Build A Major Map Training Manual

Updated for fall 2019
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CONTACTS AND RESOURCES

- Email majormaps@asu.edu with questions
- My ASU > Service Tab > Service Catalog > search for "BAMM"
- catalog.asu.edu/BAMM

APPLICATION URL

*USE FIREFOX* - BAMM doesn't always work as expected in Chrome.

Web Location: https://webapp4.asu.edu/roadmaps or use the shortcut asu.edu/bamm

Log in with your ASURITE. Please e-mail your college catalog coordinator or majormaps@asu.edu to request access to the application.

INTRODUCTION AND WORKFLOW

Upon logging in, the home screen displays a navigation bar above a list of ASU's colleges and schools, along with five columns that keep an up-to-date count of where major maps, minors, and certificates are in the review workflow.

If your college or school decides to give users access at the department level, the first column (Department Review) is where every major map will start at the beginning of the annual review cycle. If your college decides to give users access at the college level, or your college has no individual departments, then the second column (College Review) is where every major map will start.
The above image shows that W. P. Carey has 17 maps currently being reviewed at the college level. This includes majors, minors, certificates, and all proposed maps of any type. You can use the toggle buttons above the colleges if you want to view the numbers for only major maps, or only minors and certificates, or only proposed maps – or any combination of the above. Selecting Majors, as shown below, changes the numbers on the dashboard for all colleges.

Selecting the Majors toggle and the Minors/Certs toggle changes the numbers again across the dashboard:
When you click on your college, you'll first see three "drawers" that are expandable and collapsible. Clicking on a drawer will expand it, and clicking on the drawer header again will close it. This allows you to shrink and close what you're not currently working on.

For example, if you want to look at minors and certificates in this school, click on the Minors/Certificates "drawer" or maroon bar, and it will expand:

The drawer will display all active minors and certificates under that college or school. The second column shows you the plan code belonging to that program, and the third column is the status of the map. It correlates with where the map is in the review process. "Empty" means that the map has not been created yet. "College Review" means that the map is currently being reviewed by the college level reviewer.
The status can also be the following: Department Review, Provost Review, DARS Review, or Completed, depending on where the map is in the review cycle. If you have college access, the "College Review" column is where you will perform an action to the map. In the screenshot above, the certificate and the minor are still awaiting review by a College user.

You can expand as many drawers as you wish if you want to see all active programs/maps under a college.

**BAMM has four different access roles for reviewing maps: Department, College, Provost, and DARS.**

**Department level access:** You can view any major map in any college/school, but you can only edit the maps within your department. Once you have edited and reviewed your major maps, you will submit your maps to the college level for review.

**College level access:** You can view any college’s major maps, but you only have the ability to edit the maps within your college/school. Once a major map is at the college review stage, you will review the major map and then submit it to the Office of the University Provost.

**Provost level access:** You can see any major map and review maps once they are submitted to the provost review stage. Once the major map is approved by the Office of the University Provost, it is submitted to the DARS level.

**DARS access:** You can view major maps in all colleges. There is no access for editing. Once you are done reviewing the contents of a map, you will submit it to the completed level. At this point, the review cycle in BAMM is complete.

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**NAVIGATION BAR AND SETTINGS**

At the top of every page is a black navigation bar. Here you can access various pages and settings, depending on your level of access.

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1. **Home Icon**

   Clicking on the home icon will take you back to the BAMM homepage (the dashboard displaying all the colleges).

2. **Create Proposed**

   The "Create Proposed" link takes you straight to the page to begin creating a proposed or temporary major map.
If your college is going through the process of proposing a new degree program, concentration, minor, or certificate, you can create a temporary major map to submit with your proposal. It will never be visible to students and will only go to the Provost level of the review cycle. More instructions are in the "Overview" section below.

3. Notes

This page is where you enter notes that will appear on a major map (except term notes). See the "Notes" section below for further information.

4. Admin

Some users will have an "Admin" dropdown that allows them to do things like manage user roles or approve map recalls.

Approve Request Recall

This is where users with College level or Provost level access can approve or deny map recall requests from others. A college can also request the recall of every map within their college in one step. This might be used if a college wanted to change a core requirement on all or most of the major maps. Users with Department level or DARS level access do not have this link.

Manage Users

The Manage Users page allows you to request access for others or even allow you to approve access requests. What you can do depends on your access role.

- **Department level access**: You will not see this link at all.
- **College level access**: You can access this page, and can:
  - give someone department level or viewer access within your college
  - request college level access for another user
  - see who else has college and department level access within your college
• **Provost level access:** You can access this page, and can:
  - give someone any level of access
  - approve any level of requested access
  - see everyone who has any level of access in the application

• **DARS level access:** You can view this page, and have the ability to request DARS level access for another user.

5. **Catalog Year**

The Catalog Year dropdown allows you to change which catalog year’s maps you’re viewing. For example, if you want to view maps from 2017-2018, you would click on that year in the dropdown. After BAMM refreshes, it will show major maps for that year. Be sure to go back to the current catalog year when you're finished viewing older maps, because BAMM won't do it automatically.

6. **Question Mark/Help**

The question mark icon will take you to the BAMM Resources page, which has links to training guides and helpful information.

7. **Settings**

The settings or "gear" icon takes you to your user profile. This displays your name, access role, and email notification preferences.

It is strongly encouraged that you leave email notifications on, especially during the fall, so that you don’t have to constantly check the application for major maps that are awaiting your review.

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**MAJOR MAPS BASIC OVERVIEW**

Before you can make any changes on a major map, BAMM will ask if you want to lock that map. This ensures that while you are working on the map, no one else can also be in there making changes at the same time. You can lock a map two different ways:

1. click anywhere on the page and a pop up will appear asking you to click OK to lock the major map
or
2. in the top right corner of the page, there is a button labeled "Lock Map," which will lock the map once you click on it.

The lock symbol at the top of the map can be two different colors. If the lock is gray, it means that you have locked this map to edit it. The red lock means that someone else has locked that map for editing. If you hover over the lock, it will tell you the username for the person who has that map locked.
When you click on a map that is already created, you can review the major map course requirements and term sequencing.

The default view is the Sequencing page, which shows you the curriculum "checksheet" on the left side, and the sequencing of the courses within terms on the right. On this page, only the sequencing can be edited.

When a major map is newly created from scratch (not copied from an existing map), the eight terms on the right will be empty. For online major maps, the terms are split into session A and session B and are numbered up to 10B.
In order to edit or add anything to the checksheet, click on the maroon "Checksheet" tab at the top. This will take you to the Checksheet page where the Sequencing is not visible. You can only view the Checksheet page while the map is at your review level.

The curriculum checksheet for major maps is divided up into three basic sections: University Requirements, Major Requirements, and Electives.
Within the section titled "University Requirements", the categories are already created. "Literacy and Critical Inquiry (L)" is an example of a category. You can add specific requirements under these categories. "First-Year
"Composition" and "First-Year Seminar" are pre-populated with a few university level requirements and completion checks. Within the sections titled "Major Requirements" and "Electives", you can build your own program-specific categories.

The curriculum checksheet should be organized in the same fashion as the graduation DARS audit for the degree. The second and third columns represent the credit hours for that requirement, and the minimum grade required, if applicable.

The diamond shaped icon symbolizes a critical requirement, per eAdvisor. The star shaped icon symbolizes a necessary requirement (click [here](#) to jump to the section about critical and necessary requirements).

![Major Requirements Table]

The checksheet is also where you add, delete, or edit current requirements. To edit a requirement, click on the text of the requirement, and then choose edit. To delete a requirement, either click on the text of the requirement and choose delete, or hover over the gray "x" to the left of the requirement. When the "x" turns red, click to delete.
To add a requirement, find the category you want to add the requirement to, then click the "Add Requirement" button. (Click here to jump to the first section about adding requirements.)

The sequencing page can be accessed in two different places from the checksheet. (Click here to jump to the full section about sequencing.)

1) The maroon Sequencing tab at the top of the page:

2) Or the link in the bottom right corner:
On the sequencing page, you take the requirements you created in the curriculum checksheet (now displayed in the left column) and drag them to the appropriate term for the major map. You can also double click on a requirement on the (left side), and then click on the term where you want to add that requirement.

If a requirement is not fully sequenced on the major map, the icon highlighted in the screen shot below will appear next to the requirement to indicate this:

If you are not going to use that requirement on your major map, please delete it from the curriculum checksheet.

