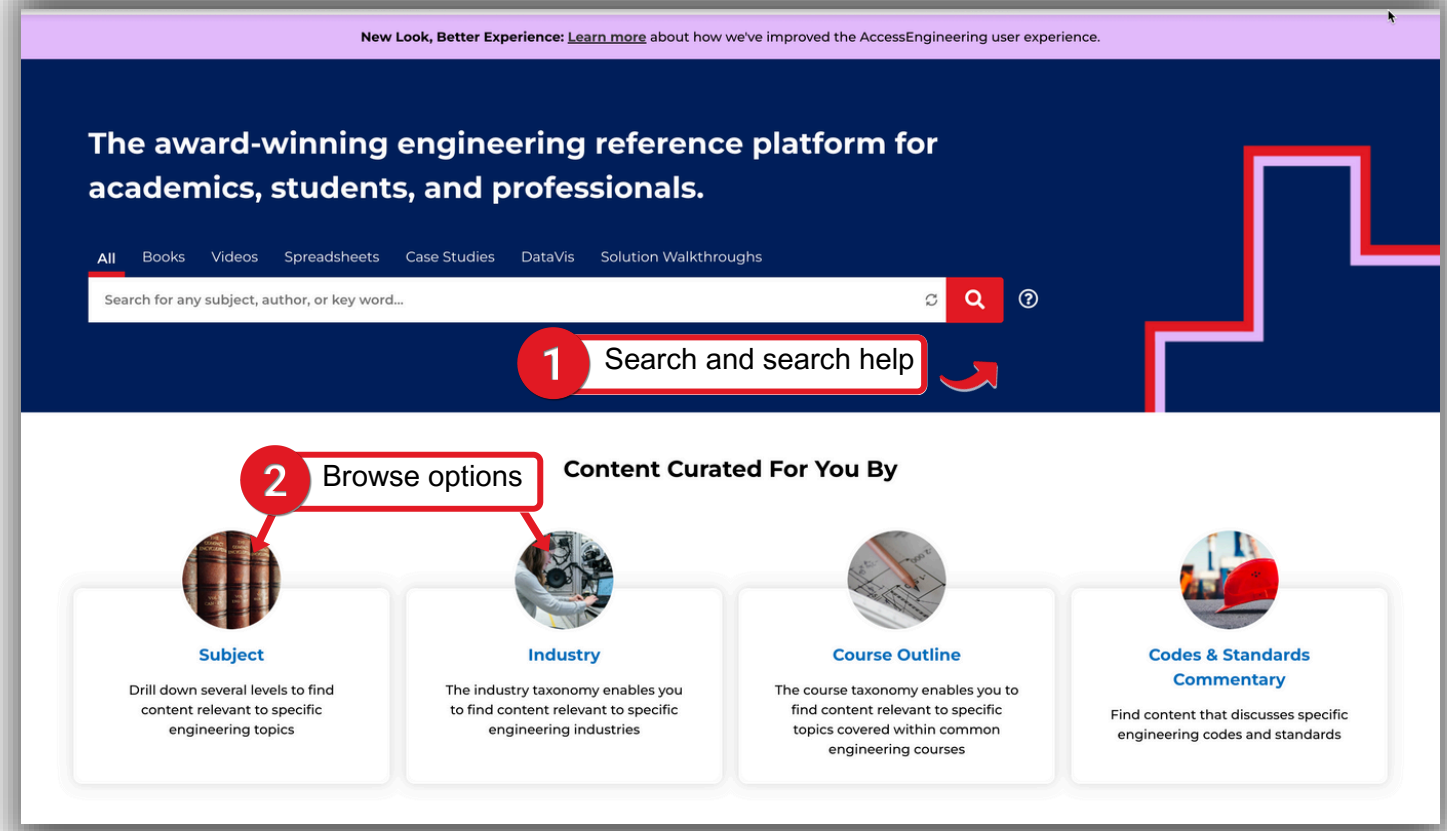
Homepage

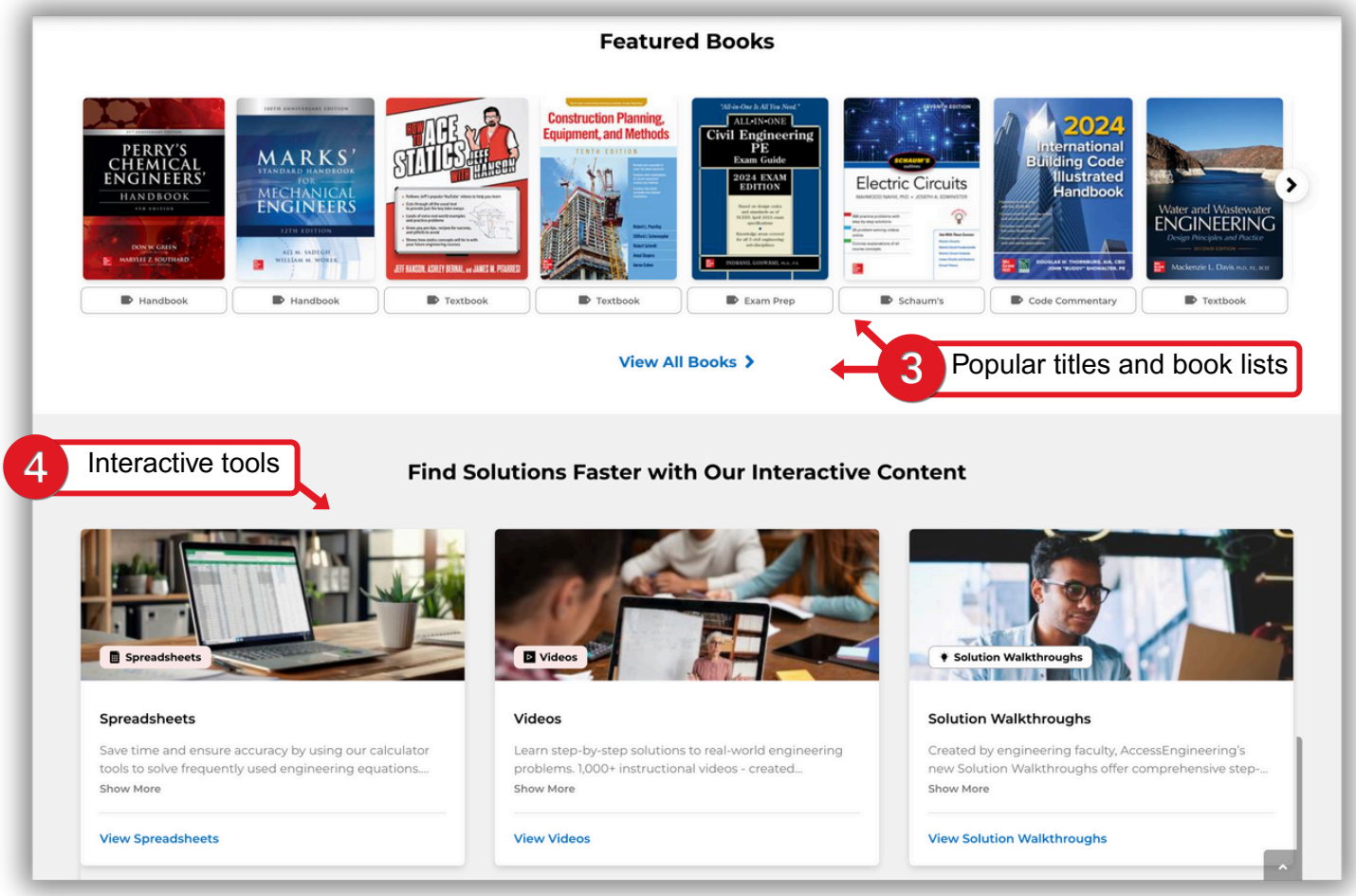
The AccessEngineering homepage is designed to help users understand what AccessEngineering is, what content it offers, and to allow them to start exploring the site.

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.



From the homepage, 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** from the rotator or view lists of titles by book type.
4. **Explore interactive tools** such as the DataVis material properties tool, instructional videos, solution walkthroughs, spreadsheet calculators, case studies, and tutorials.



