# Study Abroad in

# Computer Science & Engineering

Department of Computer Science and Engineering, UC San Diego Jacobs School of Engineering Engineering Building Unit 3B, Room 1200D



http://www-cse.ucsd.edu/

Unique opportunities to fulfill your computer science prerequisites or college GEs are available at many host institutions worldwide through the University of California's Education Abroad Program (EAP), UCSD's Opportunities Abroad Program (OAP), or UCSD's Global Seminars (GS). Every student in the Department of Computer Science and Engineering should consider an international educational experience through study abroad.

"I had a wonderful experience studying abroad . . . I would recommend the semester that starts in the summer because only one quarter would be missed at UCSD ... but I am going to graduate on time in the spring. It is an amazing experience that I would highly recommend." --Ethan Mosbaugh, Computer Engineering Major, '06

## Why study abroad?

An international educational experience will provide you with the necessary skills to work effectively in industry, academia, and the public sector.

Consider your value to an employer or a graduate program if you've:

- Observed and experienced first hand the impact of technology in another country
- Participated in a different educational system and gained a new cultural perspective
- · Increased your proficiency in another language
- Improved your critical thinking skills
- Expanded your worldview by experiencing another culture firsthand
- Developed self-confidence and independence
- Prepared for a career in an internationally competitive world
- Enhanced résumés and/or applications for graduate school

#### What are my First Steps?

- 1. Attend a First Steps meeting, sign up at http://pao.ucsd.edu
- 2. Visit http://programsabroad.ucsd.edu/ to find out more!
- 3. Start your research in the Programs Abroad Library
- 4. Meet with a Programs Abroad advisor
- 5. Complete your Academic Planning Form
- Schedule a visit with Paul Kube, the advisor in CSE (kube@cs. ucsd.edu)
- 7. Visit your college advising office

# Requirements

Please see the advisor in the Department of CSE for specific requirements regarding study abroad and your major. The CSE advisor has compiled extensive course descriptions, created four year plans, and has lists of previously approved CS courses from many host institutions to assist you in your planning.



University of Sydney, Australia

# What classes should I take?

Careful planning is the key to success! The EAP Course Catalog (https://myeap.eap.ucop.edu/Galileo/Service/CourseCatalog/
CourseCatalog.aspx) lets you search courses taken by UC students over the last 5 years. The department's undergraduate advisor will help you select courses that can meet major and minor requirements.

EAP and GS students automatically earn UC credit for the work they complete abroad. However, application of credit to major requirements is subject to the discretion of the department. OAP students earn transfer credit for the work they complete abroad, and application of credit to major requirements is also subject to the discretion of the department.

#### What if I don't speak another language?

You will find that English is the language of instruction in engineering at many top universities around the world. Additionally, you will find many programs available to you in English-speaking countries. The advisors in the Programs Abroad Office at UCSD can assist you in your search. Also, EAP has an Options in English (http://eap.ucop.edu/prospective\_participants/languages/) page to help you in your research.

#### What will it cost?

Study on EAP/OAP/GS can be comparable to the cost of study at UC. In some cases, it is less. EAP participants pay UC fees and continue to receive UC financial aid while abroad. Furthermore, EAP students are eligible for special grants and scholarships from UC, the host country, and other sources.

OAP students may retain all or some of their funding while abroad, including special study abroad scholarships, but because of the variety of the programs found through OAP, costs for individual programs can vary greatly.

Check here for specific information about scholarships and financial aid: http://programsabroad.ucsd.edu/pao/funding.htm

#### When should I study abroad?

While it is possible for CSE majors to go abroad at almost any point in their academic careers, the particular quarter, semester, summer or year that you study abroad depends on your individual progress in your major and what courses you plan to take while abroad. Because of the sequential nature of many of your required courses in the major, timing of your study abroad program will be critical if you plan to graduate in four years. Careful planning with your department advisors will insure you are aware of all of the opportunities available to you in fulfilling department requirements. Please see the CSE advisor for a four year plan that will work for you!

EAP and OAP offer a variety of short-term and year-long programs taught in English or in a foreign language that complement and enrich UC engineering degrees, in most cases without delaying graduation or adding financial burden. Programs are available for students at the sophomore, junior, and senior levels.

#### What happens when I return?

Students must bring all coursework material from their abroad program to the CSE advisor with a general petition for each course. The Faculty advisor of the program will review the petitions and make final approval on coursework  $\tilde{\mathbf{n}}$  if courses are approved the information will be transferred to the appropriate colleges.

You are strongly encouraged to be in touch with your advisor in the Department of Computer Science and Engineering while you are abroad. You may email course descriptions and syllabi while at your host institution which can be reviewed here at UCSD so that you know what courses you'll receive credit for upon your return. This, too, will speed up your petitioning process when you get back to UCSD.

"I cannot understate how much the study abroad experience has affected my life. Had I not gone to France in 1993, I probably would have gotten a 'normal' engineering job in San Diego and worked my way up the ranks there. Instead, I've moved to Stockholm, work internationally on a daily basis, still practice my French fairly often and have a much wider appreciation for the world than I did before going abroad."

- UC San Diego alum

#### Where should I study abroad?

While courses in engineering, basic science, and mathematics can be found at most EAP or OAP host universities, this page highlights particularly strong or unique EAP programs for engineering majors. You will find coursework relevant to your major in Computer Science and Engineering at many EAP study centers. Course Catalog (https://myeap.eap.ucop.edu/Galileo/Service/CourseCatalog/CourseCatalog.aspx) can help you find programs that meet your needs.

In addition to EAP and OAP, UC San Diego has Global Seminars (GS) in various countries throughout the world. Each Global Seminar consists of two courses taught by a UCSD professor. You are required to take both classes for a letter grade. These courses transfer automatically to your UCSD transcript as though you took these course on campus over the summer.

If you cant find a program, university or country that suits your needs through EAP or GS, try OAP! Two sites that will help you in your search are http://www.goabroad.com/ and http://www.studyabroad.com/.

# Here are just a few of many options out there for you! Japan:

- Engineering Programs in English
- Tohoku University, Sendai
- Tokyo Institute of Technology

#### Hong Kong:

 Hong Kong University of Science and Technology, School of Science

#### Australia:

- University of New South Wales
- Monash University
- University of Sydney

#### United Kingdom:

- · University of Sussex, Brighton, England
- University of Birmingham, England
- · University of Edinburgh, Scotland

#### Singapore:

• National University of Singapore (NUS)

#### **Upcoming 2010 Global Seminars**

Professor Joe Pasquale

1) CSE 4: Mathematical Beauty in Rome

2) CSE 6: Mathematical Beauty in Rome LAB

## PRIME Program: UCSD (http://prime.ucsd.edu/)

The Pacific Rim Experiences for Undergraduates (PRIME) program provides undergraduates with the opportunity of doing real research while living for nine weeks in one of several Pacific Rim countries, working with mentors at both the host institution and at UC San Diego.

Students who participate in PRIME are working side-by-side with researchers of their host country. The students literally integrate into the culture of their host country on a day-to-day basis. They experience first-hand that pre-judging, impatient listening, and just tolerating (rather than embracing) somebody's difference impedes communication and the ability to work well together. Students become aware that different approaches to viewing issues or solving problems lead to different insights, which drives innovation and thinking outside the box. This lesson applies well beyond science. Most importantly, students participating in PRIME learn humanity and appreciate the value in any cultural system, therefore developing a perspective that allows them to become compassionate and effective doctors.





