

A Guide to Career Resources & Services



for **Civil and Environmental Engineers**



cdc.stanford.edu
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CDC Guide for Civil & Environmental Engineers

The Stanford University Career Development Center (CDC) is the principal organization on campus providing career guidance and resources for graduate and undergraduate students. This guide has been created specifically for Civil and Environmental Engineering (CEE) students and represents a focus on career planning and job searching. It is designed to help you find your niche of technical interest, to provide you with skills to refine your resume and interview techniques and to help you find meaningful employment.

The profession of civil and environmental engineering is indeed large and diverse. Its work pervades our daily lives as well as our industrial and defense industries. Civil engineering is the design and maintenance of public works such as roads, bridges, water and energy systems as well as public facilities like schools, ports, railways and airports. They also provide design of industrial facilities such as factories, refineries and multiple housing.

Environmental engineering is the application of science and engineering principles to provide healthy water, air, and land for human habitation and for other organisms, and to remediate polluted sites. Environmental "civil" engineers focus on hydrology, water resources management, bioremediation, and water treatment plant design. Environmental "chemical" engineers focus on environmental chemistry, advanced air and water treatment technologies and separation processes.

It is estimated there are more 250,000 civil and environmental engineers employed in the United States and twice that worldwide. The employers of these engineers are academia, the government and private industry - with industry employing more than half. Whatever path you choose, you will find that civil and environmental engineers are greatly needed and valued.

The function of civil and environmental engineers in these occupations includes research, design and construction services, and consulting services, among others. In academia, civil and environmental engineers teach and conduct research in scores of colleges and universities worldwide. In government, civil and environmental engineers conduct research as well as manage government facilities and infrastructure. In industry, civil and environmental engineers perform all of the

functions mentioned above as well as provide private design, construction, and consulting services. As you can see, the career future for the civil and environmental engineering graduate is almost limitless.

In order to access all CDC resources, it is necessary to register with the CDC at: cdc.stanford.edu and click on Jobs and Internships Login.

Good luck!



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Career Assessment & Information Gathering

This guide assumes that the readers are undergraduate or graduate students pursuing degrees in Civil and Environmental Engineering (CEE). The CDC provides professional counselors to help committed CEE students identify their technical specialty and functional role within this broad field. In addition, they offer help in clarifying goals and their preferred work environment. However, students sometimes find themselves hesitant or concerned that they have made the right major or career choices. For these students, the CDC counselors are ready to help you assess your interests, talents and career goals. There is a multitude of employers who would appreciate hiring Stanford students for full time jobs or internships, but cannot physically come to campus. The career counselors can also help you develop a plan on how to reach out to these employers and position yourself as a candidate of choice.

CDC Appointment Opportunities

The CDC offers two types of face-to-face appointment opportunities with its counselors.

Individual 45 Minute Appointments: For an appointment, log into your Cardinal Careers account, click on the link "Request an Appointment"

Short 15 Minute Appointments: First come – first served, Monday – Friday, 11 AM - Noon, 2 PM – 4 PM

The CDC Career Resource Library

The CDC Career Resource Library supports the CEE Department with a wide array of information on industries in which CEE graduates and students find employment. The library contains a highly selective collection of books, magazines, e-books, guides and videos; all to assist you in learning about the world of work.

In addition, the Library provides WiFi service for your laptops, a printer for copying resumes, a copier and five web kiosks.

The Library is located on the second floor of the CDC building in Room 227. Hours are 9 AM to 12 PM and 1 PM to 5 PM Monday through Friday.

The Career Resource Specialist offers in-person assistance during those hours. You may also phone (650) 723-1545 or email cdc_library@mailman.stanford.edu to receive answers to your career resource questions.

This is a resource that will benefit all CEE students.



Networking

Networking is a broad subject. It means contacting people that have information of value to you regarding companies and job opportunities in your field of interest. They may be friends or classmates who are already working in your field, your professors, or even friends of your parents who may be knowledgeable. Networking is a search for career information to use in your pursuit of a career. *It is not asking for a job.*

The CDC has a **Networking Tips** webpage that is complete and worthy of your study. Access cdc.stanford.edu/networking/tips.

The CDC has a program entitled **Stanford Alumni Mentoring (SAM)** in which alumni volunteer to provide Stanford undergraduate and masters students with career guidance and life after Stanford. Access this site: mentoring.stanford.edu.

