

THE COOPER UNION

Albert Nerken School of Engineering

International Exchange Handbook



Dear International Exchange Student,

I warmly welcome you to the Albert Nerken School of Engineering, part of The Cooper Union for the Advancement of Science and Art. You will find Cooper Union to be an intimate learning environment with small class sizes and significant interaction with both faculty and your peers.

I also invite you to join us for an International Student orientation meeting from 12:45pm – 1:45pm on September 1, 2015, Room 201A at 41 Cooper Square. Food and drinks will be served. Please RSVP to Victoria Bill (vbill@cooper.edu) in the Dean's office by noon, Thursday, August 27, 2015.

For more information, please feel free to visit the follow online resources:

Albert Nerken School of Engineering:
www.cooper.edu/engineering

Albert Nerken School of Engineering Master's Program: www.cooper.edu/engineering/curriculum/master

I look forward to working with you during your time at Cooper Union. Please don't hesitate to stop by and say hello. On behalf of the Albert Nerken School of Engineering, I welcome you to the School of Engineering at Cooper!

Sincerely,

Anita Raja, PhD
Associate Dean of Research and Graduate Programs
Professor of Computer Science
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Getting Started

Obtaining your Cooper ID: Once you are registered in the Cooper system and assigned a Colleague ID, please contact David Robbins (drobbins@cooper.edu), to set up an appointment to process your student identification card. The office of Student affairs is located at 29 3rd Avenue, Suite 3b, New York, NY 10003.

Lockers: Students can secure personal lockers (*provided to each engineering student on the 5th, 6th, and 7th floors of 41 Cooper Square*) by placing a lock on an unused locker and registering it through Student Services at the following website:

<https://esc.cooper.edu/admin/lockreg>. You will be able to keep your locker until you complete your degree.

E-mail Address: The CU Computer Center staff will set you up with an @cooper.edu extension, once you have submitted your medical forms and paid your deposit(s). Once your e-mail address has been set up, you will be notified by a Computer Center staff member.

WebAdvisor: Once you have been set up with a Cooper e-mail address and have received your student ID number, you can register for WebAdvisor by following the first time instructions on this page <http://cooper.edu/students/registrar/registration>. Once you have this Student Self Service account, you can then register yourself for courses.

Registration: You can access your educational plan (ie the list of courses you will be taking throughout your career at Cooper Union) through the Student Self Service portal: www.cooper.edu/students/registrar/registration

Accessing Wifi: To access the Cooper Union networks (cooper-a or cooper-g), please use your @cooper.edu username and password. Prior to entering your username and password, you might be prompted to enter an access password (password: cooperCU).

Drop/Add Period: Incoming students are assigned an advisor for the duration of their degree program. ***For international students, this advisor is the department chair.*** Add/Drop changes are handled by advisors who approve courses and students can add to their Ed Plans in Student Self Service, if appropriate. Advisors can also evaluate students' requests to drop courses, and if appropriate, the advisors manually drop the courses in Student Self Service. The registrar staff handles extraordinary situations, such as conflicting or overlapping classes or missing pre-requisites.

Classes may only be added during the first two weeks of the semester. After that period, no new courses may be added. For the Fall 2015 semester, the last day that classes may be added is **September 14**.

To resolve these special situations, students must ask their advisors to email the registrar staff. Students who wish to withdraw from a course after the eighth week must have their instructor, their advisor, and the Dean email their approval to the registrar staff.

After the eighth week of the semester, students cannot withdraw from a course unless a documented medical or other such extenuating circumstance exists.

Department chair contact information:

- Jameel Ahmad, Chair of Civil Engineering
E-mail: ahmad@cooper.edu
- Fred Fontaine, Chair of Electrical Engineering
E-mail: fred@cooper.edu
- Irving Brazinsky, Chair of Chemical Engineering
E-mail: brazin@cooper.edu
- Stan Wei, Chair of Mechanical Engineering
E-mail: swei@cooper.edu

Policies: All school policies are detailed at: <http://cooper.edu/students/policies>. They include codes of conduct, alcohol, drugs, smoking, copyrights, sexual assault, non-discrimination, and anti-harassment.

