

# Special Programs

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## Academic Support

### Dean of Freshman Studies

The Office of First Year Students supports new students --- freshmen and transfers --- in the completion of their first year of studies at NJIT. The dean works closely with faculty and students to resolve academic concerns or issues that may arise, and coordinates the freshman seminar. For further information, contact the Dean of First Year Students, (973) 596-2981.

### Educational Opportunity Program (EOP)

EOP provides access and comprehensive support services for populations traditionally underrepresented in the disciplines offered at NJIT. Services provided include academic and financial support, career and personal counseling to first-time, full-time freshmen, upper-class students and eligible transfer students who received EOP funding at their previous institutions. The program features support services such as scholarships, grants and loans; an intensive pre-freshman summer academic enrichment program that helps prepare students for success in their first year of college; and access to job and internship opportunities. Further information may be obtained from the EOP office in Campbell Hall, third floor, by calling (973) 596-3690, or by visiting the EOP home page at <http://www.njit.edu/eop/index.php>.

### University Research Experience (URE)

The Undergraduate Research Experience (URE) Program of EOP encourages students to include graduate and professional studies in their career planning and assists them in preparing for careers in academia by involving them in faculty guided and mentored research activities early in their undergraduate years. Assistance is also provided in the graduate admission process and identification of graduate financial aid. URE, established in September 1990, works in close collaboration with the Graduate Studies Office and the Center for Pre-College Programs at NJIT. This close collaboration affords a number of graduate students the opportunity to finance their education through stipends received as teaching or research assistants on campus and in public schools. This partnership also assists in the encouragement of students to pursue teaching careers, particularly at the university level.

### Air Force ROTC--Aerospace Studies

A commission as a Second Lieutenant in the United States Air Force may be available to the student who completes the aerospace studies program on campus. Students in any bachelor's or master's degree program may pursue this option in conjunction with their normal academic studies. Additionally, students who are undecided about pursuing a career as an Air Force officer may take these courses to fill electives under special student status.

Students who seek a commission may participate in programs ranging from two to four years in length. The most comprehensive program consists of four academic years of AFROTC classes. The courses taken include AS 111 Foundation of the US Air Force and AS 112 The Air Force Today II, introductory courses that explore the mission and organizational structure of the US Air Force; AS 221 Evolution of USAF Air and Space Power and AS 222 Air Power Key To Deterrence, the study of the evolution of air power from its earliest beginnings through the present, emphasizing historical events and their impact on the development and deployment of air power; AS 333 Leadership and Management I and AS 334 Leadership and Management II, the study of the concepts and skills required by the successful manager and leader, focusing on organizational and personal ethics, communicative skills, and managerial strategy viewed in the context of the military; and AS 443 National Security Affairs/Prep Act and AS 444 Preparation for Active Duty, a survey of a broad range of topics concerning American civil and military relations and the environment in which US defense policy is formulated, including the role of the professional officer in a democratic society, the requisites for maintaining adequate national security forces, a special study of military justice and its effect on citizenship and preparation for active duty.

The four-year program requires students to participate in leadership laboratory held on Wednesday from 3:00-5:00 p.m.; departmental approval is required. This program also has a field training requirement of four weeks.

Programs of fewer than four years in length require a six-week field training session. During field training, which normally occurs the summer between the sophomore and junior years, students are placed in a variety of leadership positions and are given the opportunity to demonstrate their leadership, managerial, organizational, and physical skills. Upon returning to school for a fall semester, the students resume their aerospace studies with AS 333 Leadership and Management I, followed by AS 334 Leadership and Management II, AS 443 National Security Affairs/Prep Act, and AS 444 Preparation for Active Duty as described above. Further information may be obtained by contacting the Department of Aerospace Studies, (973) 596-3626.

### Cooperative Education and Internships

Cooperative Education (Co-op) and Internship programs offer students the opportunity, prior to graduation, to gain work experience that is related to their major. The Co-op Program provides students with an experiential and applications approach to education. Co-op is available to matriculated students in all majors. The program enhances the education of the student with the introduction of up to two full-time work experiences during which up to 6 additive or degree credits can be earned. In some majors, co-op may be taken on a part-time work schedule.

Co-op enables students to examine a professional field through employment in a major-related job. All co-op students earn a salary that can help defray college and other expenses. Co-op work experiences are scheduled after the completion of the sophomore year; for architecture students, after the completion of the junior year. Requirements for admission into the Co-op Program include good academic standing and a GPA of at least

**2.2. Architecture students are required to have a 2.5 minimum GPA for admission into the Co-op Program.** Full-time undergraduate students completing a full-time co-op work assignment may register for only two courses in addition to their co-op course.

