SWANSON school of engineering

cooperative education

engineering and the sciences
Co-op fairs offer students and employers the opportunity to meet one-on-one.
How Co-op Works: An Overview

Cooperative (co-op) education is a partnership between an employer and a college or university that provides relevant, paid work experience for undergraduate students. By alternating work and school terms, co-op education prepares students to take on challenging assignments with local, national, and international companies and organizations that are both public and private, large and small.

The Cooperative Education Program at the University of Pittsburgh Swanson School of Engineering, created in 1910, is the third oldest engineering co-op program in the country. The program flourished until the Great Depression forced its suspension in the 1930s. It was reestablished in 1987, and within a few years it expanded beyond engineering to include the University's nationally ranked undergraduate chemistry and computer science departments as well as the engineering technology program at the University of Pittsburgh at Johnstown.

Benefits for Students

More than half of Swanson School students participate in co-op education—an impressive percentage for an elective co-op program.

In addition to having an opportunity to use their technical skills, co-op students also improve their employability by developing

• increased confidence and maturity,
• teamwork skills,
• improved communication and presentation skills,
• better ethical and professional insights, and
• enhanced technical expertise.

The program is also financially rewarding. Students earn competitive salaries for their co-op sessions. (In 2005–06, the average starting salary for a first-term co-op student was almost $2,400 a month.) Many co-op students accept full-time positions with their employers following graduation.

Finally, most co-op students see an improvement in their grade point average, and the retention rate is 95 percent among engineering students who participate in co-op education.

“Co-oping has made me passionate about what I do. I am now eagerly awaiting graduation so that I can use all of my knowledge and experience to build a successful career for myself. My co-op experience even gave me the opportunity to work for one of the greatest chemical companies in the world.”

Joam Viani (BSChE ’07)
DuPont
Student and Employer Accolades

Two Pitt engineering students (in 2000 and 2002) were named National Co-op Student of the Year by the Cooperative Education Division of the American Society for Engineering Education, illustrating the program’s success. Co-op employers US Airways and DuPont have also received national recognition for their commitment to cooperative education at the University of Pittsburgh.

Requirements

The opportunity to participate in the Co-op Program is available to all Pitt undergraduates studying engineering, computer science, and/or chemistry at the Oakland campus; engineering and/or computer science at the Bradford campus; engineering at the Greensburg and Titusville campuses; and engineering technology at the Johnstown campus.

Students must be in good academic standing (minimum 2.0 GPA) and eligible to complete a minimum of three work rotations (with the exception of chemistry majors, who must complete a minimum of two rotations). Most students begin the program during their sophomore year and complete it during their senior year.

Students may earn a maximum of three credits, which count toward departmental graduation requirements. Upon completion of their work rotations, students write a technical paper about their co-op experience.
Through the Co-op Program, companies are able to evaluate and nurture prospective engineers early in their academic careers. Employers benefit from the expertise and enthusiasm of students and find that the program is a cost-effective way to complete projects. Many employers also use the program as a recruitment tool for hiring graduates.

The Co-op Program also sponsors two annual job fairs to facilitate placement, offering students the opportunity to network face-to-face with potential employers. In addition to being on campus and providing on-site and phone interviews, the job fair is an excellent way for students to learn about participating companies and for companies to gain visibility on campus.

“Co-oping has given me exposure to the pharmaceutical industry that is not available anywhere else in Pittsburgh. I have had the chance to network with many employees at my company and have learned many skills that will make me marketable in this industry upon graduation.”

Lilly Roy (BS ’07)
School of Arts and Sciences
Pfizer, Inc.
Departmental Specializations

Pitt students specialize in a variety of areas and can serve employers in the following fields:

- Bioengineering
- Chemistry
- Chemical and Petroleum Engineering
- Civil and Environmental Engineering
- Civil Engineering Technology
- Computer Engineering
- Computer Science
- Electrical Engineering
- Electrical Engineering Technology
- Engineering Physics
- Industrial Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Mechanical Engineering Technology

Working Together to Achieve Success

The Swanson School of Engineering provides the organization and support students need to succeed in the Co-op Program. Staff members assist students with résumé preparation and interviewing skills while also developing co-op opportunities with local, national, and international employers. Faculty members from each participating department approve students’ co-op schedules and remain in the capacity of advisors throughout the students’ participation in the program.

One of the strengths of the program is that it cultivates relationships with and draws support from University faculty and deans.

The co-op staff also work in conjunction with the University of Pittsburgh Study Abroad Office. Students who have participated or will be participating in various study abroad programs have additional skills to offer employers (e.g., foreign language skills and the experience that comes with living abroad). Employers are encouraged to participate in Pitt’s international education programs by offering overseas work rotations to qualified co-op students.

The Co-op Program office works with an extensive list of companies that value the program’s philosophy and demonstrate a commitment to cooperative education.

“Co-oping gave me the opportunity to experience ‘real-world’ electrical engineering in an area I never even thought of before the Co-op Program. But more importantly, I took away a great understanding of what I need to learn and do in school in order to graduate with the tools and abilities to start a successful career.”

Matthew Clay (BSEE ’07)
FirstEnergy Corp.
"The Co-op Program allowed me to confirm my career decision. I was able to apply concepts learned in lectures to the work environment and bring practical experience from work back into the classroom. Co-oping also provided valuable networking opportunities that have opened many doors along my career path."

Colleen Daley (BSCE ’05, MSCE ’07)
Malcolm Pirnie Inc.

For more information, visit www.engr.pitt.edu/coop or contact Maureen Barcic, director of co-op education for the Swanson School of Engineering, at paub2m@pitt.edu or 412-624-9826.
The City and the University

The University of Pittsburgh was founded in 1787, making it one of the oldest institutions of higher learning west of the Allegheny Mountains. One of the leading universities in the United States, it is a member of the prestigious Association of American Universities. The campus in the Oakland neighborhood of Pittsburgh is a 132-acre site adjacent to the renowned University of Pittsburgh Medical Center (UPMC), Carnegie Mellon University, the Carnegie Museums, and Schenley Park. The on-campus Petersen Events Center hosts many sporting events and concerts as well as other special events.

To learn more about Pittsburgh, visit www.pitt.edu/pittsburgh or www.visitpittsburgh.com.

The Co-op Program at the University of Pittsburgh has proved to be a winner for employers, both locally and nationally, as well as for the students and alumni who can attest to its benefits.

University of Pittsburgh
Swanson School of Engineering
Cooperative Education Program
152D Benedum Hall
3700 O’Hara Street
Pittsburgh, PA 15261
412-624-9826
barcic@engr.pitt.edu
www.engr.pitt.edu/coop/