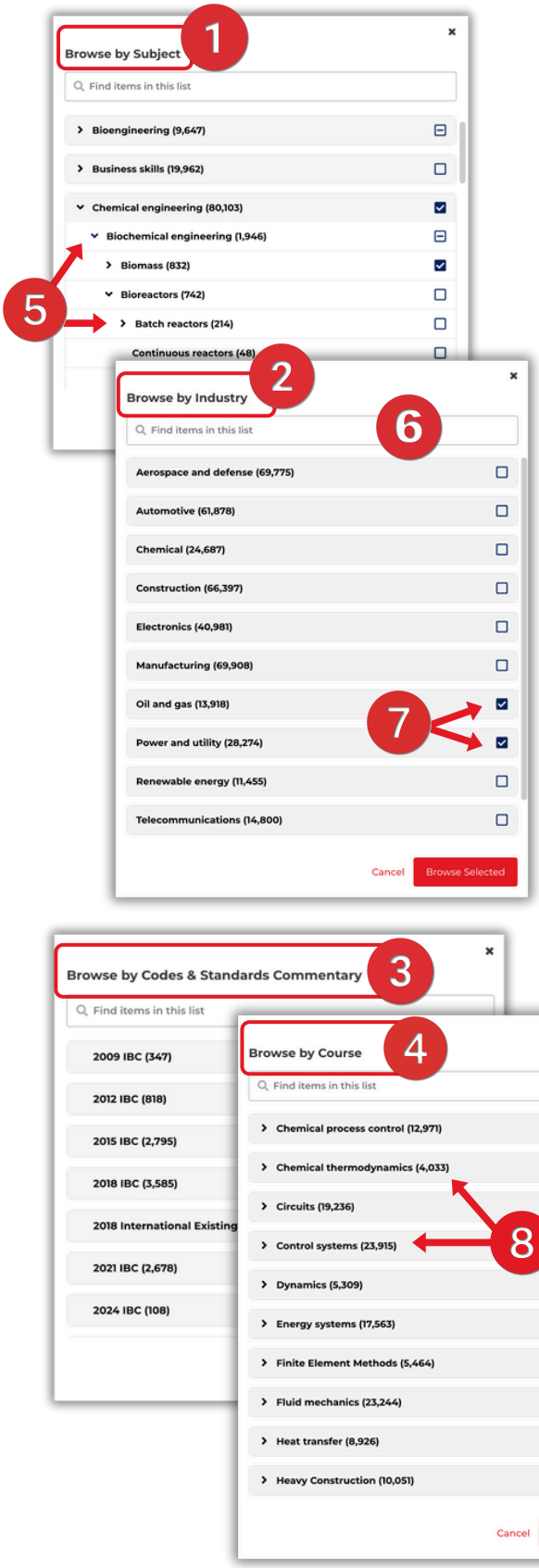
New Look, Better Experience:

Our latest redesign features a modern look and feel, a more efficient search experience, and easy in-book exploring with the updated chapter tool bar. Learn more about how we've improved the AccessEngineering user experience.

From the Top of the Homepage:

5. Learn more about AccessEngineering, access the Administration Resource Center, view Help and FAQs, and discover What's New.
6. Sign in to your **Personal Account** (see more on page 17 - *Personal Account*)

Browsing



Dynamic browsing allows users to explore AccessEngineering's rich content by choosing relevant terms from our subject, industry, course or codes & standards commentary 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 **Industry**

   See content tagged to 11 interdisciplinary industries
3. Browse by **Codes & Standards Commentary**
4. Browse by **Course**

   Choose terms from course outlines 5 levels deep for 33 common engineering courses, arranged to match a typical course syllabus

To navigate the browse boxes:

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

A Note on Taxonomies:

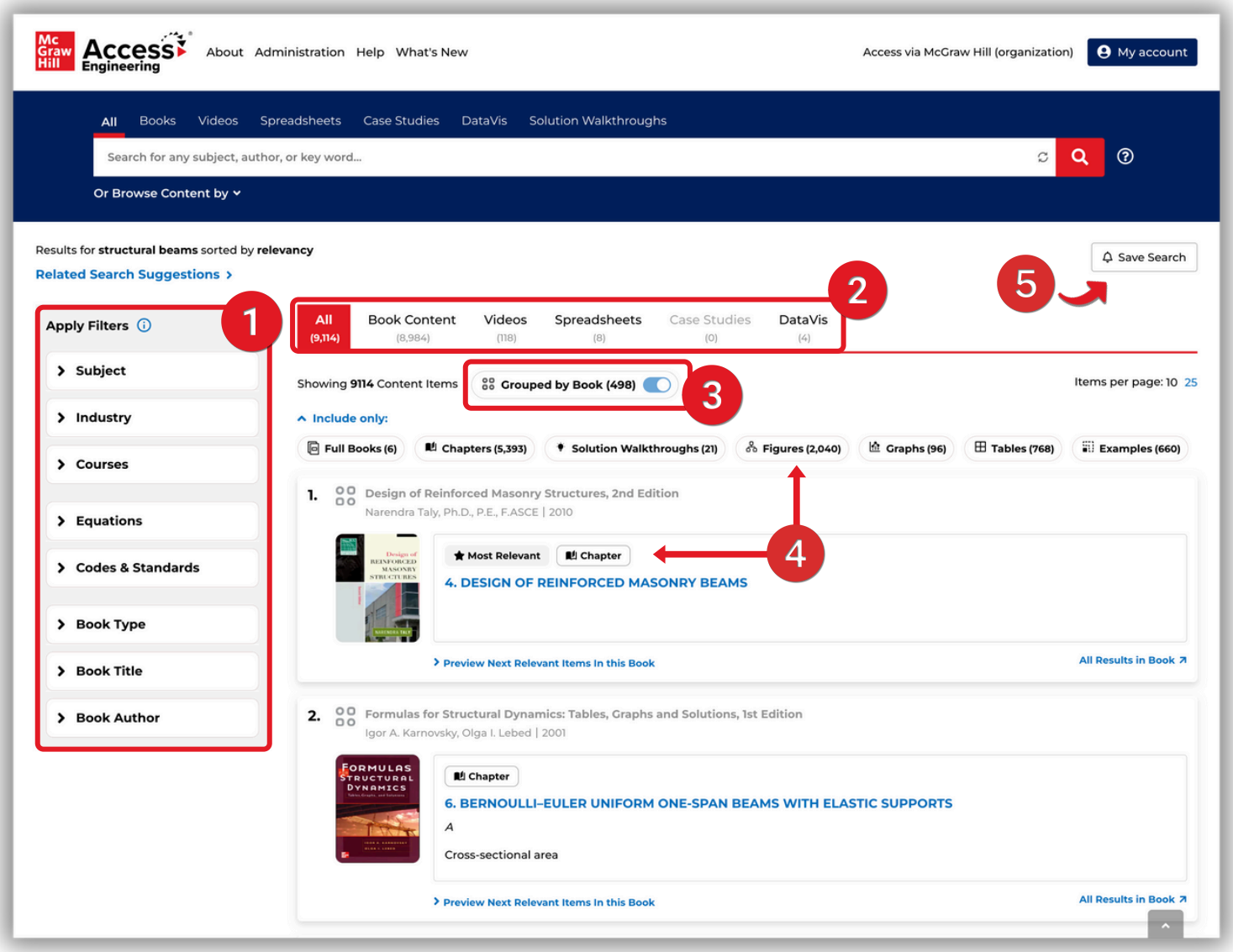
AccessEngineering's taxonomies were developed by Access Innovations, a company whose sole focus is taxonomy creation and implementation. Guidance and testing throughout the process was done by a team of 15 subject matter experts spanning every engineering discipline. Content was tagged to taxonomy terms us- ing a semi-automated approach where taxonomy spe- cialists 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