2015 - 2016 Academic Calendar

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|-------------------------|-----------------|---|
| August 25 | Tuesday | Move-in day for Residence Hall |
| August 25- August 30 | Tuesday-Sunday | New student orientation |
| August 31 | Monday | Fall semester classes begin |
| September 4 | Friday | No classes (Staff off for summer hours) |
| September 7 | Monday | Labor Day (Staff Holiday) |
| September 8 | Tuesday | Fall Festival (school in session) |
| September 14 | Monday | There will be a \$25 fee for Dropping classes after this date |
| October 12 | Monday | Fall Breather (no classes, administrative offices remain open) |
| October 13 | Tuesday | NOTE: FRIDAY CLASSES MEET |
| October 14 | Wednesday | NOTE: MONDAY CLASSES MEET |
| November 26-29 | Thursday-Sunday | Thanksgiving (Staff Holiday) |
| November 30- December 4 | Monday-Friday | Registration for Spring 2016 classes |
| December 7-11 | Monday-Friday | Last HSS/Engineering Classes |
| December 14-18 | Monday-Friday | Last meeting times for all architecture and art classes/crits. These continue in their regularly assigned rooms/spaces. Final Exams for HSS and Engineering |

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|-------------------------|------------------|---|
| December 18 | Friday | Last day of Fall 2015 semester |
| December 19- January 18 | Saturday-Monday | Winter recess; all schools |
| December 23- January 3 | Wednesday-Sunday | Staff Holiday |
| January 4 | Monday | Administrative Offices reopen. All grades are due in the Office of Admissions and Records before Noon |
| January 18 | Monday | Martin Luther King Jr.'s birthday (Staff Holiday) |
| January 19 | Tuesday | Spring semester classes begin. NOTE: MODIFIED SCHEDULE; MONDAY CLASSES MEET |
| January 27 | Wednesday | There will be a \$25 fee for Dropping classes after this date |
| February 12-15 | Friday-Monday | Founder's Day/President's Day (Staff Holiday) |
| March 12-20 | Saturday-Sunday | Spring recess (administrative offices remain open) |
| April 19-22 | Tuesday-Friday | Registration for Fall 2016 classes |
| April 27 | Wednesday | Last HSS/Engineering Wednesday Classes |
| April 28 | Thursday | Last HSS/Engineering Thursday Classes |
| May 2 | Monday | Last HSS/Engineering Monday Classes |
| May 3 | Tuesday | Last HSS/Engineering Tuesday Classes |

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| May 6 | Friday | Last HSS/Engineering Friday Classes |
| May 4, 5, 9, 10, 11 | Wednesday, Thursday, Monday-Wednesday | Last meeting times for all architecture and art classes/crits. These continue in their regularly assigned rooms/spaces. Final Exams for HSS and Engineering |
| May 11 | Wednesday | NOTE: FRIDAY CLASSES, EXAMS AND CRITS MEET |
| May 11 | Wednesday | Last day of Spring 2016 semester |
| May 12 | Thursday | Senior grades due in the Office of Admissions and Records before noon. |
| May 16 | Monday | All non-senior grades are due in the Office of Admissions and Records before noon |
| May 23 | Monday | Commencement rehearsal; annual student exhibition opens |
| May 24 | Tuesday | Commencement |
| May 30 | Monday | Memorial Day (Staff Holiday) |
| July 4 | Monday | Independence Day Celebrated (Staff Holiday) |

Description of Degree Programs

Chemical Engineering

Graduate students in the Department of Chemical Engineering are immersed in courses that supplement fundamental principles such as chemical structures, molecular transport, and kinetic relationships, while allowing them to explore individual interests. As part of the curriculum, students are encouraged to develop their creative abilities and to stimulate further inquiry by exploring many related fields, including biomedical, energy and environmental engineering.

In addition to advanced courses in chemical engineering, chemistry, physics and nanotechnology, graduate student research is closely advised by a full-time Cooper Union faculty member from either the chemistry or chemical engineering department. This process is usually informed by matching students' thesis topics with a related faculty member's area of research. Investigations include emerging technologies related to mathematical modeling, sustainability and nanomaterials, particle technology and fluidization, pharmaceutical engineering and processes, crystal growth from high temperature melts and pollution prevention and mitigation.

For more information about the CU Department of Chemical Engineering, please visit: www.cooper.edu/engineering/chemical-engineering

Electrical Engineering

Developing their capacities for both team- and individual work, graduate students in the Electrical Engineering department work with practicing professionals, faculty and peers on a variety of cutting-edge problems. Applicants are expected to exhibit superior skills using a problem-based approach in both academic and professional settings. Through the extensive use of CAD software, integrated with a strong theoretical base, students are provided with a variety of tools to address engineering problems.

