



New Jersey Institute  
of Technology

# THE CENTER FOR PRE-COLLEGE PROGRAMS

***"Inspiring Young Minds for College Access and Success in  
Science, Technology, Engineering and Mathematics (STEM)."***

Serves over  
**3,000**  
elementary and  
secondary students  
yearly



**81% of 162**  
Talent Search seniors  
enrolled in college  
in 2016



**88%** of returning  
ECPP participants  
interested in STEM  
studies or career

More than  
**700** UBELLs  
students served in  
18 years



**80.7%** of  
GEAR UP's 2016  
12th-grade  
cohort enrolled  
in post-secondary  
institutions



Talent Search  
serves  
**728**  
students annually

**96%** of Upward  
Bound seniors  
enrolled in  
post-secondary  
education after  
the 2016-2017  
academic year



Over **300** UBELLs  
students have pursued  
post-secondary  
education



GEAR UP  
serves more than  
**600**  
students annually

**11** years  
hosting ExxonMobil  
Bernard Harris  
Summer Science  
Camp



Providing STEM  
enrichment since  
**1979**



**97%** retention  
rate for summer  
2017 Upward Bound



## GAINING EARLY AWARENESS AND READINESS FOR UNDERGRADUATE PROGRAMS (GEAR UP)

Offers educational support and assistance to middle and high school students to help them prepare for and enroll in an institution of higher education. Students participate in a 20-week academic-year or six-week summer program, and also receive personal counseling and tutoring, as well as attend field trips and college tours. Target schools for this free program include Central High School, East Side High School, Barringer Academy of S.T.E.A.M., Barringer Academy of the Arts & Humanities and the following middle schools: Hawkins Street, Hawthorne Avenue, Lafayette Street, Luis Munoz Marin, Park Elementary, Quitman Street, Rafael Hernandez, Ridge Street, Sussex Avenue and Wilson Avenue. State-funded and federally funded collaboration between NJIT and Newark Public Schools, designed for students in 6th through 12th grade.

## UPWARD BOUND FOR ENGLISH LANGUAGE LEARNERS (UBELLs)

Addresses the needs of first-generation college and low-income high-school students as they make their way toward admission to college. In addition to attending academic classes in math and science, UBELL students receive support in achieving competence in English and instruction in goal setting, study skills and time management. Charged with enhancing students' college readiness and success, UBELL also preps parents unfamiliar with the college process through financial aid and enrollment counseling. UBELL services are free, as are books, instructional supplies, field trips, meals and tickets for public transportation. The program is provided over 20 weeks during the academic year and six weeks over the summer for students from Barringer Academy of the Arts & Humanities, Barringer Academy of S.T.E.A.M. and East Side High School. State-funded and federally funded collaboration between NJIT and Newark Public Schools, designed for students in 6th through 12th grade.

## TRIO PROGRAMS

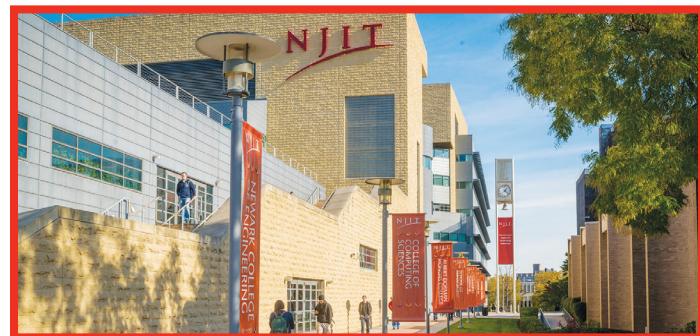
Federally funded, collaboration between NJIT and Newark Public Schools, designed for students in 6th through 12th grade.

### Upward Bound

Serves 9th- to 12th-grade low-income students between the ages of 13 and 19, who will be the first generation in their families to attend college. The goal is to increase the rate at which participants enroll in and graduate from institutions of higher learning. The free program features an academic-year component that meets on-campus on Saturdays throughout the school year, as well as a six-week intensive, residential summer component. Students take classes in literature, composition, science, math, foreign language, art, computer science, architecture, psychology and more. Field trips are included as well, both during the school year and over the summer.