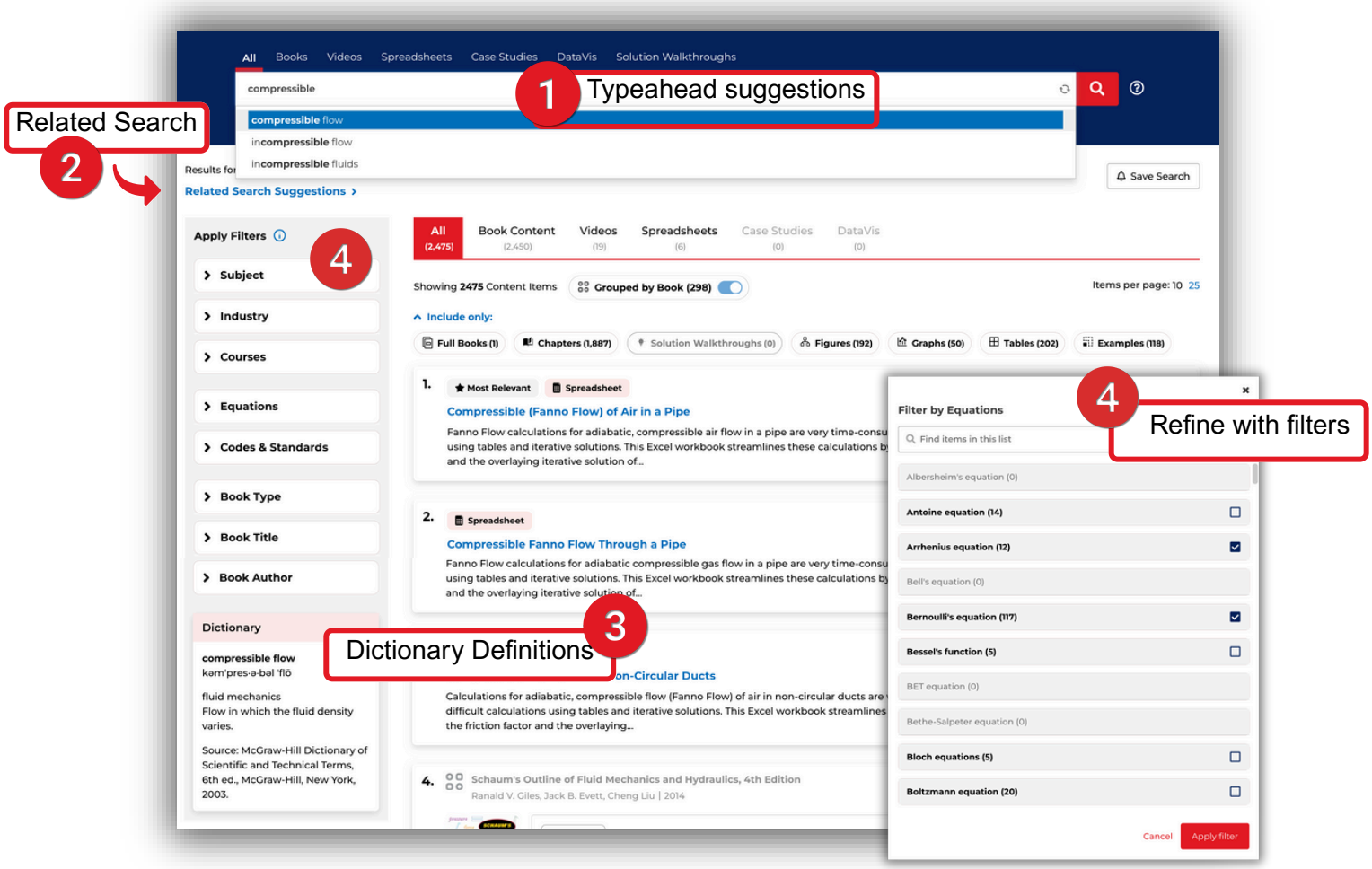
Results from browsing include content tagged to the term or terms selected in the browse window. Browsing a broader parent term will show results tagged to that term as well as results tagged to any child terms in the taxonomy. *The results are ordered by taxonomy weights so the most relevant results 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. Filter by content type using the **content tabs** across the top
3. Results are now Grouped by Book - toggle it off if desired
4. Quickly identify the **Book Content** types of the results with the **content tags**
5. **Save Search** for later browsing



Searching & Filtering



The general search bar is available at the top of all AccessEngineering pages.

Some special features of searching and search results include:

1. Typeahead suggestions while you type for matching taxonomy terms
2. Related search suggestions 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 available on the left side of the results page and include options to filter by:

- Additional taxonomy terms (subject, industry, course)
- Book Type (handbook, textbook, test prep, etc.) and Book Title and Book Author
- Book Component (chapters, figures, solution walkthroughs, tables, example problems)
- Equations and Codes & Standards commentary

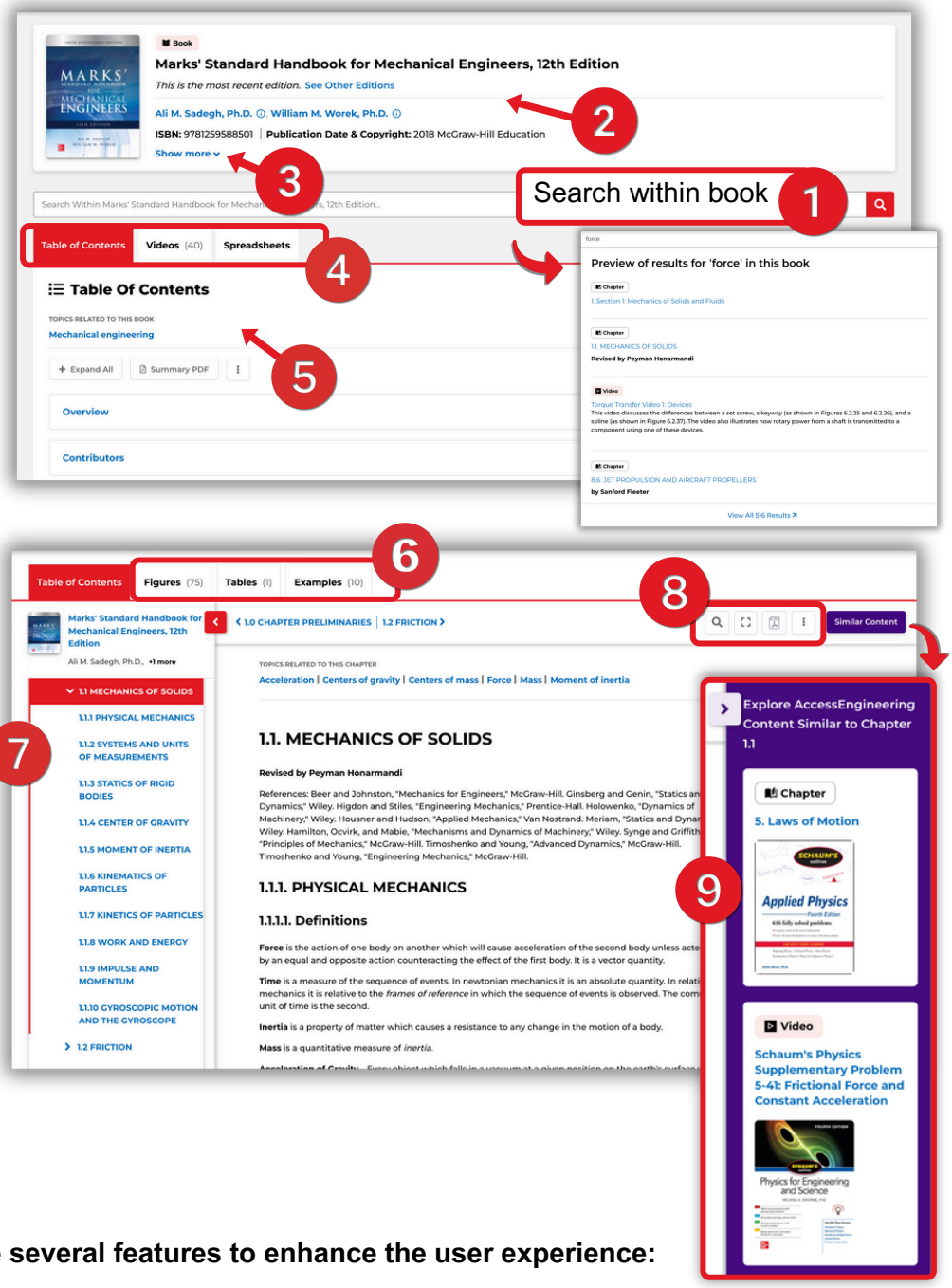
*The equation taxonomy used to tag common engineering equations takes into account synonyms and various ways the equation might be listed in the text (***ex: Manning equation vs. Manning formula***)

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. ***NEW!** Search within book now allows you to **preview results**
2. See **edition information** and links to older or newer editions
3. See **additional information** on this title
4. View a list of all **videos** and **spreadsheets** 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 to enhance the user experience:

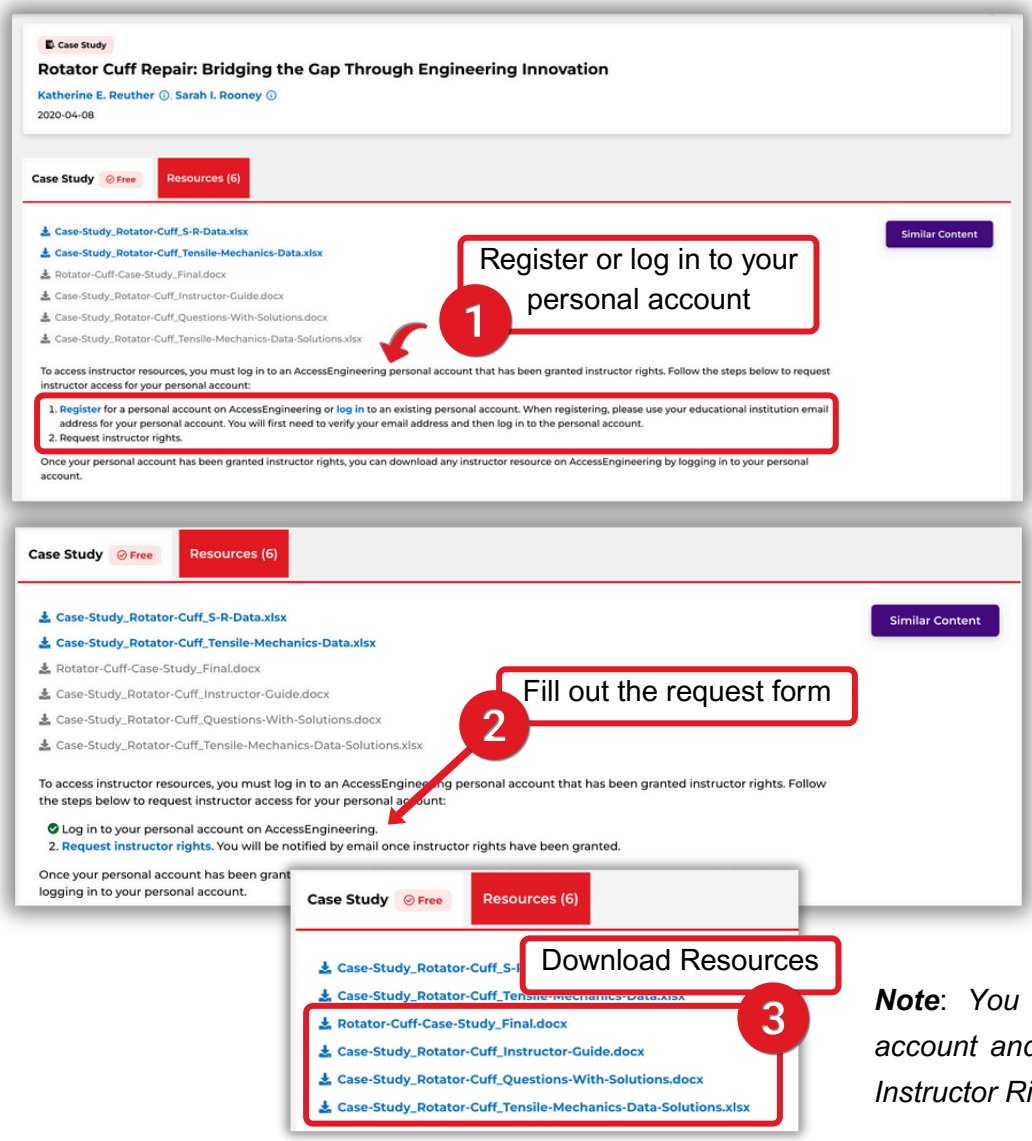
6. **Content tabs** highlight specific content types available in each section, including figures, graphs, tables, and example problems
7. **Persistent table of contents** remains visible and navigable while viewing book sections
8. In our **content Toolbar,** Reader view removes visual clutter and expands the text content, and additional tools allow users to download a PDF, get a citation or shareable link, and bookmark or label content
9. With the **Similar Content panel,** explore more content in AccessEngineering. Collapse panel if desired.

Content: Instructor Resources

Instructor and student supplemental textbook resources are available for some titles on AccessEngineering. These supplemental materials are available directly from a textbook, Case Study, or DataVis Project landing page, under the **Resources tab**, with links to download available content. ***Instructor resources include PowerPoint slides, solutions manuals, lab instructions, and additional material.***

Several of these resources (such as solutions manuals) are locked and access is available only upon verification of instructor status. ***Instructions for requesting access are included on the Resources tab, and the first step is creating or logging in to an AccessEngineering personal account (see page 16 for information about Personal Accounts).*** Once your personal account has been granted instructor rights, just log in and you will have access to all instructor resources available on the site.

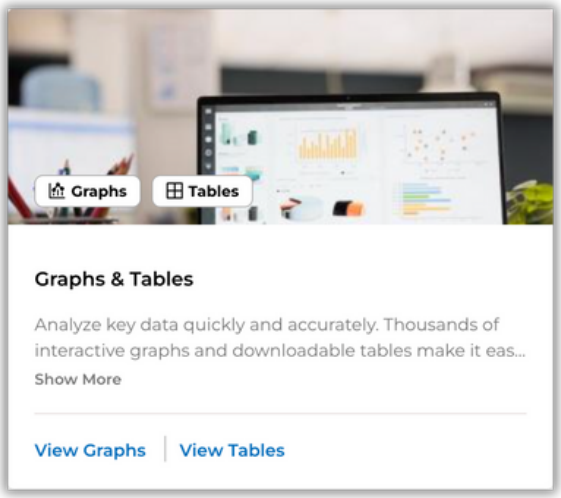
Requesting Instructor Access:



1. **Register** for a personal account or log in, using the My Account button in the site header or the links on the Resources tab
2. Once you are logged in, return to the **Resources tab** and fill out the linked Instructor Rights request form
3. You will be notified via email if **Instructor Rights** have been granted– you can then return to the Resources tab of any content item and download available instructor resources

Note: *You may need to log out of your account and log back in o get access after Instructor Rights have been granted.*

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.

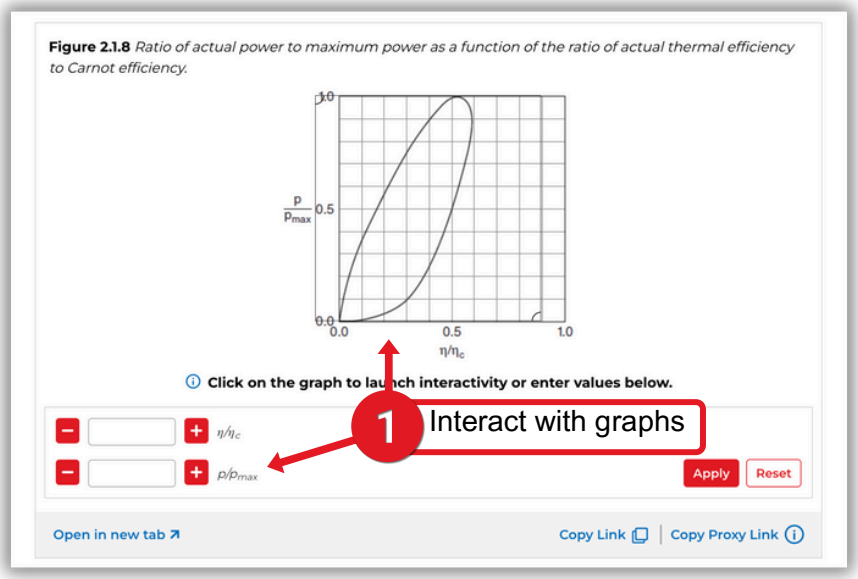
Downloadable Tables:

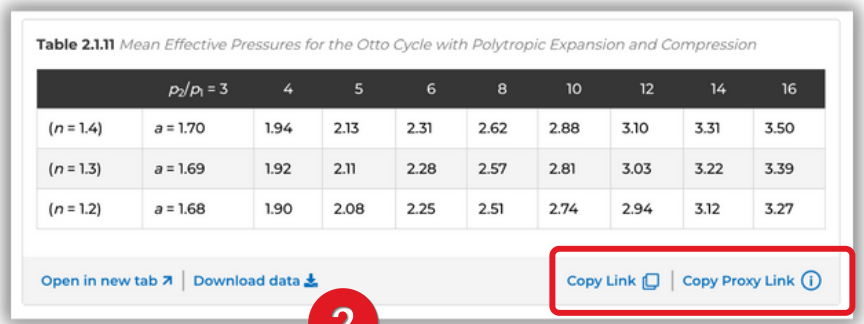
2. Download data from tables in an Excel spreadsheet for further data manipulation or analysis.