Building on electrical engineering core subjects of electronic systems and materials, signal processing and communications, and computer engineering, graduate students are encouraged to explore individual interests for their thesis. Students have the opportunity to work with faculty exploring a diverse array of subjects including, but not limited to, image and video processing, mapping algorithms to architecture, advanced computing and simulation methodology, integrated circuit engineering and sustainable engineering.

For more information about the CU Department of Electrical Engineering, please

visit: www.cooper.edu/engineering/electrical-engineering

Mechanical Engineering

Through course projects, research, or consulting opportunities, Mechanical Engineering graduate students are constantly exploring energy and sustainability, nanotechnology, leading computational methods, innovation, management, and economics. Courses strike a unique balance between analytical rigor and creative design, thereby preparing graduates for a variety of careers. Because we foster collaborative, interactive environments, Mechanical Engineering students are often encouraged to engage in interdisciplinary research spanning many subject fields. They participate in challenging and rewarding courses that combine fundamental major-related concepts with unique and topical minors. Thesis research topics include computer-aided design and engineering, computational fluid dynamics, robotics, automotive systems, thermoelectric power generation, vibrations and acoustics. Valued for their strong project-based design skills and analytical abilities, graduates lead successful careers in the aerospace, automotive, biomedical, entrepreneurship, and construction industries and often pursue doctoral studies in a complete range of mechanical engineering fields.

For more information about the CU Department of Mechanical Engineering, please visit: www.cooper.edu/engineering/mechanical-engineering

Civil Engineering

Graduate students in the Civil Engineering department are equipped with the theoretical and practical knowledge necessary for working to solve many problems facing both our built and natural environments. Coursework grounded in the principles of mathematics, structural mechanics and computer applications, prepares students for careers in urban planning, construction management and infrastructure rehabilitation. Those who chose to continue their studies after graduation are recruited by some of the nation's best universities and often accept prestigious research fellowships while enrolling in doctorate degree programs.

Through numerous combinations of over two dozen graduate-level courses, Civil Engineering students pursue areas of interest in either structural and geotechnical or water resources and environmental engineering. Augmenting the major curriculum, graduate students have the opportunity to declare minors varying from computer engineering to civil engineering management. Responding to current issues, students and faculty often collaborate on a variety of projects related to sustainability, alternative energy sources and the mitigation of damage caused by natural and man-made disasters.

For more information about the CU Department of Civil Engineering, please visit: www.cooper.edu/engineering/civil-engineering

Contact Information and Resources

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Victoria Bill

Student Programs Coordinator

41 Cooper Square Room 204

New York, NY 10003

Phone: (212) 353-4287

E-mail: vbill@cooper.edu

Office of Admissions and Records

30 Cooper Square

3rd Floor

New York, NY 10003

Phone: (212) 353-4120

E-mail: admissions@cooper.edu

<http://cooper.edu/admissions/contact>

Office of Student Affairs

29 Third Avenue

Third Floor

New York, NY 10003

<http://www.cooper.edu/students/student-affairs>

Safety, Security, and Campus Emergencies: Cooper Union is committed to providing a safe and secure learning environment for our students, staff, and faculty. All laboratory personnel and professors will review safety procedures posted in their labs before you start working with them.

If you witness any safety violations, you are strongly urged to report them to the supervising staff member and/or professor. Anonymous reporting can be performed through: <https://safety.cooper.edu/>. Important campus-wide safety and emergency guidelines are handed out to every student, but can also be found at: <http://cooper.edu/students/safety>. Remember, you are an integral part of keeping our campus safe and secure. Every active student will be provided with a photo identification card that must be swiped to gain entry into 41 Cooper Square, the Foundation Building, and the Residence Hall. Visitors can be signed in through the Dean's Office; host students must accompany their guests at all times. Visitor's passes are issued in the Dean's Office.

Health Insurance

The Cooper Union requires all students to submit proof that they have health insurance prior to registration. Students who fail to supply the information requested on the Student Accident and Sickness Insurance Enrollment/Waiver Form before August 15th will be billed for insurance.

In order to get approval for an international insurance plan, the forms must be submitted (in English) to Jorge Vadi (vadi@cooper.edu).

Health Forms

It is mandatory that incoming Cooper Union students complete and return the Cooper Union health forms and the New York State required response forms for Meningitis, Measles, Mupls and Rubella. **A physician must fill out, sign and stamp the forms. You cannot attend classes until these forms are completed and received.**

The Cooper Union health forms can be accessed at:

www.cooper.edu/students/forms-and-contacts