### Talent Search

Helps prepare middle school students for high school and high school students for college or a career of their choice. Participants are primarily from low-income households and first-generation college students. It is the intent of the free program to have students enroll as 6th graders and continue on until high school graduation. During the academic year, as well as through a summer enrichment program, students are provided with the necessary instruction and motivation to succeed. They also develop test-taking skills and take part in computer classes and cultural, social and recreational activities.





## EARLY COLLEGE PREPARATORY PROGRAMS

Tuition- and donor-funded programs designed for students who have completed 4th through 11th grades.

**Academy College Courses for High School Students**  
 Designed for high-achieving high school students, grades 10 to 12, who want to earn up to eight college credits per semester or session. Credits are transferable to NJIT or other universities. Small classes meet at NJIT on Saturdays during the academic year and daily during the summer.

### Options for Advanced Academic Achievement

Offers an opportunity for qualified high school students from partner schools to earn college credits at their school during the academic year. Courses are taught by high school teachers certified by NJIT as adjunct faculty members, and require the same syllabus, textbook and prerequisites as the on-campus course.

### On-Campus Summer Programs

#### ■ ExxonMobil Bernard Harris Summer Science Camp (EMBHSSC)

Provides STEM-enriching activities, experiments, projects and field experiences to students entering 6th, 7th and 8th grades. The two-week residential camp introduces participants to college life, instructs them in a variety of science and engineering subjects, and develops their problem-solving, critical-thinking, communication and research skills. Funded in part by ExxonMobil and The Harris Foundation.

#### ■ Robotics Exploration Program (REP)

Introduces STEM fields, through the use of robotics, to high-achieving post-6th and post-7th graders. Participants in the two-week residential program work in teams to design, construct and operate robots. REP culminates with a robotics competition and awards ceremony.

#### ■ Women in Engineering and Technology Initiatives

##### *FEMME Program*

Encourages post-4th grade through post-9th grade girls to explore science and technology fields. An intensive summer component includes classroom discussions, laboratory experiments, projects and fields trips, and focuses on the following engineering themes by grade: environmental (post-4th grade), aeronautical (post-5th grade), mechanical (post-6th grade), chemical (post-7th grade), biomedical (post-8th grade) and computer coding (post-9th grade). FEMME is one of many four-week focused programs that encourage students to study and excel in STEM disciplines.

#### ■ Co-educational Four-Week STEM-Focused Programs

Designed to prepare high-achieving students from post-4th to post-11th grades to succeed in STEM fields. Themes by grade include the Environmental Science and Engineering Program (ESEP, post-4th grade); Aeronautical Engineering Program (AEP, post-5th grade); Pre-Engineering Program (PrEP, post-6th grade); Explore Careers in Technology and Engineering (ExCITE, post-7th grade); Chemical Engineering Program (CHEM-ENG, post-7th grade); Introduction to Chemical, Industrial and Mechanical Engineering (IChIIME, post-7th and 8th grade); Biomedical Engineering Program (BIO-MED, post-8th grade); Intermediate Robotics (iRobotics, post-8th and 9th grade); and Fundamentals of Physical Science (FPS-Chemistry and FPS-Physics, post-9th through 11th grade).

**For more information  
and eligibility requirements,  
contact the  
Center for Pre-College Programs  
at NJIT:  
973-596-3550**



# THE CENTER FOR PRE-COLLEGE PROGRAMS

**Gaining Early Awareness and Readiness for  
Undergraduate Programs (GEAR UP)**  
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**Upward Bound for English Language Learners (UBELLS)**  
ellnjitupwardbound@gmail.com

**TRiO Programs**  
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**Early College Preparatory Programs**  
cpcp@njit.edu

## About the Center for Pre-College Programs

The Center for Pre-College Programs was established in 1979 in order to increase access to scientific and technological fields among traditionally underrepresented populations and to improve the teaching of science and mathematics in secondary and elementary schools. Achievement is reflected in the accomplishments of its many pre-college alumni who become teachers who show the way to youngsters, engineers who create technology that allows astronauts to rendezvous in space, scientists who research new avenues to control and cure diseases, and financiers who strive to keep our economy flourishing. The Center for Pre-College Programs annually serves more than 3,000 elementary and secondary students and their teachers in a variety of programs.



**[njit.edu/precollege](http://njit.edu/precollege) • 973-596-3550**