

The Brooklyn College COORDINATED ENGINEERING AND ENGINEERING HONORS PROGRAMS



The Brooklyn College Coordinated Engineering and Engineering Honors Programs, run by the Department of Physics, offer two years of engineering study equivalent to the first two years at any engineering school. Students who maintain the required academic level can transfer to one of the three coordinating schools — NYU Tandon School of Engineering (NYU-Tandon), the Grove School of Engineering at City College, or the Engineering Science Program of the College of Staten Island — to complete their bachelor's degree in engineering.



Why study engineering?

Engineering is one of America's fastest growing professions because technology affects our day-to-day lives in countless ways. Any invention must be engineered before it can be used. Engineers have designed every building we enter, every high-tech medical device or tool we use, every car we drive, and every item large and small in the kitchen, office and garage.

Engineers solve practical problems from getting an astronaut home from outer space to designing a car seat safe enough for an infant.

Engineers work in a wide range of fields, including environmental protection, biotechnology, biomimetics, computer design, communications, robotics, aerospace, industrial chemistry and materials science, among others. They build and maintain systems through which technology and nature interact, such as solar and wind energy, emissions technology for cars and industry, and sensors to measure oxygen levels in large bodies of water.

Engineering is one of the most rewarding professions.

A strong background in the humanities and social sciences helps engineers understand human needs. This convergence of engineering and liberal arts has practical implications in the marketplace. Engineers commonly rise to well-paid managerial positions in business, industry and government because they know how to apply quantitative analysis and the scientific method to issues in social and civic life.

Engineering provides a sound preparation for other professional careers. An engineering background in mathematics, science, computer science and design, combined with humanities and the social sciences, strengthens students' qualifications for other professions such as medicine, law and the financial industry.

ENGINEERING HONORS

Students with strong high school academic records and high aptitude for mathematics may apply for acceptance to Engineering Honors, the honors component of the Coordinated Engineering Program. Students admitted to Engineering Honors receive a Presidential Scholarship of \$2,000 per semester for the two years of the program at Brooklyn College.

Engineering Honors is associated with the Brooklyn College Honors Academy, an intellectual community offering study facilities, faculty consultation, computer access, and academic opportunities appropriate to honors students' abilities and needs. In the Honors Academy commons, members make new friends among other ambitious, academically talented students. Students interested in applying should complete the Brooklyn College Online Application for Scholarships and Special and Honors Programs at http://www.brooklyn.cuny.edu/web/ about/offices/financial/scholarships. **php.** Additionally, students must complete the City University of New York (CUNY) freshman admissions application available at www.cuny.edu/admissions/ undergraduate/apply/, indicating Brooklyn College as their first choice.

Engineering Honors requires that students maintain a minimum 3.50 overall GPA and a minimum 3.20 average in science and engineering subjects. Successful completion of the Engineering Honors requirements is indicated on the student's transcript.

Students who do not meet the admission requirements for Engineering Honors may still be accepted to the Brooklyn College Coordinated Engineering Program. Students already matriculated at Brooklyn College may apply to join the Coordinated Engineering Program at any time.

Why begin your engineering education at Brooklyn College?

The Brooklyn College Coordinated Engineering and Engineering Honors Programs are close to home and offer courses of study that are the equivalent of the first two years at any engineering school. The programs are small and provide supportive environments for students.

The different fields of engineering offered at Brooklyn College are:

Chemical and Biomolecular Civil Computer Electrical Mechanical

Annual tuition is about \$6,330 substantially lower than at most private engineering schools, where annual tuition may be as high as \$40,000 to \$50,000.

Coordinated engineering students who maintain the required academic standards can transfer to one of three coordinating schools — NYU Tandon School of Engineering (formerly, NYU-Polytechnic School of Engineering), the Grove School of Engineering at City College or the College of Staten Island Engineering Science program — to complete their bachelor's degree in engineering. Each institution has admission requirements that must also be met.

Coordinated engineering students have also transferred to Stony Brook University, the University of Wisconsin, the University of Michigan, Cooper Union and the University of Buffalo.

The Coordinated Engineering Program keeps students informed of rapid changes in the profession through the Engineering Club. The club invites working engineers to talk about their specialties and arranges visits to such facilities as Brookhaven National Laboratory, where cutting-edge research is being done.

With native speakers of over 100 languages on campus, Brooklyn College is a welcoming institution whose student body reflects the diversity of Brooklyn and the greater New York area. The college has an active Women's Center and numerous student clubs and activities.



PROGRAM REQUIREMENTS

Coordinated engineering students are required to take 64 credits in engineering and the liberal arts. The coordinated engineering curriculum matches the first two years of study at most engineering schools throughout the country, and courses are transferable to the three schools that participate in the Coordinated Engineering Program. Courses are also transferable to many other engineering programs. The course requirements include engineering mechanics, electrical circuit analysis and laboratory (seldom taught outside of engineering schools) as well as computer science courses such as advanced programming techniques, data structure and objectoriented programming. Chemistry, mathematics, calculus-based physics, modern physics and biology give coordinated engineering students a firm foundation for the advanced engineering courses given at Brooklyn College and the engineering school of transfer.

For students who enter the Coordinated Engineering Program but decide later not to pursue engineering, the program allows a smooth transition to any of the more than 70 undergraduate majors available at Brooklyn College. Those in Engineering Honors can transition to the Scholars Program or another Honors Academy program.

ADMISSION TO THE COORDINATED ENGINEERING PROGRAM

Students interested in the Coordinated Engineering Program must meet the eligibility criteria for admission to Brooklyn College and submit an application for admission as a freshman to CUNY indicating Brooklyn College as their first choice.

Qualified students already enrolled at Brooklyn College may apply to join the Coordinated Engineering Program at any time.

Brooklyn College/CUNY application forms may be obtained online at www.cuny.edu/admissions//undergraduate/apply/

TUITION

The Brooklyn College Coordinated Engineering Program provides a superior education at a manageable cost.

Tuition for full-time students who are New York State residents is **\$3,165 per semester**.

Tuition for full-time students who are not state residents is **\$560 per credit**.

Brooklyn College students who have completed the program and who transfer to NYU-Tandon will receive financial aid in terms of government grants, scholarships, and loans for their final two years of study. Those who transfer to the Grove School of Engineering at City College or the College of Staten Island Engineering Science Program continue to pay tuition as set by the City University of New York.

FOR MORE INFORMATION

To learn more about the Brooklyn College Coordinated Engineering Program and Engineering Honors, please contact Viraht Sahni, professor of physics and director of the Coordinated Engineering and Engineering Honors Programs, at **718.951.5000**, extension 2866, or by e-mail at **vsahni@brooklyn.cuny.edu**.

For course information, visit the Department of Physics website at http://www.brooklyn.cuny.edu/web/ academics/schools/naturalsciences/undergraduate/ physics/ceprogram.php.