For both Graphs and Tables:

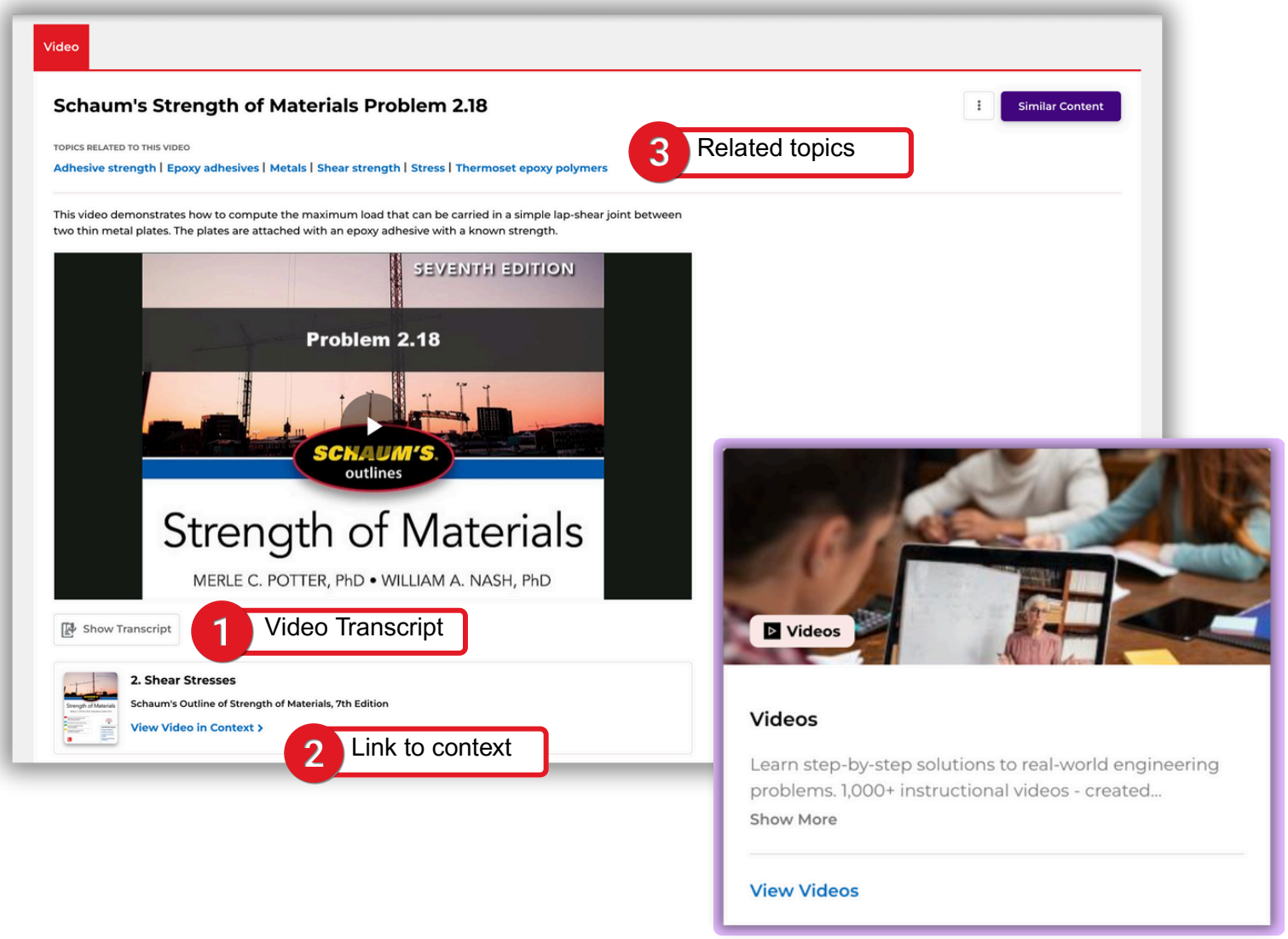
Graphs and tables can be viewed in context or in a separate browser tab. Click **Copy Link** to generate a URL to link directly to a particular graph or table.

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 Content filter** to view just graphs or tables available for that search.





Content: Videos



AccessEngineering has over 1,000 instructional videos created by engineering faculty that show step-by- step solutions to example problems.

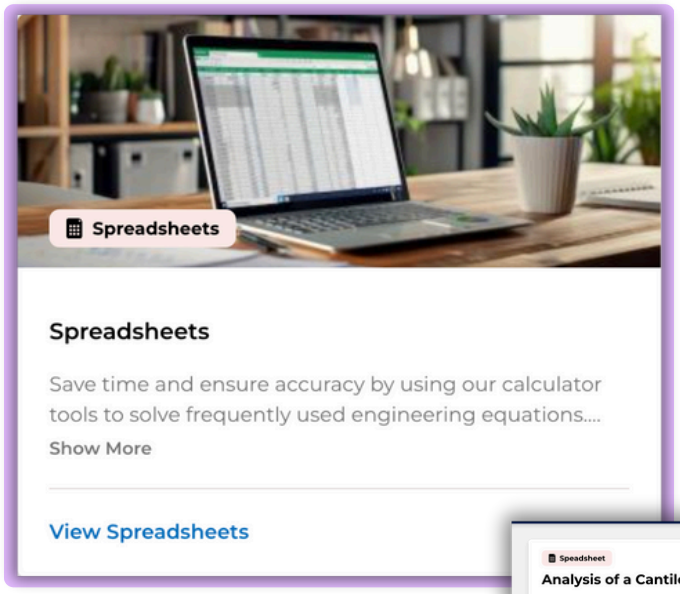
A list of all videos can be found in the **interactive tools** section of the homepage. Videos are highlighted as a content type on the content tabs of search results and the top of book content pages.

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 topics

Content: Spreadsheets

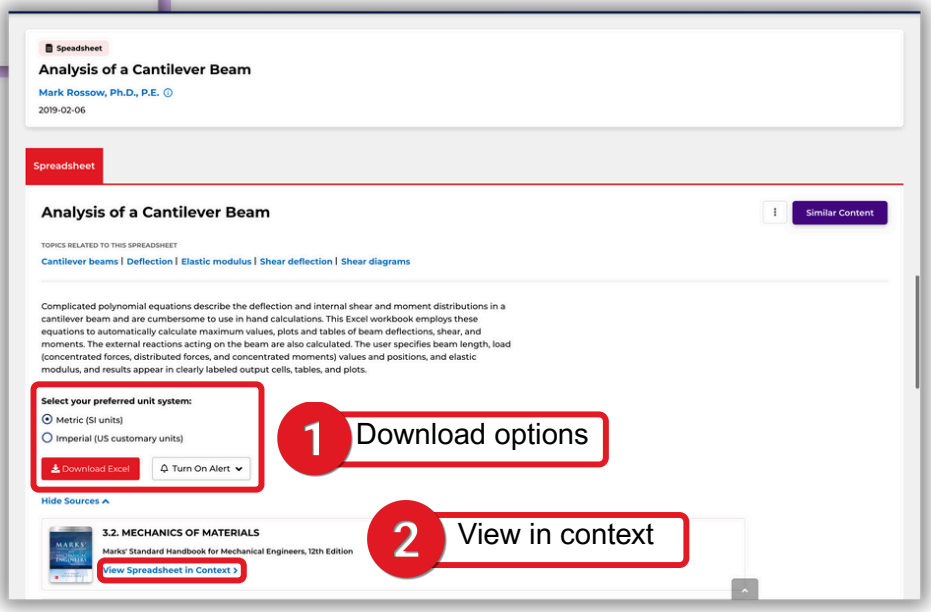


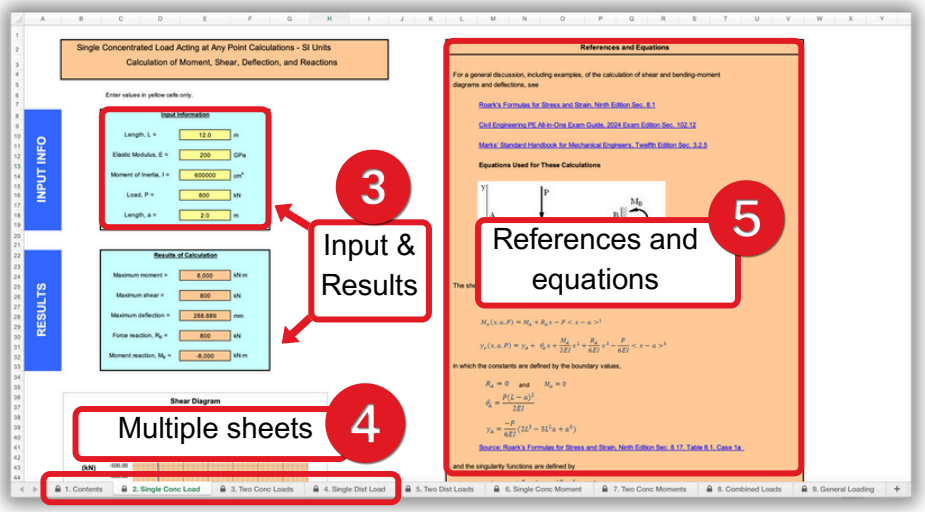
AccessEngineering's Excel **spreadsheet calculators** contain embedded data and formulas to streamline complex calculations.

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.