Below the Electives section, there is a notes area for university-wide, college-wide, departmental, or major map specific notes. There are also the legends for ASU requirements and General Studies.
Below that is a red or green bar where BAMM shows you if your major map has validated. Validation means the map meets all the rules for General Studies requirements, minimum hours for degree completion (120), minimum upper-division hours (45), and critical and necessary requirements.

If your map does not validate, you'll see the validation errors in red. Below is an example of several common validation errors. You'll be unable to submit the map to the next level if the map doesn't validate.

<table>
<thead>
<tr>
<th>Validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Mathematical Studies (MA) total hours should be at least 3 (current 0)</td>
</tr>
<tr>
<td>- Total hours should be 120 (current 119)</td>
</tr>
<tr>
<td>- The map does not contain a necessary requirement in term 8. Necessary requirements are key for timely completion of the degree.</td>
</tr>
</tbody>
</table>

If a major map needs to be returned to the previous workflow level for any edits, you can do so by going to the bottom left of the screen. A black button will be labeled with "Return to Department", "Return to College", etc. as appropriate. If you are a Department user, there will be no return button because there is no workflow before yours.
Once the major map has been corrected and meets all of the requirements, you will see the following message in green and can submit the major map to the next level.

Map is valid

(Creating New Maps)

If your college is going through the process of proposing a new degree program, concentration, minor, or certificate, you can create a temporary major map to submit with your proposal. It will never be visible to students and will only go to the Provost level of the review cycle.

You can create a map from scratch, or, if your new program is very similar to a current program, you can opt to copy the requirements from a current major map to this temporary major map.

Click on the "Create Proposed" link in the black navigation bar.
Choose your college, which department the program is in, and the type of degree. Most likely, you don't need to change the catalog year. Give your proposed plan a name, and BAMM will automatically generate a temporary plan code.

If you choose to copy this proposed map from an existing map to save yourself some time: In the last field "Copy from Plan", choose the map and the year you want to copy the requirements from.

Once you click "Create", your proposed major map will be in the bottom section of your college's page, under the "Proposed" section. Click on the "Proposed" maroon bar to expand the proposed maps:
Click on your new map, and continue reading for further information on adding and editing requirements to major maps.

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**ADDING COURSE REQUIREMENTS**

**Creating a Category**

If there isn't already a category, please add one. For best practices, requirements should not be added without a category. Remember, the curriculum checksheet should have the same categories as the graduation audit. Under the section where you would like to add a category (Major Requirements or Electives), click on the category button. This pop-up will appear:
If there is already a category in the drop-down menu that meets your needs, select it. If you cannot find one that is appropriate, click the link "Create a new Category", and a new text field box will appear:

Type in the title of the category and click the submit button. This will automatically add your new category to the options available.

There's more one step – now select the category from the dropdown menu, and click Submit so the category will appear on your major map.
If you make an error when creating your category, choose the category from the dropdown menu, and click the link "Edit an Existing Category." This will bring up the text box again so that you can make the necessary changes.

**Creating a Single Course Requirement**

Now that you have a category, it's time to add requirements to it. This example will guide you through adding courses from scratch, using Term 2 on a major map in the W. P. Carey School of Business.

<table>
<thead>
<tr>
<th>Term 2</th>
<th>17-31 Credit Hours</th>
<th>Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ACC 231: Uses of Accounting Information I</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ECO 211: Macroeconomic Principles (SB) OR ECO 212: Microeconomic Principles (SB)</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MAT 211: Mathematics for Business Analysis OR MAT 271: Calculus with Analytic Geometry II (MA)</td>
<td>3-4</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: English for Foreign Students</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SOC course (SB)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Next to the appropriate category, click "Add Requirement".
Four options expand showing the different kinds of requirements you can choose. In this case, click on the "Course" button.

At the top of the pop-up window, it tells you what you are doing (Add Course Requirement) and what category you are adding it to (Business Core).
Requirement Type: This drop-down has the different types of course requirements you can add. Depending on the option you select in the drop-down, the form will update to reflect different fields. The first course in Term 2 is ACC 231: Uses of Accounting Information I. This is a single course, so use the single course option (which comes up by default).

Course: This is where you type in the subject, ACC, and the course number, 231. BAMM pulls directly from the PeopleSoft course catalog, so once a user types ACC 231, the Units field populates and the course title shows up automatically. **Note: If the course information does not pull in automatically, try hitting tab after entering both the subject and number.**

Now choose the Minimum Grade required for the course (if there is one). In this case, the student should earn at least a grade of "C", so choose "C" from the drop-down. If it's a critical requirement, check the Critical box.

The light gray box at the bottom of the window shows you a preview of what the requirement will look like on the checksheet. This allows you to ensure that the requirement is correct before clicking Submit.
Once it's submitted, that's how it will display on the curriculum checksheet. The critical icon, course title, unit hours and minimum grade will all be visible.

Creating a Multiple Course Requirement
The next requirement is ECN 211 or ECN 212. This is a multiple course requirement. Under the appropriate category, click "Add Requirement", then "Course" again. This time choose "Multiple Course" from the drop-down.

Course not yet approved?

Add hidden courses
Now enter both classes in a similar fashion to entering a single course. Enter ECN 211, then click the capital "OR" button. Clicking "OR" will bring up the fields to add the next course, which in this case is ECN 212.
In this case, these courses need a Minimum Grade of "C" and the requirement needs to be marked critical. The preview box at the bottom shows how the multiple course requirement will look:

![Preview of multiple course requirement](image)

Click Submit, and now the curriculum checksheet shows the new multiple course requirement:

![Curriculum checksheet with new multiple course requirement](image)

**Notes:** The AND button can be used for creating requirements that should be taken together, such as a lecture and a lab.

By clicking the little "or", you can add courses that are optional, where one or the other course should be taken but not both. This is commonly used in tracks or groups. This is also sometimes used with multiple course requirements.

For example, pretend that you want the student to take two of three courses listed over two terms. With the little "or," they have to take either ENG 301 and COM 230, or ENG 302 and COM 230 by the end of those two terms.
If you used only capital OR, this would mean they could take any two of the three courses when this requirement is listed in two terms. For example, they could take ENG 301 and ENG 302, or any other combination.

Creating a Multiple Course Requirement with a Range of Hours

The next multiple course requirement will be created in the same way as before, except it has a range of hours.

When using the multiple course option, the Units field will populate with whichever course was added last. In this case, MAT 271, which is 4 units, was added last. However, MAT 211 is only 3 units. Therefore, you need to update the Units field in the form from 4, to 3-4.

NOTE: You must use a dash. "3/4" or "3 to 4" will result in an error.
Then add the Minimum Grade of "C" and make it critical. Click Submit, and the curriculum checksheet shows the range of hours:

Using a Requirement in Multiple Terms
The next requirement is First-Year Composition. Remember, this is prepopulated on all major maps and is located under the University Requirements section:

Notice that there are 6 credit hours, even though in Term 2 it's displaying as 3 credit hours. This is because you only need to add a requirement to the checksheet one time, even if it's used in more than one term on the major map.

Just create one requirement on the checksheet and give it the total number of credit hours needed for all terms in the entire major map.

Another example of this is university Electives. If a major map has 3 hours of electives in terms 5, 6, 7, and 8, you only need to create one elective requirement on the checksheet for a total of 12 credit hours (3 hours x 4 terms). When you drag the elective into the appropriate terms, you then change the hours on the sequencing side from 12 hours to 3 hours in each term.

**Editing Multiple Course Requirements**
You can easily change the order of courses within a multiple course requirement that you already created. While in the checklist, click on the multiple course requirement, and then click "Change Order of Requirements".

Then you can drag and drop the courses to adjust the order in which the courses display, or change the OR/AND/or connectors.

**Building a Subject-Specific General Studies Requirement**
In our example, the last course in Term 2 is an SOC course (SB). What this means is that a student should take a course that carries the Social-Behavioral Science (SB) General Studies designation that also has the SOC prefix/subject.

To add this requirement, click on "Add Requirement", and then "Course" as before. Now in the drop-down, choose General Study.

In the first drop-down, choose Social-Behavioral Sciences (SB). Then click on the "Add required subject" link to add SOC (Sociology).

