Architectural Engineering Education Abroad Guide

Education Abroad Quick Facts

CU Boulder Education Abroad offers over 400 programs in over 70 countries! You can go abroad for a semester, year or summer (the latter ranges from 2-12 weeks). In addition to taking classes abroad, you can choose an internship or volunteer program (or combine classes with internship or volunteer options)! Please visit the following web pages for more information and to get started.

- To start researching options and to learn about next steps, visit the Getting Started page.
- Academic Information provides more details about courses, credits, and grades.
- The Finances page provides extensive information regarding program costs, billing, financial aid, and scholarships.
- Answers to most other questions not answered in this guide.

General Advice for AREN Students Going Abroad

- Engineering courses offered through select education abroad programs have been pre-approved to substitute for core courses in the AREN curriculum. Please keep in mind that all of the approved courses for a specific program may not be offered during the semester when you are studying abroad.
- Upper division courses in a technical field (math, science, engineering, etc.) may be approved for credit as General Technical Electives. Your academic advisor can assist you in identifying classes that would be eligible for that designation.
- Courses focused on culture, literature, historical context, etc. are eligible for approval as Humanities & Social Science Electives. To request pre-approval for a specific course, please email a copy of the syllabus to your academic advisor. You can also consult the list of pre-approved classes that correspond to Engineering Humanities & Social Science requirements. Visit the pre-approvals list and click on the tab for “Engineering — Humanities & SS.”
- Remember to first check the pre-approvals list with over 10,000 courses for various degree requirements.

Getting Courses Approved

- Remember to first check the pre-approvals list with over 10,000 courses for various degree requirements.
- To submit additional major/minor courses for review, you will work with your Academic Advisor. View more information about the major/minor approvals process.

Planning and When to Go

| First Year | • Start researching education abroad programs and talking with your academic advisor. |
| • If you are planning to go abroad for a full semester and would still like to graduate in four years, you will need to make sure that you’re staying on track with all of your core |
coursework and that you have a good understanding of the department’s prerequisite structure. That becomes less important if you are on a five year plan or would like to go abroad over the summer, although it is still helpful to understand how participating in education abroad will impact your course selections.

- If possible, save some Technical Electives or Humanities/Social Sciences courses to take when you go abroad.

### Sophomore

- If you plan to go abroad during your sophomore year, be aware that you may miss some prerequisite coursework unless you are able to find appropriate substitutes through your education abroad program. Missing prerequisite coursework may extend your time to graduation, depending on your individual circumstances and your choice of concentration. Some courses may be available during the summer before your education abroad experience.

#### Fall Semester:

- APPM 2350 Calculus 3 for Engineers – particularly important for students interested in Structures, Mechanical Systems or Electrical/Lighting Systems. Take this course in the summer before studying abroad (or while studying abroad) if possible. Offered fall and spring.
- AREN 2110 Thermodynamics – particularly important for students interested in Mechanical Systems. Offered fall and spring.
- AREN 2050 Building Materials and Systems – particularly important for students interested in Mechanical Systems. Offered fall only.
- CVEN 2121 Analytical Mechanics 1 (Statics) – particularly important for students interested in Structures. Offered fall and spring.

#### Spring Semester:

- APPM 2360 Linear Algebra & Differential Equations – particularly important for students interested in Lighting/Electrical Systems. Take this course in the summer before studying abroad (or while studying abroad) if possible. Offered fall and spring.
- COEN 1300 Engineering Computing – particularly important for students interested in Electrical/Lighting Systems. Take this course prior to studying abroad. Offered fall and spring.
- AREN 2120 Fluid Mechanics & Heat Transfer – particularly important for students interested in Mechanical Systems. Offered spring only.
- CVEN 3246 Intro to Construction – particularly important for students interested in Construction, but this course can be taken in the fall of your junior year without affecting any subsequent coursework. Offered fall and spring.
- CVEN 3161 Mechanics of Materials 1 – particularly important for students interested in Structures. Offered fall and spring.

- Consider a summer education abroad program between your sophomore and junior years, especially if it’s important for you to graduate in four years.
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### Junior
- Fall semester of the junior year is a very challenging time for AREN students to go abroad, as this is when you will be taking our “fundamental” courses and choosing your area of concentration. This is especially true for students who have any interest in Electrical/Lighting Systems or Mechanical Systems, as their fundamental courses are offered fall only.
- Spring semester of the junior year is generally the best time for AREN students to go abroad, as you have completed all of the required prerequisite coursework and have more flexibility in your course options. You also have the spring semester of your senior year in which to take any spring-only courses that you miss while studying abroad. However, each student’s situation is different, and depends on whether you’re “on track” with the standard curriculum and what you choose for your proficiency/concentration courses.
  - Construction – plan to take AREN 4506 and CVEN 3256 in the fall of your senior year, and AREN 4606 in the spring of your senior year. You must have CVEN 3246 successfully completed prior to studying abroad (or take it while abroad) to graduate in four years.
  - Lighting/Electrical Systems – plan to take AREN 4570 in the fall of your senior year, and AREN 4550 and 4560 in the spring of your senior year. You must have AREN 3540 and ECEN 3030 successfully completed prior to studying abroad in order to graduate in four years.
  - Mechanical Systems – plan to take AREN 4890 in the fall of your senior year, and AREN 4110 and 4830 (Computer Simulation of Building Systems) in the spring of your senior year. You must have AREN 3010 successfully completed prior to studying abroad (or take it while abroad) in order to graduate in four years.
  - Structures – plan to take CVEN 4555 and 4161 in the fall of your senior year, and CVEN 4545 in the spring of your senior year. You must have CVEN 3525 Structural Analysis successfully completed prior to studying abroad (or take it while abroad) in order to graduate in four years.
- The summer between junior and senior year is also a great time to participate in a Faculty-Led Global Seminar, other summer education abroad program, research program offered through education abroad, or an international internship.

### Senior
- AREN students are not able to go abroad during their final two semesters, due to the two-semester senior design sequence (ARCH 4010 and AREN 4317). However, seniors are still eligible to participate in summer programs during the summer after they complete senior design.

### Recommended Programs
(see specific course approvals on pre-approvals list)

- **University of Wollongong; Australia**
- **Technische Universitat Darmstadt; Germany**
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University of College Dublin; Ireland

University of Canterbury; New Zealand (ISA)

National University of Singapore; Singapore

Faculty-Led Global Seminars and other summer programs