

# Course Selection



**Course enrollment starts August 20, enrollment should be finalized by Monday, September 9.**

All students need to have an approved [Program of Courses](#) form turned in to the MEng Mailbox, 322A Upson by **Monday, September 9.**

A good place to start course selection is to review the [research focus areas](#) available in the department, and think about what your focus is going to be. The program is flexible so you can tailor course selections to your interests within the program requirements. Your project advisor may have course suggestions/requirements as well.

Keep in mind you have the option to go to more classes than you expect to take. Some may turn out to have too much overlap with what you have taken, are at too high a level, or not really what you thought they would be. It is easy to drop a class up to the 7th week but you cannot add after the first 3 weeks. And it can be very hard to catch up if you were not sitting in on a class.

When choosing courses you should be choosing for the **entire academic year**, you can modify your selections later but you should have a plan for your full program of 30 credits.

The requirement is 12 credits in MAE course work, excluding project and colloquia (seminars). You are not limited to classes in MAE you can choose classes from other departments/disciplines, you can find course descriptions in the [Courses of Study](#). Classes should however be technical in nature, 1 or 2 non-technical classes may be approved if they closely relate to your program goals.



**MAE Course Offerings for 2018-2019 by focus area**

Courses are listed by general subject area, you are free to mix and match as best fits your needs.

## Course levels

5000 level intended for MEng  
6000 level intended for PhD and interested MEng  
4000 level intended for senior undergraduates but a very limited number of 4000 level classes can be taken if you have not had any background in the areas. Example: Introduction to Nuclear Science. Need to be petitioned to be included in your program. [petition](#)

## Recommendations by Focus Area:

These are recommendations not requirements

[Astronautics](#)  
[Biomechanics](#)  
[Dynamics, Systems and Controls](#)  
[Energy and Sustainability](#)  
[Fluids and Thermal Systems](#)  
[Materials, Solid Mechanics or Structural Mechanics](#)  
[Robotics](#)

## Note:

### M&AE Courses:

If you are having difficulty registering for a MAE course contact Kae-Lynn Wilson ([kbw28@cornell.edu](mailto:kbw28@cornell.edu)), if the course is oversubscribed please let Matt/Judy know

### Systems Engineering Courses:

If you are having difficulty registering for a System Engineering Course (SYSEN or MAE 5910, 5920) contact Marcella P. Purcell ([mk594@cornell.edu](mailto:mk594@cornell.edu))

## Colloquium

Recommended as it gives you some breadth in a variety of areas. Generally weekly talks by outsiders, very simple assignments and one credit, many are S/U grading.

## MAE

MAE 7999 MAE Colloquium (Fall, Spring)  
MAE 5459 Energy Seminar I (Fall)  
MAE 5469 Energy Seminar II (Spring)  
MAE 5949 Enterprise Engineering Colloquium (Fall, Spring)

## Other

BME 5010 - Bioengineering Seminar (Fall, Spring)  
BME 7900 - Biomedical Engineering Seminar (Fall, Spring)  
CHEME 5990 - Medical and Industrial Biotechnology Seminar (Fall, Spring)  
CEE 6020 - Seminar - Water Resources & Environmental Engineering (Fall)  
CEE 6021 - Seminar: Environmental & Water Resources Systems Analysis (Spring)  
ORIE 9000 - ORIE Graduate Colloquium (Fall, Spring)  
CS 7790 - Seminar in Artificial Intelligence (Fall, Spring)

## Entrepreneurship

If you are interested in taking an entrepreneurship class NBA 5070 - Entrepreneurship for Scientists and Engineers (Fall, Spring, 3 credits) is the course targeted to MEng students. **Do not register in MAE 4610 this class is intended for undergrads and will not be approved as part of your program.**

**Professional Development** (Business, Management, Leadership, Entrepreneurship)

## Design

## MEng Project

Most often MEng Projects will fall under MAE 6900, when registering you should register under the section for your project advisor/project team and choose the number of credits you are doing for the current semester, ie. 8 credit project completed over 2 semesters, you should register for 4 credits in Fall and 4 credits in Spring.

Some students may choose projects outside MAE and you should register for the class your advisor designates, ie. BME 5910 or 5920 for a Biomedical Engineering Project.

### Program of Courses

All students need to have a [Program of Courses](#) form turned in to the MEng Mailbox in Upson 322A by **Monday, September 9**.



If you make any changes to your Program of Courses after it has been turned in you will need to update the form, this is a graduation requirement.