Since you aren't pulling in a specific course from the course catalog here, the Units need to be entered manually. In this case, 3 credit hours should be entered into that box. You can see a preview of the requirement in the gray section at the bottom of the form.
That takes care of creating the courses for Term 2. Creating new requirements on the checksheet doesn't mean that your major map is automatically updated. After building the entire major map's course requirements, your next step is to add the new requirements to the appropriate terms. This is also referred to as sequencing, and is necessary in order for the content to display in Degree Search. (Click here to jump to the Sequencing section.)

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**CRITICAL AND NECESSARY REQUIREMENTS**

Arizona State University uses the eAdvisor Tracking Tool to monitor student progress toward degree completion throughout all eight semesters.

"Critical" requirements are represented by the diamond shaped icon with an exclamation point. Critical requirements should be present in terms 1 - 4 (1A - 4B for online major maps), and at LEAST one requirement per term must be marked critical. Critical requirements are those courses or requirements that faculty have deemed as predictors of future student success in a particular major.
"Necessary" courses should be present in terms 5 - 8 (5A - 10B for online major maps) and are represented with the star icon. Again, at LEAST one requirement per term must be marked necessary. These identified courses are considered necessary, or required, to progress toward graduation in 8 semesters. Courses that are prerequisites for courses in later terms or are sequential in nature are good examples of necessary courses.
ELECTIVES

There are quite a few ways to enter Elective course requirements. Shown below are a few common uses of Electives:

<table>
<thead>
<tr>
<th>Term 8</th>
<th>109 - 120 Credit Hours</th>
<th>Hours</th>
<th>Minimum Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Complete 2 courses:</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>CRJ 4xx Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper Division Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**University Elective**

The simplest type of elective to add is a general/university elective ("Elective" or "Upper Division Elective"). If necessary, create a category under the Electives section. Then click the "Add Requirement" button and the "Course" button.

In the pop-up window, choose Elective from the Requirement Type drop-down:
To create a generic elective or an upper-division elective, click on the University Elective radio button.

If these should be upper-division electives, choose "Upper Division" from the "Level" drop-down menu.

(There's no need to select "Lower Division" for university electives, since you shouldn't restrict students to taking lower-division electives. These will simply display as "Elective".)

Next, add in the credit hours and click Submit. **Note:** University electives should never have a minimum grade tied to them.

Subject and Course Level Elective
To create an elective such as a CRJ 400-level elective, start the same way. Click "Add Requirement", then "Course", and choose Elective from the Requirement Type drop-down. Then choose the Subject Elective radio button.

Add the subject to the subject field and choose the appropriate level indicated on the major map. A 400-level course is displayed as 4** in Bamm and Degree Search.

Enter in the desired number of units (in this case, 6) and the Minimum Grade of "C".
Click Submit, and the requirement is now in the checksheet as shown:

**Other Types of Electives**

There are some electives that are only supposed to be fulfilled from a certain list of courses that the college provides to the student. These course options should be listed on the student's major map so they can easily see what they need to take without having to make an advising appointment. However, in some cases, the list is far too long to accomplish that, such as The College of Liberal Arts and Sciences' Science and Society Elective. The list is available online though, so you can add that URL to notes on the major map.
To create The College's Science and Society requirement, add a Course requirement and choose Elective as the Requirement type. Instead of choosing the University or Subject radio buttons, click the Course Elective radio button. Then open the "Courses" drop-down menu, and choose "CLAS Science and Society Elective" from the drop-down. This drop-down contains other course categories you may want to have on your major map.

![Add Course Requirement to Electives](image)

To finish creating this requirement, choose the course from the list you need, add the Units, Grade, and make it critical or necessary if applicable. Click Submit and the CLAS Science and Society Elective appears on the checksheet:

![Checksheet with CLAS Science and Society Elective](image)

This is also the method used for those degrees that have tracks or groups of courses, such as a list of courses that fulfill a "Technical Elective". For more information about Tracks and Groups, continue to the next section.
TRACKS AND GROUPS

There are many degrees that use this feature. If you have a list of courses displaying at the end of your major map below the sequenced terms, you are already using tracks/groups. An example is the Applied Mathematics BS degree from CISA:

![Image of Applied Mathematics Electives and Upper Division STEM Electives]

It is a two step process to create track/groups.

The first step is to add each course in order to create the boxes shown in the screenshot above.

Under the appropriate category, click "Add Requirement" then "Course". Under the "Requirement Type" dropdown, choose "Track/Group".
Enter the title of your track/group, and add each course as if it was for a multiple course requirement. Make sure to use the big "OR" in between each course, unless the courses are crosslisted. In that case the little "or" is appropriate. If adding a lecture and a lab that should be taken together (such as PHY 111 and PHY 113), the "AND" connector is appropriate in those cases.
After all of the courses are added, click Submit. The new track/group will appear below the Electives section but above the legend on the major map:

The paper and pencil icon in the top right corner of the track or group (see red arrow above) is where you can edit or delete the track. The + icon next to the paper and pencil icon gives you the ability to copy a track from this major map to another major map.

Please ensure courses are listed in alphanumeric order. If you add a course and need to change the order they display it, clicking on the paper & pencil icon also gives you the option to "Change Order of Requirements".
Step 2: Create the course requirement for the checksheet that will be sequenced into the terms. The name of the track/group created in step 1 should match the name of the requirement created in this step.

In this example, students need to take a total of 12 credit hours from the Applied Mathematics Electives track, and 9 of those hours need to be upper division.

Click the "Add Requirement" button, then the "Course" button. Under Requirement Type, choose "Elective". Select the Course Elective radio button, and open the Courses drop-down menu. Choose "Free text" at the bottom.
Once "Free text" is chosen, a field appears to add the track/group title. Again, this should match the name of the track/group created in step 1.

Leave the box "Link to track group" checked. Enter the units/credit hours students need to take from this track/group, and if applicable, also enter the Minimum Grade and mark it as critical or necessary.
Click Submit, and the requirement will display under the appropriate category.

To add credit hours that must be upper division, repeat the above steps, and this time select "Upper Division" from the "Level" drop-down menu.
(Optional) If there are notes regarding any of the track/groups, these notes must be added from the separate Notes page. An example of an appropriate track/group note would be "Students must select one course from each of the following three categories." (Click here to go to the Notes section.)

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COURSES NOT YET APPROVED (AKA FLAGGED COURSES)

You may want to add a new course to a major map that hasn't been approved yet. With these courses, if you enter the subject and number, the course will come up as "Course not found" instead of the course title. This is because it is not yet created in the PeopleSoft course catalog. It's still possible to add it in BAMM, though.

Note: the New Course Form in Curriculum ChangeMaker must be at the University Review level before you submit the major map to the Provost review level.

Click on the "Add Requirement" button, then the "Course" button under the appropriate category.

Click on the link titled "Course not yet approved?" and the window will change.
The window will change to allow you to type in the proposed course title. The Changemaker button links you to Curriculum ChangeMaker. There, you can ensure that the course is already in the process of being reviewed. The text boxes to the right of the Changemaker icon is where you input the course's subject and number.

In the box labeled "Course Title," please type the title of the course. Then add the Units and Minimum Grade.
Once the submit button is clicked, this course will appear on the curriculum checksheet like any other requirement. The only difference is a red flag will appear next to the requirement.

![Screenshot of Add Course Requirement form]

Once the submit button is clicked, this course will appear on the curriculum checksheet like any other requirement. The only difference is a red flag will appear next to the requirement.

The red flag will alert anyone reviewing the map to check if the course has been approved yet. If a course has been approved, you can edit the course to be a regular course requirement.

1. First click on the course on the curriculum checksheet, and a little window will pop up. Click "Edit".

![Screenshot of Edit option]
2. Click on the link "Revert to approved".

3. The window will change back to appear as normal. Fill out the new course subject and number, then click Submit.

If the course has not yet been approved, the Office of the University Provost will send the major map back to the college and will ask which course should be used in its place. Major maps cannot be sent to DARS or posted on Degree Search until flagged courses have reached the University Review level in Curriculum ChangeMaker.

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GENERAL STUDIES REQUIREMENT EXAMPLES

A common example of a generic General Studies requirement is "Social-Behavioral Sciences (SB) AND Global Awareness (G)".

To add this, click the "Add Requirement" button then "Course" under the "Humanities, Arts and Design (HU) and Social-Behavioral Sciences (SB)" category:

From the Requirement Type drop-down, choose "General Study".