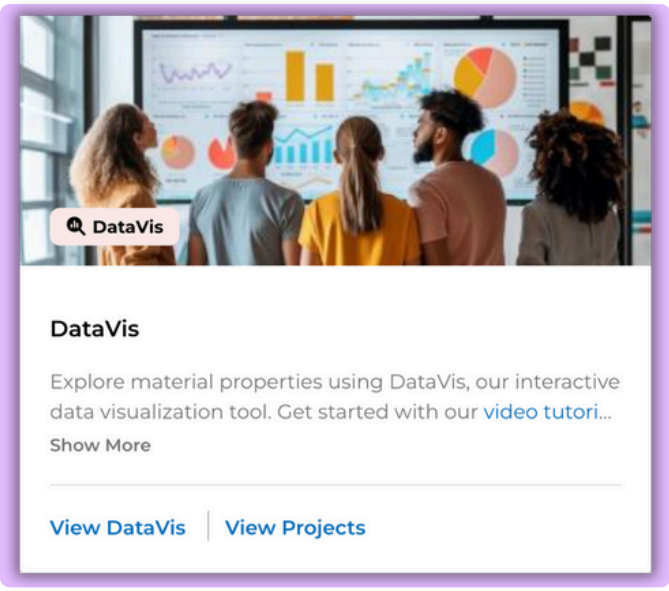
Some features of AccessEngineering's spreadsheet calculators include:

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





Content: DataVis



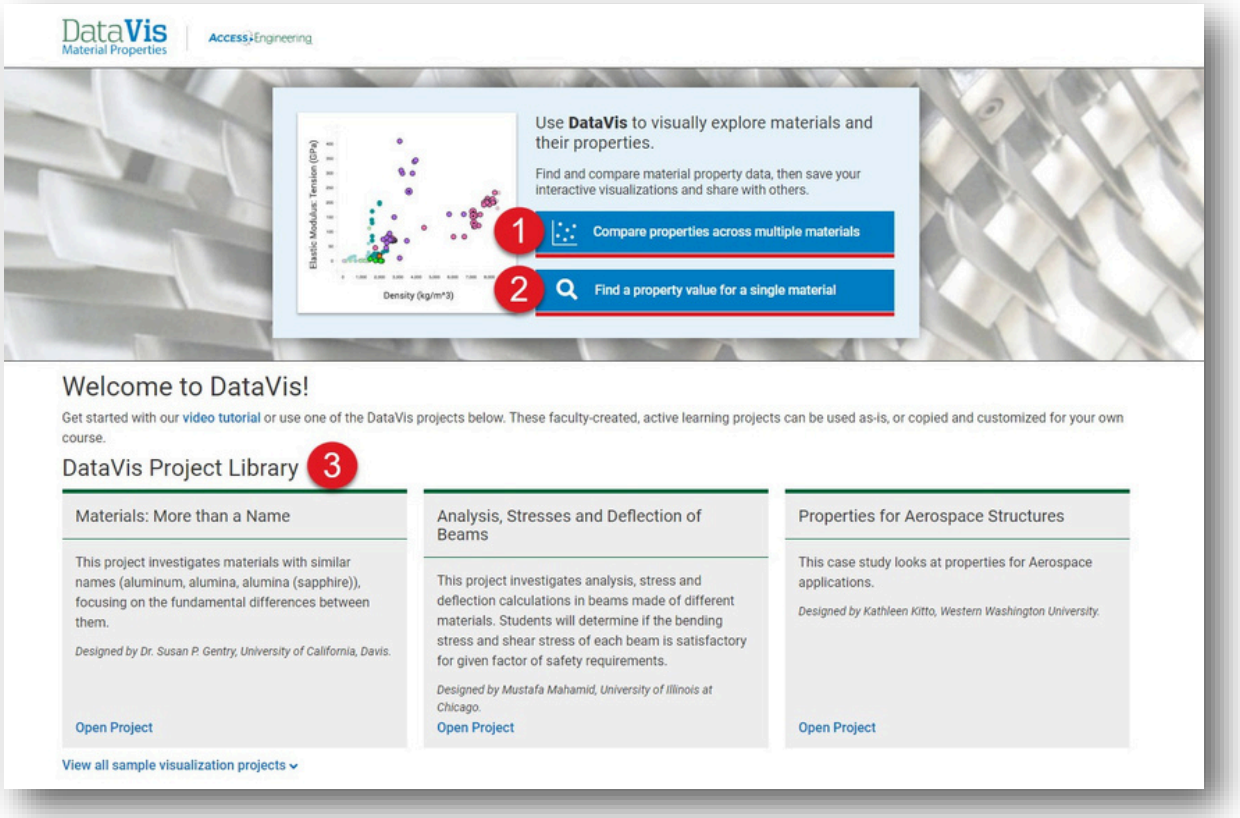
DataVis is AccessEngineering's powerful **data search and visualization tool** for material properties.

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.

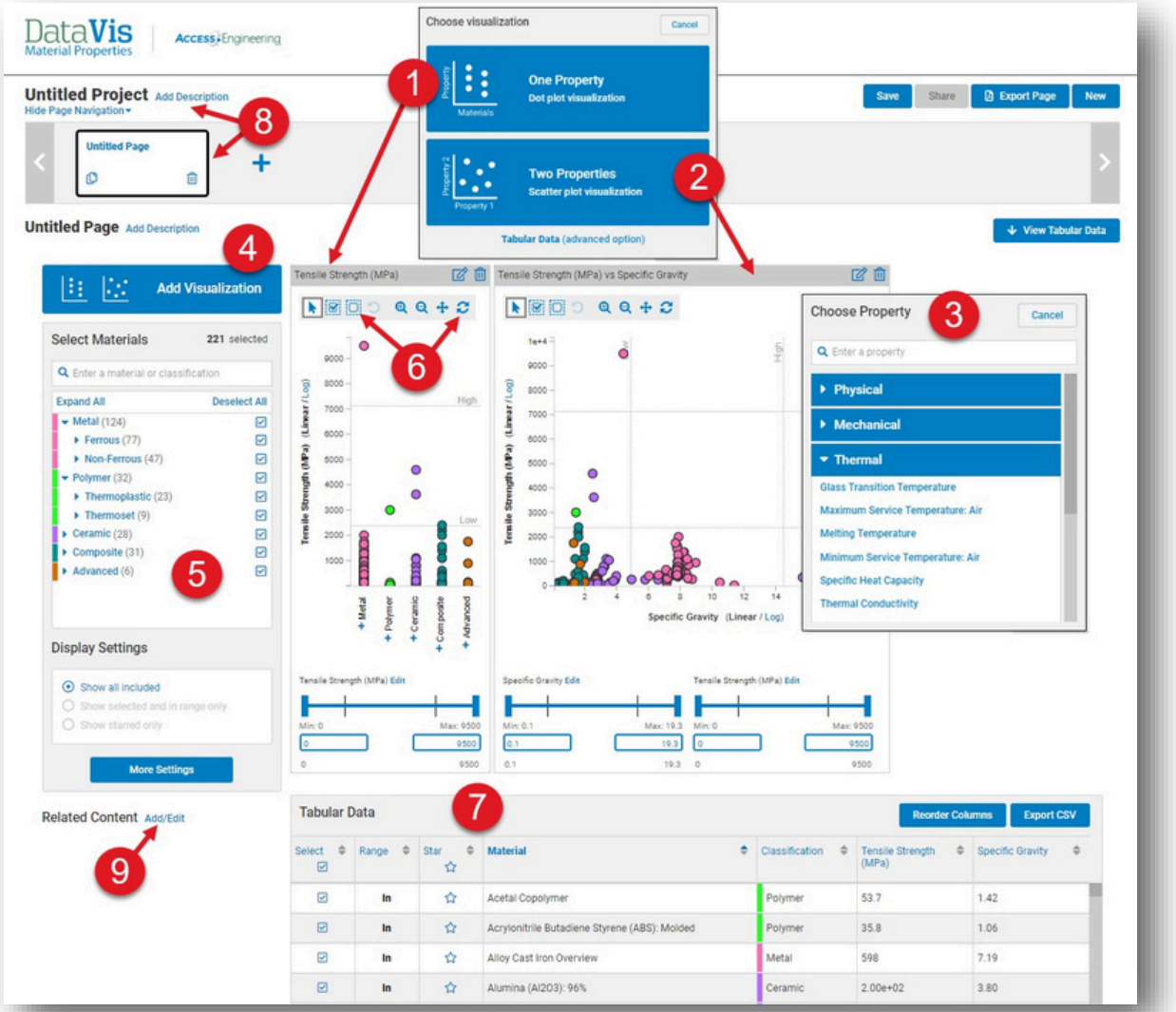
The **View DataVis** projects button opens a list of available projects. DataVis projects also appear in search and browse results and can be found on the DataVis tab.