Descriptions for undergraduate co-op work experience courses (Co-op Work Experience I and Co-op Work Experience II) are found in the course listings of the departments offering them. See the list below.

| <b>Code</b> | <b>Title</b>   | <b>Credits</b> |
|-------------|--|----------------|
| ARCH 310    | Co-op Work Experience I                                | 3              |
| ARCH 410    | Co-op Work Experience II                               | 3              |
| BIOL 310    | Work Experience I                                      | 3              |
| BME 311     | Co-op Work Experience                                  | 3              |
| BME 411     | Co-op Work Experience                                  | 0              |
| CE 311      | Co-op Work Experience I                                | 0              |
| CE 413      | Co-op Work Experience II                               | 3              |
| CET 497     | Co-op Work Experience                                  | 3              |
| CHE 310     | Co-op Work Experience I                                | 3              |
| CHE 311     | Co-op Work Experience II                               | 0              |
| CHEM 310    | Co-op Work Experience I                                | 3              |
| CHEM 311    | Co-op Work Experience II                               | 3              |
| CIMT 497    | Co-op Work Experience I                                | 3              |
| CS 310      | Co-op Work Experience I                                | 3              |
| CS 410      | Co-op Work Experience II                               | 3              |
| CS 485      | Special Topics in Computer Science/Information Systems | 3              |
| CPT 395     | Co-op Work Experience I                                | 3              |
| ECE 310     | Co-op Work Experience I                                | 0              |
| ECE 410     | Co-op Work Experience II                               | 3              |
| ECET 395    | Co-op Work Experience I                                | 3              |
| ECET 495    | Co-op Work Experience II                               | 0              |
| ENG 490     | Co-op Work Experience I                                | 3              |
| ENG 491     | Co-op Work Experience II                               | 3              |
| ESC 310     | Work Experience I                                      | 3              |
| IE 310      | Co-op Work Experience I                                | 0              |
| IE 411      | Co-op Work Experience II                               | 3              |
| IS 310      | Co-op Work Experience I                                | 3              |
| IS 410      | Co-op Work Experience II                               | 3              |
| IT 311      | Co-op Work Experience I                                | 3              |
| IT 411      | Co-op Work Experience                                  | 3              |
| MATH 310    | Co-op Work Experience I                                | 3              |
| MATH 410    | Co-op Work Experience II                               | 3              |
| MGMT 310    | Co-op Work Experience I                                | 3              |
| MGMT 410    | Co-op Work Experience II                               | 3              |
| ME 310      | Co-op Work Experience I                                | 0              |
| ME 410      | Co-op Work Experience II                               | 3              |
| MET 395     | Co-op Work Experience I                                | 3              |
| MET 495     | Co-op Work Experience II                               | 3              |
| MNET 395    | Coop Experience I                                      | 3              |
| MNET 495    | Cooperative Experien II                                | 3              |
| PHYS 311    | Co-op Work Experience I                                | 3              |
| PHYS 411    | Co-op Work Experience II                               | 3              |
| STS 311     | Co-op Work Experience I                                | 3              |
| STS 411     | Co-op Work Experience II                               | 3              |

Graduate cooperative education courses may be found in the appropriate listing in the **Graduate Catalog**.

## Ronald E. McNair Post Baccalaureate Achievement Program

The Ronald E. McNair Post Baccalaureate Achievement Program at NJIT is a US Department of Education funded program that prepares eligible undergraduate students majoring in Science, Technology, Engineering or Mathematics (STEM) for doctoral studies. Students with a GPA of 3.2 and above, junior or in some cases senior level standing who meet low income and first generation guidelines, or are from groups underrepresented in graduate education, are program eligible. McNair Fellows are engaged in research and other scholarly activities with faculty mentors from the academic community. Results of their research projects are presented at professional meetings and conferences and prepared for publication in peer reviewed and other professional journals. Additionally, McNair Fellows participate in a wide array of workshops and activities to prepare them for doctoral study. A primary goal of the McNair Program is to encourage minorities and individuals underrepresented in science, engineering and mathematics higher education fields to obtain doctorates and diversify the professoriate, thereby becoming role models for others of their background. For more information about the McNair Achievement Program visit the Web site at [mcnair.njit.edu](http://mcnair.njit.edu) (<http://mcnair.njit.edu>) or call (973) 596-6470 or 5590. Students may also stop by Kupfrian Hall, Room 201A.

## Student Exchange/Study Abroad

NJIT offers a number of international exchange opportunities for undergraduate and graduate students in Europe and the Far East. Through established exchange agreements, participants are provided with opportunities to enhance their technological skills, expand their cultural horizons, and gain educational experience from an international perspective. Students gain firsthand knowledge of political, social, and economic systems of a rapidly changing world.

Students may elect to study for one semester or for a full academic year. NJIT students pay tuition and fees at NJIT and room and board at the host institution. Financial aid may be applied to these expenses.