The commercial website entitled **LinkedIn** offers a site containing 1000's of professional profiles and the ability to link up with them for career advice and job opportunities. Join at linkedin.com

There are many **professional societies** that offer networking opportunities with members. They include:

American Society of Civil Engineers: www.ASCE.org

American Academy of Environmental Engineers: www.AAEE.net



Books & Other Sources of Career Information

The CDC library possesses many books and other materials that relate to career planning and job searching in the mechanical engineering field. Some are:

Book: Careers in Engineering – Garner

Book: Career Management for Scientists and Engineers – Borchardt

Book: Career Opportunities in Engineering – McDavid and Echaore-McDavid

Book: Is There an Engineer Inside You? – Baine

Book: Opportunities in Civil Engineering Careers – Hagerty & Cohn – A MUST READ

Additional professional societies and references are listed in the Appendix.

Preparing to Contact/Meet with Employers

The importance of preparing yourself to contact or meet with prospective employers cannot be overestimated. In addition to researching employment opportunities and organizational information, you should create a resume and other documents that describe yourself in terms that are of interest to an employer. When an interview is scheduled it's important to organize your thoughts and practice your interviewing skills.

The CDC Career Planning Handbook

The Career Planning Handbook is a publication of the CDC, revised annually. It is a comprehensive booklet containing a wealth of information on the entire job seeking process. It contains job search strategies, examples of resumes and cover letters, interview etiquette and dress, job offer negotiations and much more.

This handbook is extremely useful for all Stanford CEE students. Copies are available free on the second and third floors of the CDC and on the CDC website at: studentaffairs.stanford.edu/cdc/services/handbook.

Creating a Resume

Your resume is one of the most important documents that you will use in your job search. An effective resume opens the door of opportunity for you and acts as a roadmap for interviewers during the selection process. It also acts as your spokesperson long after the interview is over. The creation of a proper resume is not a topic that can be addressed in the few short pages of this guide. However, you can find comprehensive advice, with many samples, in the following references as well as from a career counselor.

Book: Knock 'em Dead Resumes: Yate, Eighth Edition

Book: The CDC Career Planning Handbook

Website: studentaffairs.stanford.edu/cdc/resumes

There are more references in the Appendix to this guide.

Creating a Cover Letter

The purpose of writing a cover letter for your resume is to interpret the facts on the resume and highlight your skills and experience for the prospective employer. It is also an example of your writing skills. It is often the first contact with an employer, so it is important to make a good impression.

For help in writing an effective cover letter, see the following guides and aids.

Book: Knock 'em Dead Cover Letters: Yate, Eighth Edition

Book: The CDC Career Planning Handbook

Website: studentaffairs.stanford.edu/cdc/resumes/cover-ltr

The Interview

The interview is one of the most important elements of your job search. It is your opportunity to persuade an employer that you are the right person for the job. One of the critical things you should do before the interview is to research the company's services, structure, values and mission statement. This allows you to find common ground and become invested in the interviewer's work. Types of interviews include telephone, Skype, in person, dining, screening, and group.

There are many resources available to aid you in the preparation for an interview. Some are:

Book: The CDC Career Planning Handbook

Book: Knock 'em Dead 2010 – Yate

Website: studentaffairs.stanford.edu/cdc/interviewing

Workshops

The CDC offers a variety of useful workshops and special programs throughout the academic year. Log-in to your Cardinal Careers account to check the CDC Calendar of Events for scheduling details. Some events of interest for CEE students are below:

Quick Networking Tips

Resume and Cover Letter Essentials

Interviewing Strategies

Contacting Employers

There are many avenues available to meet prospective employers on campus and off. The purpose of all of your preparation is to meet with an employer for an interview. Below are resources and events that are designed to offer you meetings with employers in person, by phone or via the internet.

Career Fairs

There are numerous career fairs held on campus throughout the year that attract employers interested in Stanford engineering students. These fairs offer unique opportunities to meet representatives of recruiting organizations, learn about their industry, and give them a positive first impression. These events showcase hundreds of companies, offering internships and full-time positions, year-round. Relevant job fairs for CEE students are below. Consult the CDC website for dates and locations.