Choose SB in the first drop-down and G in the second drop-down. Only the three awareness areas (C, G, or H) can be added in the second drop-down and these will be an automatic "AND" connector. Type the credit hours (3) in the Units field.

Generic General Studies requirements shouldn't have minimum grades attached to them, unless there's a special exception in your unit for a specific designation.
Click Submit to add this to the checksheet. This is how the requirement will appear:

The next example is with Natural Sciences.

Natural Science - Quantitative (SQ) OR
Natural Science - General (SG)

This will be created under the Natural Sciences category by using a multiple course requirement, with Course 1 and Course 2 using the General Study options. The reason for this is that we need the "OR" connector this time because SQ and SG can't be earned simultaneously. The "OR" connector can only be used by defining this as a multiple course requirement.

(Note: If this map doesn't require specific science courses, please list the SQ requirement by itself first to avoid errors in eAdvisor.)

Click "Add Requirement" and then "Course".

As "Requirement Type" at the top, choose "Multiple Course". Under "Course 1", choose "General Study" and then "Natural Science – General (SQ)" in the drop-down.
Then click the OR button to add the second course, which will be another General Study. Pick "Natural Science – General (SG)" from the dropdown menu.
Enter 4 in the Units field, because the SQ or SG requirement is 4 credit hours. Click Submit so the requirement saves and appears on your checksheet:
The next General Studies example is for Upper Division HU or SB.

To add this requirement, it again requires the Multiple Course requirement type. Under the SB and HU category, click on "Add Requirement" and then "Course" buttons.

Choose "Multiple Course" as the Requirement Type. Then for Course 1, choose "General Study". Select HU in the first drop-down, and in the "Level" dropdown, select Upper Division.
Click the OR icon and add the second general study, SB. Be sure to choose Upper Division as the level. Don't forget to add the Units (3), and then click Submit.

Please ensure that the appropriate amount of General Studies is present on the major map, whether they are attached to courses or are added as generic General Studies requirements. Do not overload on General Studies because the eAdvisor Tracking Tool cannot check for more than the required number of hours.

- 6 hours of Literacy and Critical Inquiry (L) with at least 3 hours upper-division
- 6 hours of Mathematical Studies (3 hours of Mathematics (MA) & 3 hours of Computer/Statistics/Quantitative (CS))
- 6 hours of Humanities, Arts and Design (HU) (lower or upper division)
- 6 hours of Social-Behavioral Sciences (SB) (lower or upper division)
• 3 hours of Humanities, Arts and Design (HU) or Social-Behavioral Sciences (SB) (upper division)
• 8 hours of Natural Sciences (Quantitative (SQ) and General (SG)) with at least 4 hours of SQ
• 3 hours of Cultural Diversity in the United States (C)
• 3 hours of Global Awareness (G)
• 3 hours of Historical Awareness (H)

(SECOND LANGUAGE REQUIREMENTS)

Second language requirements are very similar across the various colleges that require it, usually with the same options accepted to fulfill the requirement.

To create a second language requirement, click on the "Add Requirement" button and then the "Course" button under the appropriate category, and choose Second Language in the drop-down menu to display the form below.
Look in the bottom notes area of the major map or the DARS audit to see which of these options the college will accept to fulfill their second language requirement. In some cases, it's actually all of the options. Check the boxes next to what is accepted, and fill in the total hours (usually it's 4 semesters at 4 or 5 credit hours each semester, so 16 or 20 total hours). Usually a minimum grade of "C" is required. Add that if applicable.
After you click Submit, the Second Language requirement will display in your check sheet:

In this case, in the Second Language requirement window, don't check any boxes. Copy the text from the requirement "Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV; Completion of two sequential semesters of coursework in a current computer language." and paste it in the free input text field. Then edit this field to reflect your specific requirements. The gray Preview section at the bottom shows how your requirement will look:
Click Submit and the requirement will display:

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RECOMMENDED COURSES

Recommended courses on a major map allow you to list a general requirement (such as General Studies, elective, etc.) while suggesting, or recommending, that students take a specific course that also meets that requirement.
For example, when you create your CS requirement, there may be some specific CS courses more closely related to the major that might help students out in their studies, such as DCE 240 or FMP 255.

However, if you truly require students to take DCE 240 or FMP 255, then you should list those as the requirement, and not as recommended courses. Major maps should be built with the ideal course requirements.

If your unit will truly accept any CS course and you decide to go ahead listing recommended courses to the CS requirement, then follow the next steps.

Click on the "Add Requirement" button and the "Course" button.

In this example, the true requirement is a CS course, so select "General Study" as the requirement type in the first dropdown, then "CS" from the General Studies list. Then, click on the link "Add recommended course".

Enter the recommended course subject and number in the empty fields that appear. If you want to add more than one recommended course, just keep clicking "Add recommended course".
When you've entered in all the recommended courses, enter in the credits at the bottom and click Submit.

**NOTE:** Please don't add recommended courses to a General Studies requirement unless those courses actually carry that General Studies requirement.

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**HIDDEN COURSES**

Requirements that need to have hidden courses in the DARS graduation audit can be added while creating a course requirement. For example, you may have MAT 210 listed in Term 1. You truly want the student to take MAT 210, but MAT 270 is acceptable to fulfill the requirement too. To add MAT 210 with a hidden course of MAT 270, first add MAT 210 as a course requirement, then click on the link "Add hidden courses":

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Additional fields will appear so you can add the hidden course(s) and their effective date. In this example, MAT 270 will be hidden with the effective date Fall 2011 until forever. Dates in these fields should be in the 5-digit DARS format, not the 4-digit PeopleSoft format.
You can also add a range of hidden courses, and if you need to, a range that rejects a specific course. Let's pretend they can take any MAT 200-level course to fulfil MAT 210 EXCEPT MAT 270. Here's how that is created:

Once you submit your course with the hidden course information, you will see an icon with the letter "H" at the end of the requirement.
Click on the blue H icon to display more detail.

GPA REQUIREMENTS

When a minimum GPA is a true requirement (and not just a note), it should be added to the checksheet and sequenced like a course requirement. Under the appropriate category, click the "Add Requirement" button, then the "GPA" button.

The image below shows the types of GPA requirements you can create. If a major requires a specific GPA, you can add that. The type "Critical tracking requirements" is used when it is required that a student maintain a certain GPA in courses marked as critical. The course requirement option allows you to create a GPA requirement for specific courses or subject areas.
This example uses the ASU cumulative GPA. From the Min GPA drop-down, choose 3.00:
The form also allows you to mark GPA requirements as critical or necessary, if appropriate.

<table>
<thead>
<tr>
<th>College Requirements</th>
<th>Add Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Language: Requirement satisfied through the following:</td>
<td></td>
</tr>
<tr>
<td>* Completion of Chinese, Japanese or Korean language course at the intermediate level (202 or equivalent).</td>
<td></td>
</tr>
<tr>
<td>Minimum 3.00 GPA ASU Cumulative.</td>
<td></td>
</tr>
</tbody>
</table>

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**MILESTONES**

Milestones can be added requirements, similar to the way in which courses and GPA requirements are added.

**Note:** Milestones on major maps are not the same thing as milestones used in prerequisites for the PeopleSoft course catalog and enrollment. Creating a milestone in BAMM doesn’t carry over to PeopleSoft – it will only apply to eAdvisor.

Here are two examples of milestones:

- Milestone: Complete online Intent to Progress form (meet with advisor).
- Milestone: Submit Identity Verified Print (IVP) DPS fingerprint clearance card.

To add a milestone, under the appropriate category, click "Add Requirement" and then the "Milestone" button:

This works very similar to categories. You can select an existing milestone from the drop-down, create a new milestone, or edit an existing milestone. You can also make a milestone critical or necessary.

In this example, select the existing milestone "Complete online Intent to Progress form (meet with advisor)" and mark it critical. Then click the Submit button to add the milestone to your checksheet.
Milestones can also have URLs embedded into them using HTML. The example below shows how to create a new milestone with a link:

When you click Submit, this only adds the milestone to the dropdown menu and not to your checksheet yet. BAMM also adds the milestone to the very bottom of the list, so make sure you scroll all the way down. Once you've selected your milestone, click Submit and it will appear in your checksheet.

The text "fingerprint clearance card" is now hyperlinked, signified by a slightly different font (highlight added).
You can also create more general milestones and then add specific dates or URL's that may change often into the term notes when you’re Sequencing your map. (See the Notes section for adding term notes.)