With the prior written approval of the student's academic advisor, academic credit may be awarded for courses taken while participating in an international exchange program. Some programs may require proficiency in the language of the host country, especially if the language of instruction for course work is not English.

For further information, contact the Office of International Students and Faculty, (973) 596-2451.

## Pre-Professional Programs

### Pre-Law

While students desiring a professional legal career may apply to law school with any NJIT undergraduate course of study, the minor in legal studies is particularly appropriate for this purpose. This interdisciplinary minor introduces students to a wide range of approaches to the study of law. It combines a core course emphasizing skills needed to pursue further study in law with elective courses designed to enhance students' familiarity with the functioning of law, to sharpen their understanding of the historical and cultural dimensions of law, and to improve their grasp of legal issues in technological fields. For more information, contact the faculty coordinator of the legal studies minor.

### Premedical, Pre-Dental or Preoptometric

Students interested in eventually obtaining degrees in medicine, dentistry or optometry may pursue any major at NJIT. Typically, schools of medicine, dentistry and optometry require that students have completed certain courses. For example, most medical schools require 1 year of English, 1 year of general physics with laboratory, 1 year of general biology with laboratory, 1 year of general chemistry with laboratory and 1 year of organic chemistry with laboratory. Some schools may require additional courses. Thus, certain majors at NJIT are especially suitable as they already incorporate most of these courses; these include biology, chemistry, biomedical engineering and chemical engineering. It is also possible to follow a focused four-year pre-medical, pre-dental or pre-optometric option with engineering science. Interested students may obtain further information from the Engineering Science program director.

## Accelerated Programs in Law, Medicine, Dentistry or Optometry

Students may apply for accelerated joint degree programs (<http://honors.njit.edu/academics/acceleratedprograms>) that offer the BS or BA degree plus the JD (law); the MD (medicine); either the DMD or DDS (dentistry); the OD (optometry); or the DPT (Doctor of Physical Therapy). These programs shorten the total time to the terminal degree by one year.

Students applying for these programs must first apply to, and be accepted by, the Albert Dorman Honors College (<http://honors.njit.edu>).

## BS/MS, BS/PhD, and Dual Degree Programs

These accelerated dual degree programs permit undergraduates to earn credits toward a master's degree or a doctoral degree. Students in BS/MS take 6 credits of graduate course work in their senior year. These may be counted toward both a bachelor's degree and a following master's degree if enrollment as a graduate student in the master's degree program occurs within two years of completion of the bachelor's degree. After enrollment as a graduate student, those who wish to apply the 6 credits to the graduate degree program should contact the Office of Graduate Studies. Graduate study may be completed full or part-time.

Full-time undergraduate students become eligible to apply for the BS/MS program after they complete at least five courses in their major and have maintained a GPA of 3.0 or better. Students in the Albert Dorman Honors College are pre-approved for the BS/MS program at the time of admission.

to NJIT but will receive letters about activating their status in BS/MS if their GPA is still above 3.0 and have earned between 57 and 110 undergraduate credits. The activation letter will instruct Honors College students about contacting the Office of Graduate Studies. All other students with a 3.0 or better GPA will have to submit an application for admission to the BS/MS program to the Office of Graduate Studies no later than one year prior to graduation. Applicants must satisfy all university requirements for admission to graduate programs.

Exceptional students may seek to go into an NJIT doctoral program directly through the BS/PhD program and must have a record consistent with university criteria for doctoral study (3.5 GPA or better). Up to 12 graduate credits may be taken in the senior year and applied later toward an NJIT doctoral program. GRE scores are required for doctoral admission.

Several other combinations of Bachelor's and Master's degrees exist or are under development. The number of dual-use credits for these combinations may exceed 6 credits in accordance with specific program requirements. An example is the B. Arch/MS in Management program which allows 12 dual-use credits. Information and applications for BS/MS, BS/PhD, and other accelerated dual degree programs can be obtained from the Office of Graduate Studies, Suite 140 Fenster Hall.

## **Community and Public Service**

NJIT is committed to fostering opportunities for students to share their skills, talents, and enthusiasm through community service and civic engagement. Through both volunteer and paid service opportunities, students assist the public and non-profit sectors in meeting objectives to help improve the quality of life in our communities. Participants in these programs are a valuable resource of both technical and non-technical help for local and regional agencies. The office is open Mondays through Fridays, 8:30 a.m. - 4:30 p.m. during the school year. (Summer hours are 8:30 a.m.-5:00 p.m. Mondays through Thursdays). For more information about the programs described below, contact the Division of Career Development Services, Community and Public Service, (973) 596-3100 or view our website at <https://www.njit.edu/cds/welcome/>.

### **NJIT Community of Caring**

NJIT "Community of Caring" Volunteers program is a concerted outreach to promote the good work of NJIT students. Annually, we challenge our campus members to provide at least 10,000 hours of service to the citizens, non-profit agencies, and schools in communities throughout New Jersey. Participants contribute service hours through the community connections volunteer referral service or through any of our other CDS civic engagement programs.

