

# A Guide to Studying Abroad as an Engineer

*By Engineering Abroad Mentors Ethan Peng & Nicole Malandrinos*

## Getting started:

1. **Plan early!** It takes approximately 5 months to get **everything** sorted.  
**Different programs have different deadlines. Don't miss out!! (Go to <http://www.cie.uci.edu/> and click on the bottom right)**
2. Go to the UCI Study Abroad Office or website <http://www.cie.uci.edu/> and click "Want to go abroad-Start Here."
3. Create a profile and click on the tabs to learn about the various program options (UCEAP, IOP, etc).
4. Choose a program/University (Check out "Suggested Engineer Programs" and the second and third pages of this guide for ideas).
5. Pick the courses you would wish to take.

## To get classes taken while abroad approved (GE and Engineering courses):

1. Check out the host university's course website.
2. Compare the abroad engineering course description to a UCI engineering course.
3. If you think you can get engineering course credit with a course taken abroad, send an email to your engineering counselor or visit the Engineering Undergraduate Student Affairs Office (**305 Rockwell Engineering Center**).
4. Present the engineering counselor the **abroad and UCI course names, abroad and UCI course descriptions, and abroad course websites** (if possible, also include the **syllabus** of each course taken while abroad).

To see the list of engineering courses that are offered each quarter visit <http://plaza.eng.uci.edu/teaching-plan/2016-2017>

Check out Degree Flow Chart to have a general idea of what classes you need to take for each quarter. Here are 2 examples:

Civil: <http://plaza.eng.uci.edu/sites/default/files/flowcharts/16-17/civil-general-frosh.pdf>

Mechanical: <http://plaza.eng.uci.edu/degree-program/mechanical>

5. Once you have chosen your courses, go back to the UCI Study Abroad page and print/turn in your "Pre-Application" at the UCI Study Abroad Office
6. Once you have been approved for the program, the UCI Study Abroad Office will then give you the **real** application for that University.
7. Follow the instructions of that application and enjoy your study abroad experience!

## When you return from studying abroad:

1. The host University will automatically send your grades to UCI.
2. Submit a request to update your degree audit.
3. If there is an issue, stop by the Engineering Undergraduate Student Affairs Office (**305 Rockwell Engineering Center**).

## Things to consider when picking courses:

- Sometimes host universities change course names, numbers, or combine one class with another class. It is possible that the Suggested Engineering Abroad Programs and MyEAP Course Catalogs will contain outdated course information so double check.
- Make sure you know which semester/dates the host university will offer the courses you need.
- Know the engineering prereq classes you must take while abroad so that when you return, you won't be behind. (Example: If you are a mechanical engineer and you want to study abroad your junior fall quarter, you must take a course that is similar to MAE 130A so that when you come back in the winter quarter, you can take MAE 130B.)
- If you do need to catch up or want to get ahead, it may be possible to take some of the engineering classes during the summer (be sure to know which ones are available in the summer) or take an extra class another quarter.

**Ethan's Experience:** Take 2 to 3 engineering courses and 1 or 2 GE courses while you are abroad. Try to join an engineering club/society and explore the country as much as possible. While I was at UNSW, I took 2 engineering courses, 1 Aboriginal Australia, and 1 Australian history. I joined an engineering DIY club at UNSW called Create. Create offers a lot of workshops as well as hands-on projects similar to engineering senior design. Because of this club, I was able to learn how to proficiently use Arduino (which helped me significantly for MAE 150L and MAE 106) and build my own quadcopter (which got me a summer job building and teaching people how to build drones). One of the engineering courses I took was about solar energy. UNSW is ranked as one of the top universities for photovoltaic and renewable energy. It was rewarding to have access to state of the art labs and do a project to design and pick solar panels for an apartment in Beijing and make it self-sustainable. I was able to get credit for this class as a Technical Elective).

	<b>Things to Consider</b>	<b>For Mechanical Engineers</b>	<b>For Civil Engineers</b>	<b>Engineer Mentor's suggestions</b>
If you want to study abroad your sophomore year:	-Make sure that you are aware which are prereq courses and which ones can be taken during the summer or a different quarter. -Be aware of physics and math courses.			
If you want to study abroad your junior year:		-For Fall abroad, mechanical engineers must take course similar to MAE 130A because you will be taking MAE130B in the winter quarter.  -For winter and spring abroad, mechanical students must take courses similar to MAE147, MAE 106, MAE 145, etc or take it senior year and take MAE 130B, MAE 156, MAE120 during the summer. (base on the Summer courses offered in 2016)	- For Fall abroad, civil engineers should find courses similar to CEE 150(Mechanics of Materials) and CEE 170(Fluid Mechanics) because you will need 150 as a prereq for 151A (Structural Analysis) during winter quarter which is a prereq for 151C (Reinforced Concrete Design) during spring quarter. Winter quarter students will take CEE 171 (Water Resources Engineering) which 170 is the prereq	-For mechanical and civil, you can take abroad courses that will fulfill 4 <sup>th</sup> year technical engineer electives and take some junior courses during senior year (Basically switch off).
If you want to study abroad your senior year:		-You must take 3 units of senior design to graduate. The suggestion is to study abroad during the fall and then come back during the winter and spring quarter to obtain the 3 units.	-You must specialize and take 6 units of senior design.	- If possible, try to take senior design units junior year so you can get it out of the way.
If you want to study abroad during the summer:	-Summer time is usually the most convenient way for engineers to go abroad without falling behind but it is more expensive.		-There are many internship opportunities in the UCDC program.	-There are a few summer programs (England, Ireland, etc) that allow you to complete your physics 7 series  -Impress companies by doing research or internships abroad (Check out the China, Japan, etc programs)