Study Abroad - Aerospace and Mechanical Engineering

The AME Department encourages its students to take advantage of the many programs that are offered through USC’s Office of Overseas Studies. Please review the following guidelines to better understand how studying abroad can impact your course plan.

Sophomore Year

In terms of course sequencing, it is recommended that students interested in studying abroad should do so during the Spring of their sophomore year in order to minimize the impact on their course plans and degree completion dates. However, certain programs (like South Africa and Ireland) require junior standing. Please consult the Office of Overseas Studies to confirm your eligibility.

Junior Year

Students are required to complete the AME 341 (Mechoptronics) series in their junior year. Please remember that AME 341a is offered only in Fall and AME 341b is offered only in Spring. Both are pre-requisites to AME 441a (Senior Projects Laboratory), which is offered only in Fall. These classes are degree requirements and students must complete them in this sequence.

However, there are certain instances when a student will be allowed to enroll in AME 441a without having first taken AME 341b.

Approval is contingent upon the following:

1) A grade of B or better in AME 341a
2) Consider if you have the technical ability and background to successfully complete AME 441a. You will be putting yourself at a disadvantage if you are not comfortable with designing and conducting your own experiment. Please note that AME 441a requires a lab partner and it is best if both parties can contribute equally to the project. Experience in any of the lab groups (Aerodesign/Rocket Lab) is helpful, but the following describes the skill set needed for AME 441a:

   a. Mechanical/structural design and fabrication of your apparatus.
   b. Complete schedule including significant milestones and time for completion.
   c. Proper sizing of the apparatus (e.g. ability to withstand forces, preliminary stress analysis).
   d. Determine what data needs to be recorded and how you plan to do so.
   e. Proper sizing of all instrumentation and sensors (e.g. adequate range for pressure transducers, strain gages, etc.)
   f. Record meaningful data. Understand what is important before you begin experimentation.
   g. Communicate results: biweekly progress reports, oral presentation and final technical report.

If you are not comfortable with the above and/or you do not meet the requirements, but are still interested in studying abroad, please understand that you may need to extend your time at USC by at least one semester (if not two) in order to complete your degree.

However, if you believe you satisfy the above requirements, then you will need to arrange a meeting with either Dr. Charles Radovich (radovich@usc.edu) or Dr. Yann Staelens (staelens@usc.edu) to discuss the possibility of taking the courses out of sequence and to be given formal approval.
**Senior Year**

It is possible for students to study abroad their senior year, but careful course planning is necessary. Also, it is advisable that students plan to go abroad during the Fall rather than Spring because the majority of required USC coursework is offered only in Spring. Please consult with the Office of Overseas Studies to determine the appropriate programs. For students who pursue this option, there is a possibility that they will miss out on the commencement ceremony because Spring programs tend to end in June.

**What Next?**

If you have decided that you would like to study abroad, please be prepared to do some research to present to your AME Advisor. Recommended procedures are listed below:

1) Choose a program to apply to – refer to the guidelines set forth by the Office of Overseas Studies to determine that you are eligible for the program based on class standing and GPA.

2) Take a look at your STARs report to see the classes you still need to take. You can also take a look at your most recent course plan and compare that with the classes offered at the institution abroad. Remember that technical electives (most upper division (300-499) Engineering, Physics, Chemistry, Math courses) are pretty flexible, so feel free to branch out a bit. Please don’t forget to check the pre-requisites for the abroad classes to make sure you have satisfied them.

3) Essentially, you want to take courses which “match” the classes you will take at USC. Do your research beforehand! Before you ask your AME Advisor to endorse your Study Abroad Advising Record, you should be ready to present the course descriptions of the classes you plan to take and its possible USC equivalent course name/number. Please use the worksheet provided.

For links to the study abroad institutions (so you can see what classes they are offering), please click here: [http://dornsife.usc.edu/Engineering-overseas/](http://dornsife.usc.edu/Engineering-overseas/)


***Class offerings at abroad institutions are subject to change, so please keep in contact with your AME Advisor to determine appropriate coursework.***