The View 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



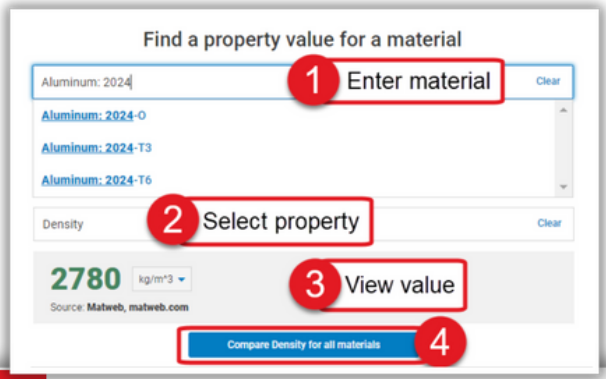
Content: DataVis - Compare Properties



A walkthrough of options available to compare properties:

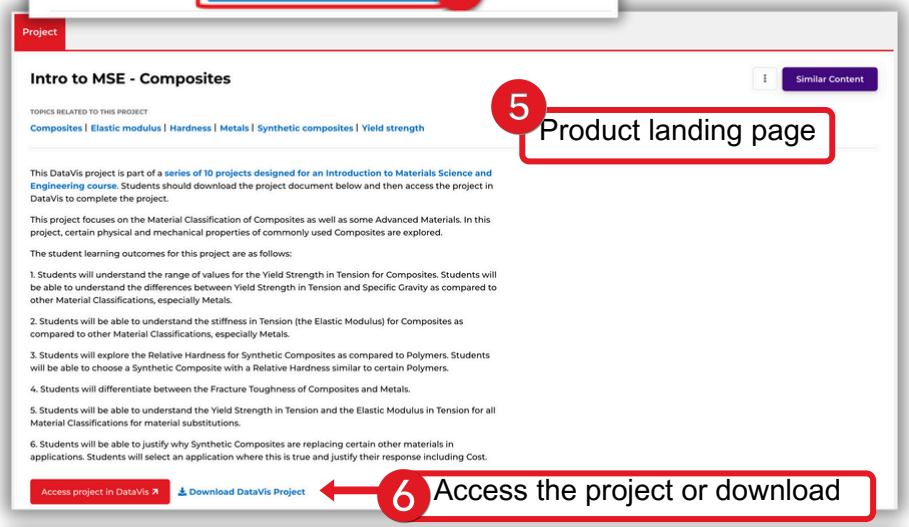
1. Select the one property option **to view a dot-plot**
2. Select two properties **to view a scatterplot**
3. **Choose one or two properties** from the list provided or use the search bar
4. **Add more visualizations** of either type to your workspace
5. **Select specific materials** from the five classifications 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 - Projects

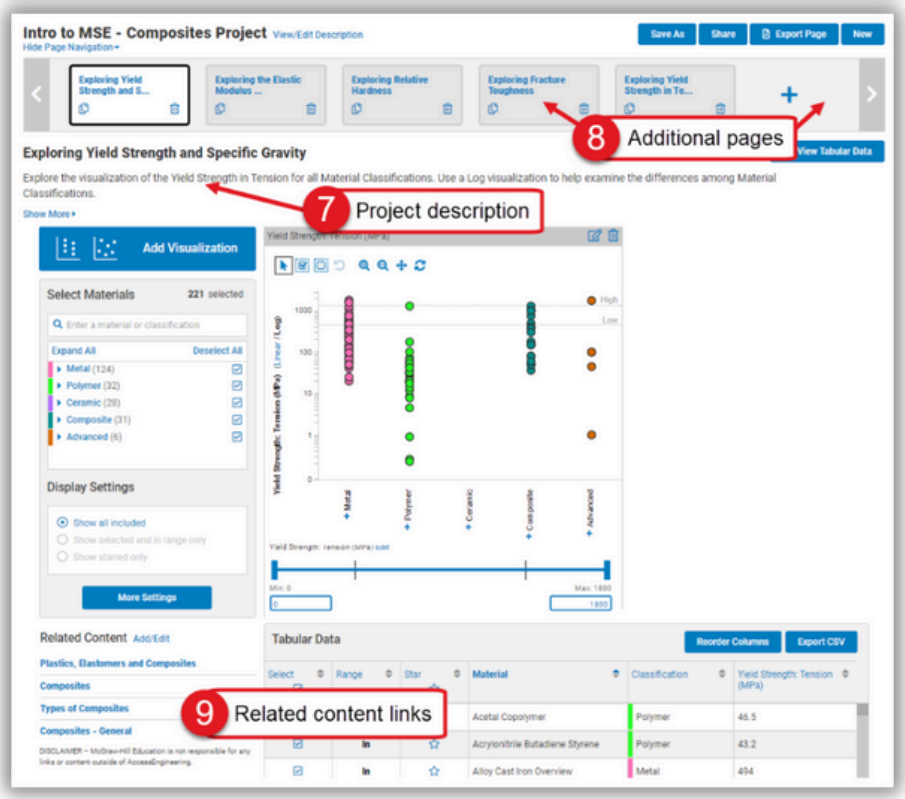


To find a property value for a material, click the option on the DataVis homepage.

1. **Typeahead** suggests specific materials
2. Select the **desired property**
3. View **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 projects 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

Personal Account

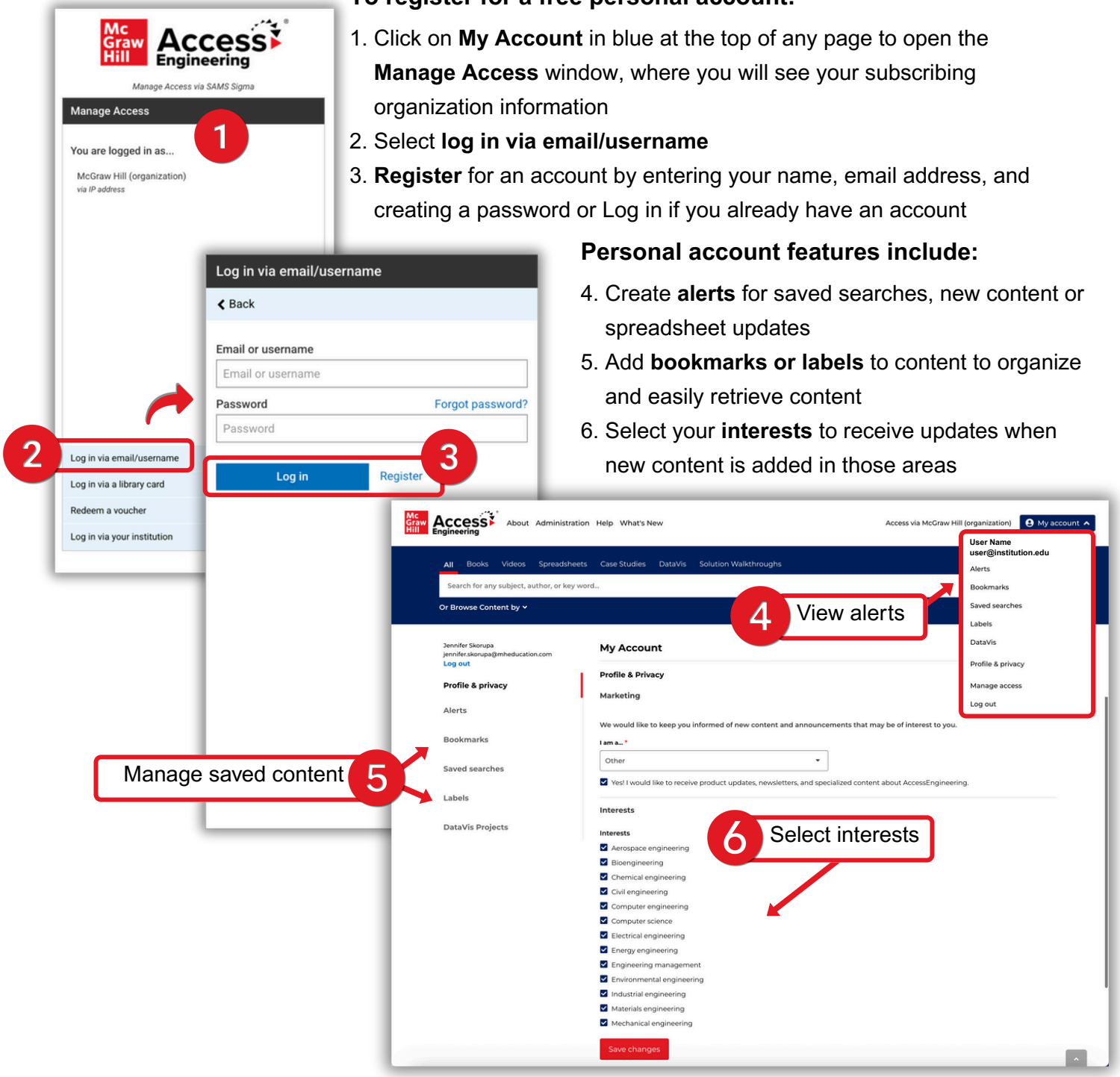
AccessEngineering has several features which are available only after signing up for a **free personal account.** Personal accounts are an optional feature and are not required to view or use any of the content on the site. *Personal accounts do not replace authentication via your institution*; *you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