As a final note, remember that milestones are enforced at the end of a term, not at the beginning. Also, please ensure that milestones should not actually be GPA or course completion checks instead.

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**COMPLETION CHECK REQUIREMENTS**

Completion check requirements are generally used to make sure students are completing courses at certain points in the major map. For example, in Terms 2 and 3, the university has two completion check requirements: First-Year Composition and mathematics (MA). You have the ability to add other checks for courses and to indicate whether they are critical or necessary.

Under the appropriate category, click on the "Add Requirement" button, then the "Check" button:

![Major Requirements]

This is similar to entering a GPA requirement. You can choose one of the drop-down options (First Year-Composition, Mathematics, or General Studies) or you can choose course requirement. If you select course requirement, that will create the "Course" field.
Here you can enter one or more courses. You can even just enter a specific subject if that is what you require. This example shows how to create a necessary check for ENG 301. The preview below shows how it will display on the major map:
Please ensure that completion checks make sense:

- Is it redundant? (If a course is already critical or necessary in a previous term, a completion check is unnecessary.)
- Is it in the correct term?
- Does it contain courses from previous terms?
- Is it built correctly? (check ANDs, ORs and ors)

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**SEQUENCING REQUIREMENTS**

This section covers not only how to sequence requirements, but best practices as well.

When you've finished adding the requirements to the checksheet, you're ready to sequence them, or add them to the terms in the ideal order students should take them.

The sequencing page can be accessed in two different places from the checksheet:

1) The maroon Sequencing tab at the top of the page:
2) Or the link in the bottom right corner:

Once one of those is clicked, you will see two columns. The left column represents the curriculum checksheet (your previous screen). The right column represents Term 1-8 (or terms 1A - 10B for online major maps), which will be used to display the major map in Degree Search. If you've been creating a major map from scratch, the terms will be blank.

Notice right above Term 1, the Total Hours field displays with a count of 0. As courses are moved in the terms, this will automatically update with a current count of all credit hours. This is an easy way to ensure you have reached 120 hours, which is a requirement for graduation with a baccalaureate degree. There's also a field that keeps track of upper-division hours, and this helps ensure that your major map meets the graduation requirement of a minimum of 45 credit hours in upper-division courses.
Sequencing Basics

There are two ways to sequence requirements:

1) Click on a requirement, then drag and drop it to the appropriate term.
2) Double click on a requirement. A pop-up will show you all the terms you can sequence it to. Click on the appropriate term.

In our example, after the Term 2 requirements have been sequenced, here's how they display in sequencing view:
Change Hours for Requirements Sequenced to More Than One Term

When you sequence First-Year Composition (or any other requirement that will be added to more than one term), it carries over the total credit hours from the checksheet with it (six hours). You'll need to update the credit hours under the term to reflect the appropriate number of credit hours that are supposed to be in that term. In this case, it needs to be changed from six hours to three hours.

Type in the gray boxes to replace the credit hours for ECN 211 or ECN 212 and First-Year Composition. Hit tab or click outside the box in order for the Term Total Credits at the top to update:
"Not Sequenced" Symbol and Credits Countdown

On the left-hand side of the page, the "not sequenced" symbol (circle with a line through it) shows you that a requirement has not fully been sequenced. There is also a credits countdown that shows you how many credits of that requirement remain to be sequenced, shown by the first number. The second number, after the slash, shows you how many total credits this requirement was created for on the checksheet.

In this example, ECN 211 or ECN 212 shows the "not sequenced" symbol and says 3/6 Hr(s). This means 3 out of 6 total hours remain to be sequenced.
The goal is to have the first number in the credit countdown be 0, meaning there is nothing left to sequence. It should display as 0/3 Hrs, or 0/6 Hrs, etc. If the first number in the countdown is negative, that means you've sequenced the requirement too many times.

In this example of the Upper Division Electives, the "not sequenced" symbol has disappeared, but the credits countdown for the Upper Division Elective is -3/12 (negative 3 out of 12). That means you've added 3 extra credits to the terms that aren't on the checksheet.

To fix this, either remove 3 hours of Upper Division Electives from the terms, or go to the checksheet and change the total Upper Division Elective hours to 15.
Indicator to Complete More Than One Course in a Term

If a single term holds a requirement that will take more than one course to complete (such as six hours of Electives), the hours should be in multiples of three whenever possible. You also need to add an indicator. Double click on the requirement in sequencing view and a small pop up will appear:

In the drop-down box, choose the number of courses appropriate needed to complete the number of credit hours. If a requirement says 6 hours, it should say, "Complete 2 courses." If a requirement says 9 hours, it should say, "Complete 3 courses". Then click the "Add/Update" link.

The page will refresh and now this term gives students a heads up to complete 3 courses for 9 hours of electives:

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ORDERING REQUIREMENTS WITHIN TERMS

The order of the requirements within the term is very important. The Office of the University Provost would like the requirements to be in the following order:

i. First, critical or necessary courses listed in alphanumeric order.

ii. Next, specific course requirements listed in order from most specific to least specific:
   a) specific course requirements (including major-specific)
   b) track/group requirements
   c) General Studies requirements
   d) University electives

iii. Finally, non-course requirements (GPA checks, completion checks, milestones, etc.) in alphanumeric order with critical or necessary requirements listed first.

Simply drag and drop requirements to re-order them.

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NOTES
There are several different types of notes you can add to a major map to provide additional information or clarification to students.

**Term Notes**

Term Notes will appear in one specific term only, on that major map only. Examples of term notes are things like clarification on requirements, instructions for students to contact their advisor, career notes, or anything else the student should be aware of in that specific term.

**Career notes** are an important addition to major maps in the Term Notes. Please ensure that at least four career notes are present on each major map (ideally at least one note per academic year), spread out through the various terms. The [Career and Major Integration](#) webpage gives further information and instructions, and lists suggested career notes along with their suggested term. You are free to customize these career notes or provide different links if your unit has specialized pages regarding internships, work experience, etc.

Remember that term notes are not enforceable by eAdvisor. Term notes should be clear and not actually be a requirement, milestone, completion check, or GPA check.

To add, edit, or delete term notes, click on the notepad icon. This icon is located on the righthand side of each term header bar.

![Image of term notes](image)

Click on the bullet list icon at the top left to create the first bullet in the text field. Even if there is only one note in a term, please still use bullets to keep a uniform look throughout the terms.
To add a URL, highlight the text that should be hyperlinked, then click the chain-looking icon. Paste in the URL and click Submit.

To remove a URL, highlight the text and click the icon of the chain breaking.
Continue to add any notes that are relevant to this term and click the black Submit button to save them. In this example, various information and links are provided for students.

<table>
<thead>
<tr>
<th>Term 3</th>
<th>Term Count: 32 - 46</th>
<th>Total Credits: 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>X BIO 340: General Genetics OR MBB 347: Molecular Genetics: From Genes to Proteins 4 Hr(a) / Grd: C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X CHM 231: Elementary Organic Chemistry (SQ) AND CHM 235: Elementary Organic Chemistry Laboratory (SQ) 4 Hr(a) / Grd: C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X CLAS Science and Society Elective 3 Hr(a) / Grd: C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X Humanities, Arts and Design (HU) AND Historical Awareness (H) 3 Hr(a)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Complete First-Year Composition requirement.
- Complete Mathematics (MA) requirement.

- Pre-health students should take CHM 233 and CHM 237 instead of CHM 231 and CHM 235. See pre-health website for more information.
- If CHM 233 and 237 are taken, then CHM 234 and 238 must be taken the following semester.
- Explore extracurriculars (i.e. service learning, community service, internships, research, student involvement, shadowing, etc.)
- Attend a Study Abroad 101 Session
- Explore minors or certificates
**Track/Group, Major, Department, and College Level Notes**

In the black navigation bar at the top of BAMM is a link to a Notes page where you can add different kinds of notes to a map. Each type of note is contained within a collapsible/expandable "drawer". Click on a maroon bar to expand or collapse a section.

**College Level Notes:** Restricted to those with that specific College role, or the Provost role. Notes added here will display on all major maps within that college. The notes are positioned at the bottom of the map below track/groups and above the University Requirements Legend.

Click on the maroon bar for College Level Notes. Select your college and enter the appropriate notes, then click Submit. After you refresh the map, the notes will appear.

**Department Level Notes:** Restricted to those with that specific Department role, the College, or the Provost role. Notes added here will display on all major maps within that specific department. They will display in the same area as college-level notes.