### **Community Service Work-Study Program**

This program offers eligible students the option of working in community-based non-profit agencies, public schools, or governmental agencies to earn a work-study award. CSWS provides students the opportunity to earn part of the funds needed to cover educational cost and offers organizations an economical way to meet short-term staffing goals.

### **Wachovia/NJ DCA Housing Scholars and Community Development Program**

The Housing Scholars Program continues to engage students in affordable housing and community development projects in New Jersey. This innovative program offered a paid, ten week, full-time summer internship for students attending NJIT and other New Jersey universities or colleges. NJIT students majoring in Architecture, Civil Engineering, and Management are selected to serve as Housing Scholars.

### **George Garrison and Sandy Kirk Community Service Scholarship**

The George Garrison and Sandy Kirk Community Service Scholarship program promotes civic engagement by recognizing the commitment and outstanding community service contributions of NJIT students each year. One \$1,000 scholarship and a \$750 scholarship are presented for meritorious community service. The scholarship celebrates the dedication of George Garrison and Sandy Kirk, former CDS staff members, whose work at NJIT furthered the development of quality civic engagement for students.

### **NJIT Literacy Corps—America Learns**

The NJIT Literacy Corps program is to engage students as tutors in local schools and after-schools sites. Our tutors help children in the greater Newark area to understand math concepts and to read well and independently by the end of the 3rd grade. NJIT students eligible for federal work-study and student volunteers provide one-on-one and group tutoring for children.

### **Service Learning Program**

The Service Learning Program at NJIT facilitates experiential learning by helping students link academic theory with practical experience in a community service environment. Students participate in service learning internships related to their academic major and career goals. Successful involvement in community-based service experiences not only enhances career preparation but also provides students the opportunity to hone leadership skills in a service environment.

### **Athletes in Service to Communities**

This program offers NJIT student-athletes the opportunity to provide community service and outreach through team-oriented projects. Team members serve as trainers and coaches for swimming and tennis camps, NJIT Celebrity Readers in our local schools, and coordinators to collect donated sports equipment for underprivileged youth.

## **Civic Engagement Computer Center @ NJIT**

The Civic Engagement Computer Center @ NJIT is a student-supported resource of technical support through virtual volunteer projects for community agencies. The Center provides an avenue for NJIT students to hone their academic and technical skills through hands-on civic engagement experience. Our technology related majors volunteer or work to produce technical solutions for web design, data management, and basic computer training needs for community organizations and schools in the local and regional area.

## **Civic Engagement**

NJIT is committed to fostering opportunities for students to share their skills, talents, and enthusiasm through community service and civic engagement. Through both volunteer and paid service opportunities, students assist the public and non-profit sectors in meeting objectives to help improve the quality of life in our communities. Participants in these programs are a valuable resource of both technical and non-technical help for local and regional agencies. The office is open Mondays through Fridays, 8:30 a.m. - 4:30 p.m. during the school year. (Summer hours are 8:30 a.m.-5:00 p.m. Mondays through Thursdays). For more information about the programs described below, contact the Division of Career Development Services, Civic Engagement, (973) 596-3100 or view our website at <https://www.njit.edu/cds/welcome/>.

## **Civic Scholars Program**

The Civic Scholars program is an innovative civic engagement and leadership development learning experience for Honors College students. Participating students spend at least 25 hours per semester volunteering, as part of a service-learning experience, in a leadership shadowing and mentoring capacity with the Executive Director or senior staff member at a local non-profit or governmental agency.

## **NJIT- A.C.E. Mentor Program Partnership**

The ACE Mentor Program serves high school youth who are exploring careers in Architecture, Construction, or Engineering. The program is designed to engage, inform, and challenge youth and college students in their pursuit of future careers in these professions. NJIT Collegiate interns assist professional mentors in their work with ACE high school protégés as part of a service-learning experience.

## **NJIT – Newark Public Schools – F.I.R.S.T. Robotics Programs**

CDS, in collaboration with Pre-College Programs at NJIT, recruits and supervises the work of Honors College and work-study students serving as Technical Mentors/Literacy Tutors in a Robotics program. Mentors/Tutors guide 32 middle and high school teams in building robots to compete in tournaments at NJIT and in New Jersey. They also help teams gain hands-on experience in engineering and computer programming principles.

## **NJIT – Newark Public Schools College Tutors Partnership Program**

NJIT students work to help 11th and 12th graders prepare for the New Jersey High School Proficiency Assessment Exam (HSPA). Tutors are employed to work 10 to 12 hours per week in the after-school and Saturday sessions in Newark high schools. They assist classroom teachers with providing instruction in Language Arts and Math competencies for over 350 NPS students.