Fall Career Fair: Sponsored by the CDC, this fair is held in early October in White Plaza. It typically hosts over 200 organizations.

Energy & Environmental Career Fair: Sponsored by CDC and the School of Earth Sciences, this fair is typically held in October.

Engineering Opportunity Job Fair: Sponsored by the School of Engineering and the CDC, this fair is held in late January. Over 100 organizations attend each year.

Construction Management /Structural Engineering Fair: Sponsored by the CDC, this fair is typically held in February.

Spring Career Fair: Sponsored by the CDC, this career fair is a one- or two-day event, typically held in April. Over 100 companies usually attend.

Cardinal Recruiting

Cardinal Recruiting is an on-campus, face-to-face interview program offered by the CDC. Recruiting organizations come to campus and interview students who sign up ahead of time for an interview time slot. Most interviews are held at the CDC, and occur during Fall and winter quarters.

Cardinal Recruiting, cont.

To participate in Cardinal Recruiting, submit an Intent to Participate form each academic year at

<https://stanford-csm.symplicity.com/students>

After activation, you may submit your resume to employers. For more information, visit:

cdc.stanford.edu/login/CR_guidelines.htm.

Cardinal Careers & iNet Internship

This is the official job posting website exclusively for Stanford students. Logon to Cardinal Careers at <cdc.stanford.edu/login/> and find over 1000 jobs at any given time. Search jobs by keyword, location, industry, etc, and upload your resume or CV.

You may also login to iNet , a consortium of Stanford and ten US universities with hundreds of summer internship and part-time positions.

Stanford Resume Service

The CDC maintains an exclusive database of student resumes that employers pay to access. The database is open from September 1 to August 31. Submit your resume by indicating “yes” in the privacy section of your profile and uploading it from the Documents section of Cardinal Careers.

Affiliate Programs

Find jobs through joint programs between faculty and industry partners in the School of Engineering. These include the Blume Center/Earthquake Engineering Affiliate, Construction Program, Engineering & Environmental Affiliate and Energy Modeling Forum. Contact the professor in charge of the program to express your interest in helping them conduct research.

Resources Outside of Stanford

For simple, fast, search-based job listings, visit:

jobcentral.com simplyhired.com google.com indeed.com

Appendix

Books and other print sources cited below are located in the CDC Career Resource Library

From the Career Assessment Section:

Professional Societies:

Society of Women Engineers – stanford.edu/group/swe

Society of Black Scientists & Engineers –
bse.stanford.edu/cgi-bin/home/

American Indian Science & Engineering Society –
stanford.edu/group/aises/

Society of Chicano/Latino Engineers/Scientists –
sscles.stanford.edu

Business Association of Stanford Entrepreneurial Students –
bases.stanford.edu

From the Preparing to Meet Section:

Resources for Resumes:

CDC Library Binder of Sample Resumes and Cover Letters

Resumes and Cover Letters for Graduate Level Students

Resumes and Cover Letters for Master’s Level Students

Books on Cover Letters:

Curriculum Vitae and Cover Letters (for academic job
searchers)

Cover Letters That Will Get You the Job You Want – Wynett

201 Killer Cover Letters – Podesta and Paxton

The Everything Cover Letter Book – Graber

Books on Interviewing:

The Everything Job Interview Book – Adams

Best Answers to the 201 Most Frequently Asked Interview
Questions – DeLuca

Behavior-Based Interviewing – Fitzwater

Ace the Technical Interview – Rothstein

New Dress for Success – Molloy

Power Etiquette: What You Don’t Know Can Kill You –
Casperson

**Career Development Center
Stanford University
Student Services Building
563 Salvatierra Walk
Stanford, CA 94305**

General Information	650-723-3963
Counseling Services & Appointments	650-725-1789
Career Resource Library	650-723-1545
Employment Services	650-723-9014
Reference File Service	650-723-1548
CDC Fax	650-723-0365

HOURS:

Counseling Services:
Monday – Friday
9:00 a.m. – 5:00 p.m.
(Closed noon – 1:00 p.m.)

Employment Services:

Monday – Friday
8:15 a.m. – 4:30 p.m.

Reference File Services:

Monday – Friday
10:00 a.m. – 4:00 p.m.
(Closed noon – 1:00 p.m.)

**Visit our home page:
cdc.stanford.edu**