Select your college, the appropriate department, and enter your notes. Click Submit and refresh the map to see your notes.
**Major Level Notes:** Restricted to users that have the ability to edit that specific major map. Notes here will display at the bottom of the map above the University Requirements Legend, but will only display on that specific major map.

Here is how College, Department, and Major Level Notes appear on a map. They also tell you the user who last edited the note and the timestamp they did so.
**Major Track/Group Notes:** Restricted to users that have the ability to edit that specific major map. Notes at this level will display above the track/group lists. These notes should be used for specific directions and clarifications regarding track/groups or specific course lists such as The College's Science and Society requirement.

If track/groups don't exist, they will display in a separate section above the other types of notes.
Transfer Map Notes: The purple "MM" icon seen on these notes indicates that this is a major map note. There is an orange "TM" icon to indicate notes that will show on Transfer Maps.

Transfer Map Notes are rarely used. They should only be added if a special direction or clarification applies to ALL transfer students, regardless of the type of institution they're transferring from.

For example, it would not be appropriate to add a transfer map note that applies only to students transferring from community colleges.

It is also not appropriate to duplicate existing notes on the major map (term notes, track/group notes, etc.) into the Transfer Map Notes field. All of the notes displaying on the major map are already visible to all students, both current and prospective.

Here are two examples of appropriate transfer map notes:

- Demonstrated language proficiency at or above the 202 level is required for enrollment in upper-division language courses.
- Acceptance into the School of Music is contingent upon a successful audition the semester before transferring to ASU. Please refer to the following website for application and audition deadlines: http://music.asu.edu/admissions/
TRACKING MAJOR MAP CHANGES

BAMM can quickly show you how a major map has been changed. For example, if a new course is added to a term, a course is moved between terms, or the credit hours are changed, an orange delta (triangle) will display at the beginning of the requirement. In this example, ACC 231 has been moved from Term 3 to Term 2:

![Term 2 Table]

When you click on the delta, it displays the original requirement at the bottom, what the change was, who made the change, and when:

![Original Requirement]

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COMPARING PREVIOUS YEAR'S MAPS

In the bottom right corner of the major map, there is a link that allows you to see the major map’s terms side by side with the previous year’s major map.

This an example of what the comparison looks like:

![Comparison of major maps for Accountancy (BS) from 2018-2019 with 2019-2020 terms side by side. Changes highlighted.](image)
CHECKING ENROLLMENT REQUIREMENTS

When you sequence a course that has enrollment requirements, hit refresh, and you will see a green icon with the letter "P" to the right of the requirement:

![Course Table]

Please make sure that the enrollment requirements are met on your major map before submitting it. BAMM will check the enrollment requirements for the upcoming fall term. For example, if you are working on a major map for 2020-2021, the enrollment requirements pulled in will align with what is present in the catalog effective Fall 2020.

Click on the icon to show the enrollment requirement details. If the prerequisites for a requirement are met, the course prefix and number will display as green.

![Prerequisite Details]

This "P" icon will display if the course has one or more of the following:

- a prerequisite (displays as PRE 1) is a course that needs to be taken in a previous term
- a corequisite (displays as CO 1) is a course that needs to be taken in the same term
- a pre/corequisite (also displays as CO 1) is a course that needs to be taken either in a previous term or in the same term
- an antirequisite (displays as PRE 0) is a course that cannot be taken if you already have credit in an equivalent course, or in its crosslisting.

The prerequisite icon will also display for courses that have one or more of the following:

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- a major as a prerequisite (e.g. Construction Management BS or Construction Engineering BSE major)
- a minimum GPA prerequisite (e.g. minimum 2.25 GPA)
- a minimum standing prerequisite (e.g. minimum junior standing)
- an iCourse or oCourse attribute

You will have to read the enrollment requirement text (see highlighting below) as the coding for these types of enrollment requirements do not display within BAMM.

For courses that require a minimum GPA, it is recommended that a note is added to a previous term to alert students to this enrollment requirement.

If a certain standing is required, please ensure that the course is in an appropriate term. For example, if a course requires at least junior standing, the student would need at least 56 hours to register. As a result, this course could not be in term 2 because the student would not have enough earned hours to register.
Check to make sure that all prerequisites are met and make note of any that are not met. Ensure that if the prerequisite is present in an earlier term, it is not an optional course in an earlier term but rather a required course. If the prerequisite is only an option, there's no way to ensure the student will choose the course they need.

There are four options when enrollment requirements are not met:

1. Re-sequence the courses on the major map
2. Add the missing prerequisite to the major map in an earlier term
3. Remove the course from the major map
4. Modify the prerequisites for the course via a Modify Course Form in Curriculum ChangeMaker (see the Curricular Deadlines document)

(Check Catalog and Prerequisite Changes)

Another link at the bottom of the map runs a report regarding any courses that have changed titles, subject, number, General Studies designations, or enrollment requirements.
The top portion of the report shows you catalog changes for any and all courses on a major map, if the changes are in Subject, Number, Title, or General Studies. This allows you to quickly identify updates needed on a map. In the example below, all you need to do is update CHS 100 to pull in the new course title.

<table>
<thead>
<tr>
<th>Course</th>
<th>Number</th>
<th>Original Title</th>
<th>Original GS</th>
<th>New Title</th>
<th>New GS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS</td>
<td>100</td>
<td>Designing Your Well-Being</td>
<td>SB</td>
<td>Optimizing Your Health and Performance</td>
<td>SB</td>
</tr>
</tbody>
</table>

* - Omnibus Topic may have received a permanent number
† - Course number/prefix may have changed or may have been deactivated

To edit or update a course, go to the Checksheet page. Click on the requirement and when the pop-up appears, click edit:

When the course requirement window pops up, clear out the course number from its field by selecting it and deleting. (If the prefix is what changed, clear out both the prefix and the number.)

Type in the course number, then either hit tab or click somewhere else in the window. BAMM will then recognize you're done entering the course number and pull in the updated course information. Click Submit to save your updates.
The top portion of the report will also indicate if a course or topic is no longer available in the course catalog. In this example, Art & Television is no longer an available topic under ARS 394. When a topic is no longer available, this may mean that the course has received a permanent number, or the topic may have been deleted. It’s recommended to consult both PeopleSoft and Curriculum ChangeMaker to determine the status of the course. In this situation, the course did receive a permanent number (ARS 345).

PHS 402 is also appearing on the report as "Course Not Found." Again, it’s important to check in PeopleSoft and Curriculum ChangeMaker. In some situations, the course may have just changed prefixes and/or numbers. In this particular situation, the course had been inactivated by the unit. As a result, this course needs to be removed from the major map.

### Prerequisite Changes

The bottom section of the report displays information regarding changes to course enrollment requirements between the current catalog and the upcoming catalog year:

<table>
<thead>
<tr>
<th>Course</th>
<th>Number</th>
<th>Term(s)</th>
<th>Original Prerequisites</th>
<th>New Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 444</td>
<td>Term 7</td>
<td>ACC 444; Prerequisite(s) with C or better: Accountancy BS major; ACC 241, 242, or 271; ECN 221 or 231 OR Computer Information Systems major; ACC 241, 242, or 271; CIS 235, 236 or 237; ECN 221 or 231; Credit is allowed for only ACC 444 or ACC 401 or ACC 401 OR PRE 1 of (ACC 241, ACC 271, ACC 242) AND 1 of (ECN 231, ECN 221) OR PRE 1 of (ACC 241, ACC 271, ACC 242) AND 1 of (CIS 235, CIS 236) AND 1 of (CIS 231, CIS 221) AND PRE 0 of (ACC 401) AND 0 of (CIS 401)</td>
<td>ACC 444; Prerequisite(s) with C or better: Accountancy BS major; ACC 241, 242, or 271; CIS 360; ECN 221 or 231 OR Computer Information Systems major; ACC 241, 242, or 271; CIS 235, 236 or 237; ECN 221 or 231; Credit is allowed for only ACC 444 or ACC 401 or ACC 401 OR PRE 1 of (ACC 241, ACC 271, ACC 242) AND 1 of (ECN 231, ECN 221) AND 1 of (CIS 235, CIS 236) AND 1 of (CIS 231, CIS 221) AND PRE 0 of (ACC 401) AND 0 of (CIS 401)</td>
<td></td>
</tr>
</tbody>
</table>
If a course's enrollment requirements have changed, its prerequisites may no longer be met on the major map. This report can help bring these potential concerns to light so that units can be proactive in resolving any enrollment requirement issues. It is still suggested that the enrollment requirements for all courses on major maps are reviewed, but this report highlights courses that may require extra attention.