To register for a free personal account:

1. Click on **My Account** in blue 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 or Log in if you already have an account

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

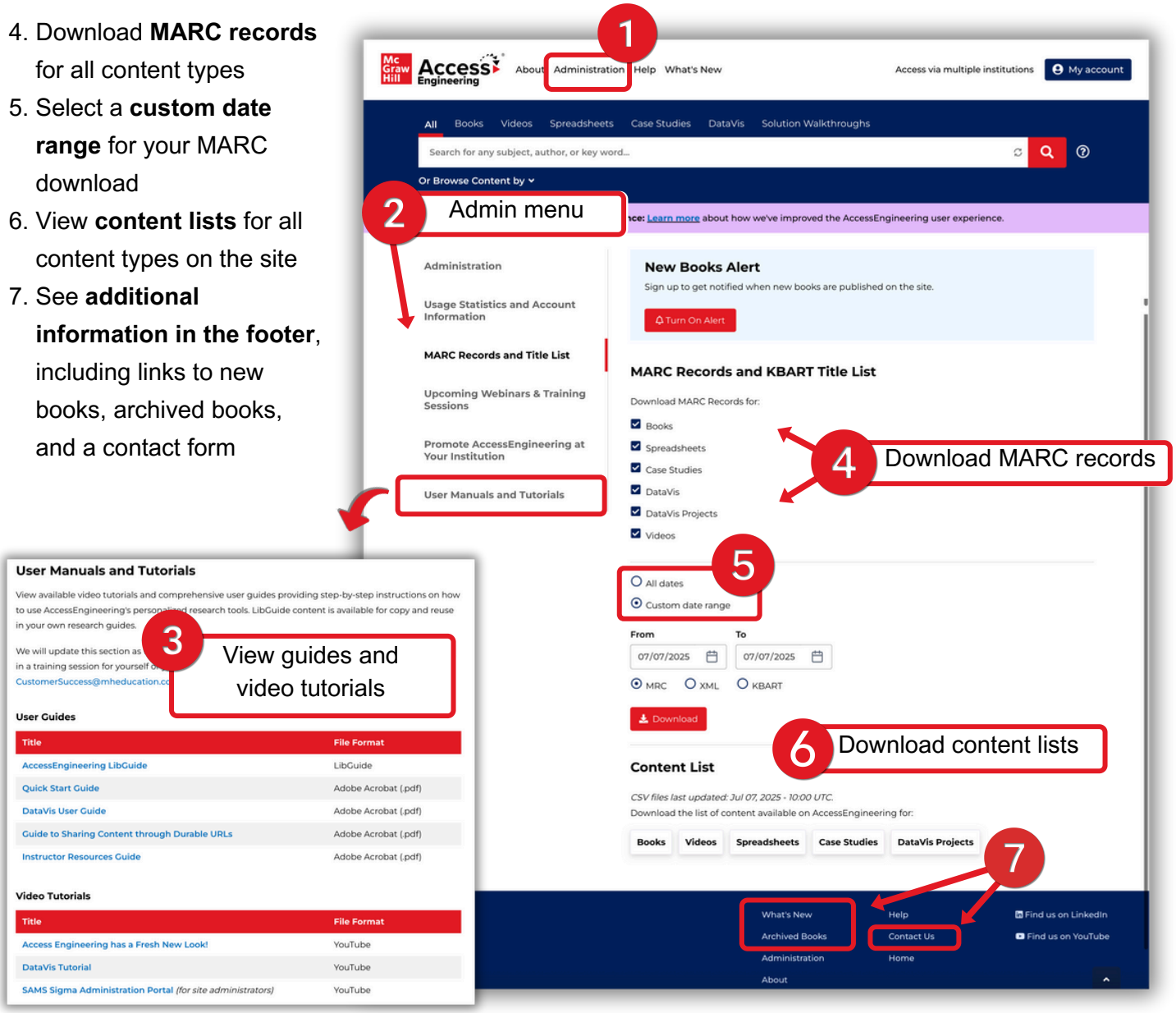


Administration

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

Features of the Administration page are shown here:

1. Access the **Admin page** from anywhere on the site 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. **User manuals and tutorials** include brief videos on using site features and content, and also an AccessEngineering **LibGuide** which is available to copy and share
4. Download **MARC records** for all content types
5. Select a **custom date range** for your MARC download
6. View **content lists** for all content types on the site
7. See **additional information in the footer**, including links to new books, archived books, and a contact form

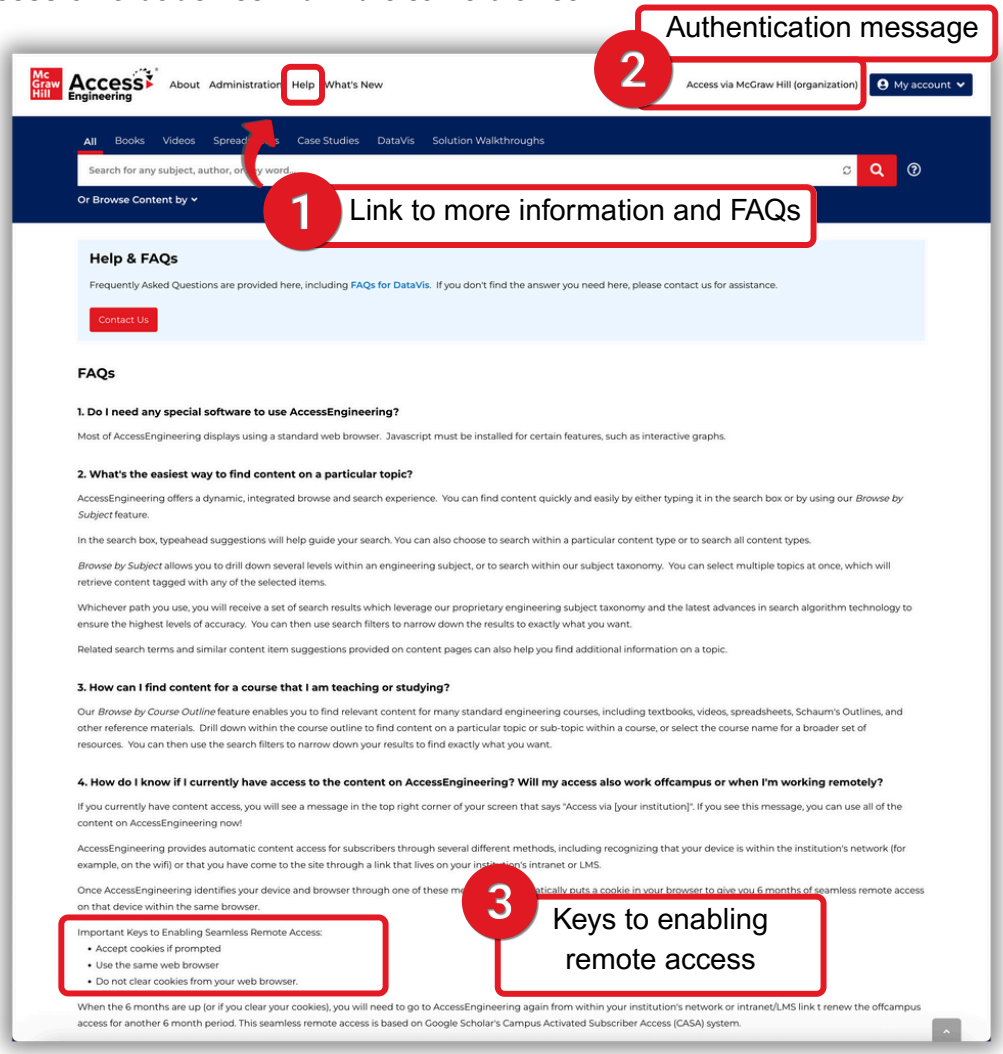


Remote Access

Use AccessEngineering wherever you are without needing to log in with the remote access feature. This feature is available if your **institution provides access via an IP range or referrer URL**. The first time you use AccessEngineering from within your institution's network or through the referrer site, the system will recognize your device as being affiliated and automatically put a cookie in your browser giving you **six (6) months of seamless remote access on that device** within the same browser.

1. Use the "**Help" header link** to view information on this function and FAQs
2. Check if you have been authenticated by looking for the "**Access via [your institution]**" message
3. Make sure to **accept cookies if prompted** and do not clear cookies from your browser

***NOTE: After six (6) months (or if you clear cookies),** you will need to log back in from your university network or referrer site to renew access for another 6 month period



Need additional assistance?

Contact McGraw Hill's Customer Success team at customersuccess@mheducation.com for questions on using the platform, requests for additional training, or help with promoting usage at your institution.