There are four options when enrollment requirements are not met:

1. Re-sequence the courses on the major map
2. Add the missing prerequisite to the major map in an earlier term
3. Remove the course from the major map
4. Modify the prerequisites for the course via a Modify Course Form in Curriculum ChangeMaker (please see the Curricular Deadlines document)

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Other Major Map Requirements and Guidelines

- The philosophy behind the major map is to create the **ideal** path to graduation for an incoming freshman.
- **Freshman Year Courses**: Identify courses in which freshmen are not being successful and remove them from initial semesters.
- **Check validation on checksheet**: The curriculum checksheet should have the same categories and courses as the graduation audit, and should only include requirements that are present in the terms. Review the curriculum checksheet to make sure it says "Map is Valid" in the green bar at the bottom:

  ![Map is valid]

If your map does not validate, you'll see the validation errors in red. Below is an example of several common validation errors. Make the necessary adjustments so that both the checksheet and sequencing pages are validated.

- **Clean up checksheet**: If a requirement is not fully sequenced or is over-sequenced, the "not sequenced" symbol and credits countdown help you identify what needs to be corrected so that the
checksheet and the terms match. Your checksheet must reflect the current requirements, as this affects transfer maps and graduation audits. See the Sequencing section for more information.

- **Preview the major map in Degree Search:** This is what students will see when they view the major map in Degree Search. Hover your mouse over each course.
  - This helps ensure that the course information is popping up. If nothing pops up, check the PeopleSoft course catalog to see if this course may have changed numbers, subjects or is now inactive. Update the major map accordingly.
  - It also allows you to verify that the correct number of hours are listed in the term (see screenshot below).

![Screenshot of Degree Search]

- **Make sure that everything is linked:** Check that every requirement is either linked to the course catalog or to the track groups below. If it is linked, it will appear as a maroon color. If it is unlinked, it will be black.
  - If a track/group requirement is unlinked, go to the curriculum checksheet and click edit, then ensure the box "Link to track group" is checked.
**Include ENG completion check:** Term 2 (Term 2B for Online) should have a completion check for ENG 101 OR 105 OR 107. If the ENG courses requirement was critical in terms 1 and 2, then the completion check should *not* be critical. If the ENG courses requirement was not critical, then the completion check must be critical.

- Term 3 may also have the "Complete First-Year Composition" check, but this is not required.

- **Include Math completion check:** Term 3 (Term 3B for Online) should have a math completion check. Again, if at least one MA course was critical in terms 1-2, this completion check should not be critical. If none of the MA courses were critical, this completion check should be critical.

- **Include C, G, and H completion check:** Term 6 (Term 6B) for Online) should have a necessary completion check for the General Studies awareness areas (Cultural, Global, and Historical). This should be built as a single check with multiple requirements.
• **Standard notes in term 1:**
  - An SAT, ACT, Accuplacer, IELTS or TOEFL score determines placement into first-year composition courses
  - Mathematics Placement Assessment score determines placement in mathematics course
  - ASU 101 or college-specific equivalent First-Year Seminar required of all freshman students

• **Career notes:** As appropriate to the sequence and requirements of your degrees, please add at least one career note per academic year in the terms. See [https://catalog.asu.edu/career_integration](https://catalog.asu.edu/career_integration) for more information.

• **Internship option:** If your degree doesn't already include an internship, we recommend that you "OR" an internship with a university elective somewhere in Terms 5-8.

• **No omnibus numbers in major maps:** No omnibus numbered courses (194, 294, 394, 494) with specific topic titles should be required in the terms. To include an omnibus topic in a future year, it needs to be submitted for a permanent number in Curriculum ChangeMaker before the deadline (see the [Curricular Deadlines](https://catalog.asu.edu/career_integration) document). Omnibus topics may be included in track/groups so long as they are options and not specifically required.

• **No upper-division courses in Terms 1-4 (1A-4B for online maps):** Please ensure that there are no upper-division courses in these terms, as this can cause issues for our transfer students. If it is unavoidable, please provide a justification statement in the communication notes when submitting the major map.

• **Check that courses have the right number of hours:** The hours should be in multiples of three whenever possible. If a course says 6 hours, it should say, "Complete 2 courses". If a course says 9 hours, it should say, "Complete 3 courses".

To change the text above the requirement, within the term, double click on the requirement. The following pop-up will appear. Then just select the number of courses from the drop-down and click add/update.

• **Align major map to graduation audit:** Please check that the courses and requirements in the terms truly reflect the requirements of your degree. The major map is a contract with the student, and as such, the major map **must** match the graduation audit. This especially is crucial with respect to the eAdvisor Tracking Tool and transfer maps.
• Remember that if there is an Online version of a degree program, the same graduation audit is used for the students. Any specific requirements on a ground major map must also be specific requirements on an Online major map.
• All courses on Online maps must have the oCourse attribute.
• Online map track/groups lists may be a subset of options from the ground map in order to only include those courses that are oCourses.

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Major Maps and eAdvisor Tracking Tool

The way you design your major map and the requirements within it can directly impact the eAdvisor Tracking Tool. Here are some things to keep in mind as you go along:

1. The major map represents the ideal path for students to complete the major in eight terms - not the "possible" path for every student. As a result, we have the following recommendations:
   a. **The first term math should be your preferred math.** Do not build in prerequisites. For example, if you want the students to take MAT 170 first, do not also list MAT 117 (one of the prerequisites). Your college or school's DARS encoder can work with you to encode the prerequisites behind the scenes. This will help you see in the eAdvisor Tracking Tool that the student is progressing towards completion of that requirement but has not successfully done so yet.
   b. **Do not follow a noncritical course with a critical completion check.** Completion checks are checked at the end of the term. As a result, this doesn't allow us to determine if the student is enrolled in the right courses at the start of the term, and a student could potentially fall behind two semesters before displaying as "off-track". In the example below, if the student doesn't sign up for ACC 242 or fails it, they won't show up as "off-track" until the end of term 4.
2. The way General Studies requirements are designed can have a significant impact on tracking student success. Here are a few things to avoid:

<table>
<thead>
<tr>
<th>Things to Avoid</th>
<th>Solution</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>HU or SB</td>
<td>List one or the other. Make sure your graduation audit and major map match. If coursework is predominantly HU, indicate that the student will need an SB and vice versa. Also, please only indicate lower division if in fact a lower-division course is required. If it is either upper division or lower division, leave off &quot;lower division.&quot;</td>
<td>To help ensure that a student earns enough hours of both designations, especially when this requirement repeats in more than two terms.</td>
</tr>
<tr>
<td>Splitting apart UD</td>
<td>Keep UD HU or SB together. Only split them apart if you prefer one to taken in a particular term.</td>
<td>In Udirect there is a prebuilt UD HU or SB requirement. If they are split, we have to encode a special requirement. Be intentional.</td>
</tr>
<tr>
<td>HU or SB</td>
<td>List one or the other. Make sure your graduation audit and major map match. If coursework is predominantly HU, indicate that the student will need an SB and vice versa. Also, please only indicate lower division if in fact a lower-division course is required. If it is either upper division or lower division, leave off &quot;lower division.&quot;</td>
<td>To help ensure that a student earns enough hours of both designations, especially when this requirement repeats in more than two terms.</td>
</tr>
<tr>
<td>Scenario</td>
<td>Instructions</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>A list of courses OR'd with a General Studies course</td>
<td>Build the major map with the ideal course requirement. If PSY 101 or SOC 101 is the ideal requirement, list these. If these are just recommendations and not required, build the requirement as a generic SB and add them as true recommended courses.</td>
<td>In Udirect it is not possible to build this and truly check for the specific course requirements and the General Studies requirement. This can also cause issues with enrollment predictions.</td>
</tr>
<tr>
<td>An elective paired with a General Studies. (Ex. Elective or L)</td>
<td>See previous example. What is the ideal path? List the ideal path on the major map.</td>
<td>Again, the eAdvising Tracking Tool cannot accurately check for both of these at the same time.</td>
</tr>
<tr>
<td>Overloading on generic HU and/or SB requirements</td>
<td>Please ensure that your major map contains the appropriate amount of General Studies. The major map should require 15 total hours of HU/SB.</td>
<td>Including superfluous generic HU or SB requirements on a major map leaves blanks on the eAdvisor Tracking Tool, as the audit is only looking for 15 hours of this requirement.</td>
</tr>
<tr>
<td>Listing (SQ OR SG) before SQ</td>
<td>If you do not require specific science courses, please ensure that you list the SQ requirement first:</td>
<td>The SQ requirement fills first on the audit. To avoid blanks on your eAdvisor Tracking audit (caused by courses falling in out of order), you want to list SQ first on the major map.</td>
</tr>
</tbody>
</table>
Splitting Out Awareness Areas (C, G or H)

As much as possible, it is recommended that the awareness areas are paired with either a HU or a SB:

- Humanities, Arts and Design (HU) AND Historical Awareness (H)
- Social-Behavioral Sciences (SB) AND Global Awareness (G)
- Social-Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C)

Very few courses are only C, G, or H. Most of these courses also fulfill the HU or SB requirement. If these are split out, the same course will fall in for two separate requirements on the tracking audit. Try to avoid splitting these as much as possible.

3. Here are a few other miscellaneous things to avoid as they can cause issues with the eAdvisor Tracking Tool. These include:

<table>
<thead>
<tr>
<th>Things to Avoid</th>
<th>Solution</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two of the same requirement in one term, but one is necessary and the other is not. (This also applies to critical requirements.)</td>
<td>A requirement that repeats in a term can either be listed as necessary or not listed as necessary, but it cannot be one of each.</td>
<td>Cannot drag the same requirement into a term more than once, so it has to be combined.</td>
</tr>
<tr>
<td></td>
<td>Instead of listing the same requirement twice, you should combine these two 3 hour requirements into one 6 hour requirement.</td>
<td></td>
</tr>
<tr>
<td>Lower division courses listed in track/group where only upper division courses are supposed to be taken</td>
<td>If you specifically require upper-division courses, please only list 300- or 400-level courses in the track group.</td>
<td>The student cannot truly take those lower-division courses and still meet the requirement. Also, the graduation audit will not include those lower-division courses.</td>
</tr>
</tbody>
</table>

- Technical Elective
- Technical Elective
- Technical Electives
  - MAE 2122: Engineering Mechanics
  - MAE 2131: Solid Mechanics
  - MAE 2134: Computer-Aided Engineering 1
  - CHM 302: Environmental Chemistry
  - EEE 463: Electrical Power Plants
  - MAE 434: Internal Combustion Engines
### Splitting apart electives into less than three hours

As much as possible, try to keep electives in blocks of three credit hours.

Blanks will display on the tracking tool. Pretend the student needs 3 hours of electives. The major map has 1 hour of elective in Term 2 and 2 hours of elective in Term 4. On the eAdvisor Tracking Tool, if the student takes a 3 hour elective first, the course will fall into Term 2. Term 4 will not get a course because the requirement is completed on the audit (3 hours were taken).

<table>
<thead>
<tr>
<th>Complete 2 courses:</th>
<th>6</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related Area Course</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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### Submitting Completed Major Maps

If a major map needs to be returned to the previous workflow level for any edits, you can do so by going to the bottom left of the screen. A black button will be labeled with "Return to Department", "Return to College", etc. as appropriate.

If the major map is valid and has passed your review, it will indicate so in green bar at the bottom of the map.

Map is valid

Now it can be submitted to the next review stage. Enter any comments/communication notes that are needed. The department level will submit to the college level for review, and the college level will submit their approved review to the Office of the University Provost. Once approved by the Provost's Office, the map will be submitted to the DARS team before being marked as Completed.

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### Minors and Certificates

**Overview**
The biggest difference between major maps and minors/certificates is that there's no sequencing. The curriculum checksheet itself populates the information in Degree Search. Minors and certificates also use categories to validate that the minimum number of hours and grade requirements are present. Otherwise, the functionality remains the same with just a few business practice differences.

Minors and certificates are found with their own expandable/collapsible "drawer" on your college's page in BAMM. In order to make edits, they also have to be locked by a specific user working on them, to ensure no one else can be making changes at the same time.

The checksheet for minors/certificates is divided up into three main sections: Program Requirements, Course Requirements, and Additional Requirements. Note that things like marketing text, a full program description, and enrollment requirements are not housed in BAMM, but on the catalog page. The "Preview in Degree Search" button will only show you how the BAMM portions will display in Degree Search.
**Program Requirements**

This section is typically a note that briefly describes the overall requirements of the minor/certificate, such as how many hours students need to complete and if there is a minimum grade requirement involved. If any edits are necessary, left-click on the note you need to edit. If any of the information is no longer valid, you can delete the note by clicking on the gray X to the left.

If you would like to add a new note, click the "Notes" button under this section to add the appropriate information.

**Course Requirements**
The next section of your minor/certificate checksheet is a list of the required courses or electives that need to be taken. The "Add Category" button is how you add and edit your categories.

**Adding/Editing Categories**

1. Click the "Add Category" button under Course Requirements.

![Course Requirements](image)

2. Click on "Create a new Category" and the pop up window will expand.

![Add Category](image)

3. In the "New Category" box, enter the category title only. Please do not use colons. If you have a list of many course choices, you may include text in parentheses such as: "Energy Electives (choose two)"

4. In the "Credit hours – Minors/Certs only", enter the total credit hours of courses students need to take underneath this category.
   a. Note: The system will use whatever number is entered into this box to validate the map for the minimum required credit hours.
   b. If your category is a section header, you can enter "0" in the credit hours field and the "0 credit hours" won't appear on Degree Search.

5. Click Submit.
6. A message briefly appears that indicates the category was added to the list. Now choose the new category from the dropdown box and click Submit.

Your new category will appear in the checksheet. You can drag and drop your categories to re-arrange them anytime. Dragging a category will keep all the courses underneath it.

You can edit the name or credit hours of existing categories anytime.

1. To edit the category, click the "Add Category" button.

2. In the pop-up window, choose the category you want to edit in the dropdown box.

3. Click on "Edit an Existing Category".
4. You can edit the category name, or the credit hours required underneath it, or both. Click Submit and the page will refresh with your new category information.

Adding/Editing Requirements

Most course requirements for minors and certificates will be entered one at a time using the Single Course option. No AND / OR connectors should be used. This will make the courses appear in Degree Search as an easy-to-read list.

The only connector that might be appropriate is the little "or", if there is truly an option in which course to take. This is common with crosslisted courses. Otherwise, proceed with the steps below to add courses to minors and certificates.

1. Under the appropriate category, click the "Add Requirement" button, then the "Course" button.
2. Leave the Requirement Type as "Single Course" and enter the course information.

![Add Course Requirement](image)

3. Click Submit.
4. Repeat steps 1-3 for all courses.

Remember to include a minimum C grade on courses that require it. Also, please remember to check the catalog changes by clicking on the "Check catalog and prerequisites changes" link. If any of your existing requirements have changed (new prefix, new number, new GS designation, inactivated course, etc.), please edit that requirement accordingly. See the full section on the catalog changes report for more information.

**Additional Requirements**

The last section on minors and certificates is for "Additional Requirements". Using this section is completely optional. It already includes a default, required note to students that additional prerequisites may be required in order to enroll in courses for the minor/certificate.

Appropriate notes in this area might be suggestions for language proficiency or study abroad recommendations.

**Tips and Final Submission**
A few tips to keep in mind while working on your minor/certificate checksheets:

- Do not use colons in your category names.
- If you delete a category that has requirements underneath it, all the requirements will also be deleted.
- Make sure all the courses are in alphanumeric order within each category.
- Check the bottom of the screen to check your program map validation. If your minor/certificate is not validated, the errors will appear in red:

Validation
- Total hours should be at least 15 (current 9)
- Upper division hours should be at least 9 (current 6)

Once you have corrected the errors and the map is valid, the validation message will change to green:

Map is valid

At the very bottom right of the screen, there's a button to submit the major map to the next review level.

When you click on "Submit Major Map", a pop-up window will appear where you should include any comments/communication notes or items you updated. You also need to check the box verifying that you've made all known catalog changes. Once you check the box, you may submit your map to the next review level.
Would you like to add a comment? (optional)

Check catalog and prerequisites changes here

☑ Yes, I have checked the catalog and prerequisite changes and made all of the known updates at this time.

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