STUDENT APPLICATION FORM - SUMMER 2015

Please check the program(s) you are applying to:

WOMEN IN ENGINEERING & TECHNOLOGY INITIATIVES:

- ❑ Environmental Engineering ***FEMME4*** (4th Grade / Female)
- ❑ Aeronautical Engineering ***FEMME5*** (5th Grade / Female)
- ❑ Mechanical Engineering ***FEMME6*** (6th Grade / Female)
- ❑ Chemical Engineering ***FEMME7*** (7th Grade / Female)
- ❑ Biomedical Engineering ***FEMME8*** (8th Grade / Female)

❑ ENVIRONMENTAL SCIENCE AND ENGINEERING PROGRAM ***ESEP*** (4th Grade)
❑ AERONAUTICAL ENGINEERING PROGRAM ***AEP*** (5th Grade)
❑ PRE-ENGINEERING PROGRAM ***PrEP*** (6th Grade)
❑ EXPLORE CAREERS IN TECHNOLOGY & ENGINEERING ***ExCITE*** (7th Grade)
❑ CHEMICAL ENGINEERING ***CHEM-ENG*** (7th Grade)
❑ INTRODUCTION TO CHEMICAL INDUSTRY ***IChME*** (7th & 8th Grade)
❑ MEDICAL ROBOTICS ***MEDIBOTICS*** (8th Grade)
❑ BIOMEDICAL ENGINEERING ***BIO-MED*** (8th Grade)
❑ FUNDAMENTALS OF PHYSICAL SCIENCE (9th, 10th & 11th Grades)
❑ CHEMISTRY ***FPS-C*** ❑ PHYSICS ***FPS-P***

Fill in all items. Please Print.

Name: _____
First Name Middle Initial Last Name

Address: _____
No. & Street Apt. or P.O. Box #

_____
City State County Zip Code

Parent 1 E-mail Address (Required): _____

Parent 2 Alternate E-mail Address: _____

Last name on mailbox: _____

Date of Birth (Required): ____ / ____ / ____ Gender: ❑ Male ❑ Female

School: _____

Grade: _____ High School Graduation Year: _____

School City: _____ School County: _____

Parent/Guardian 1
Full Name: _____

Home Phone: (___) — _____ — _____ Cell: (___) — _____ — _____

Work Phone: (___) — _____ — _____

Parent/Guardian 2
Full Name: _____

Home Phone: (___) — _____ — _____ Cell: (___) — _____ — _____

Work Phone: (___) — _____ — _____

How did you hear about our programs?

❑ Internet ❑ School ❑ Newspaper ❑ Friend ❑ Other: _____
❑ Former Applicant ❑ Alumni

NJIT AND THE CENTER FOR PRE-COLLEGE PROGRAMS

One of the nation's foremost public research technological universities, New Jersey Institute of Technology (NJIT) prepares students to be leaders in the technology dependent economy of the 21st century.

Founded in 1881, NJIT has a student enrollment of more than 10,000 on its 45-acre campus in the University Heights section of Newark, NJ.

Today, NJIT looks proudly upon its efforts to minimize the United States' critical shortage of engineers and scientists by reaching out to qualified young people, especially those traditionally underrepresented in the technological fields. Achievement is reflected in the accomplishments of its many pre-college alumni who become teachers showing the way to youngsters; engineers who create technology that allows astronauts to rendezvous in space; scientists researching new avenues to control and cure diseases; and financiers who strive to keep our economy flourishing.

The Center for Pre-College Programs was established in 1978 to increase access to scientific and technological fields among traditionally underrepresented populations and to improve the teaching of science and mathematics in elementary and secondary schools. The Center for Pre-College Programs annually serves more than 3,000 elementary and secondary students, their teachers, and parents in a variety of programs. NJIT has great expectations for this century and we have established clearly defined programs to meet the challenges that lie ahead.

To be considered for admission students must:

- Maintain a **B or better grade average**
- Complete the attached application and recommendation forms
- Submit a copy of your second marking period report card
- Submit a copy of your most recent standardized test scores, achievement scores, PSAT and/or SAT scores
- **Send a $60.00 non-refundable application fee payable to NJIT**

Applications should be in our office no later than Monday, March 23, 2015, to guarantee consideration. Late or incomplete applications will not be considered.

Send all application materials including application fee to:

NEW JERSEY INSTITUTE OF TECHNOLOGY
CENTER FOR PRE-COLLEGE PROGRAMS
Central Avenue Building, 2nd Floor
University Heights
Newark, New Jersey 07102-1982

For more information please
Call (973) 596-3550, Email cpcp@njit.edu
or visit our website at www.njit.edu/precollege

The Center for Pre-College Programs at NJIT does not discriminate on the basis of sex, sexual orientation, race, color, disability, veteran's status, national or ethnic origin, or age in the administration of student programs. Campus facilities are accessible to the disabled.

ENGINEERING ENVIRONMENTAL SCIENCE
AERONAUTICS ROBOTICS
MATHEMATICS CHEMISTRY STEM
BIOMEDICAL TECHNOLOGY

CENTER FOR PRE-COLLEGE PROGRAMS

Early College Preparatory Programs SUMMER 2015

July 6 - August 6, 2015

The Center for Pre-College Programs offers a series of summer programs for high achieving students from post-fourth to post-eleventh grades. These programs are designed to encourage and prepare students to succeed in the fields of **science, technology, engineering and mathematics.**

- **Women in Engineering & Technology (FEMME)**
- **Environmental Science and Engineering Program (ESEP)**
- **Aeronautical Engineering Program (AEP)**
- **Pre-Engineering Program (PrEP)**
- **Explore Careers In Technology & Engineering (ExCITE)**
- **Chemical Engineering (CHEM-ENG)**
- **Introduction to Chemical Industry in Engineering (IChIME)**
- **Medical Robotics (MEDIBOTICS)**
- **Biomedical Engineering (BIO-MED)**
- **Fundamentals of Physical Sciences (FPS)**

NJIT New Jersey Institute of Technology

www.njit.edu/precollege

CENTER FOR PRE-COLLEGE PROGRAMS
CENTRAL AVENUE BUILDING, 2ND FLOOR
UNIVERSITY HEIGHTS, NEWARK, NJ 07102-1982

SUMMER 2015 PROGRAMS

Women in Engineering & Technology Initiative (FEMME)

ELIGIBILITY: Female students completing 4th through 8th grade

The Women in Engineering and Technology Initiative – FEMME Program is a five-week program designed to provide post-4th through post-8th grade girls with opportunities to enhance their mathematics, science and technological academic achievement, develop problem-solving and critical thinking skills and promote self-esteem and self-confidence. The program's goal is to encourage girls to choose careers in scientific and technological fields in which women are traditionally under-represented. FEMME provides an intensive five-week summer component for five groups of female students and includes classroom discussions, laboratory experiments, projects, and field trips. Engineering themes include:

Environmental – 4th grade	Aeronautical – 5th grade	Mechanical – 6th grade
Chemical – 7th grade	Biomedical – 8th grade	

Environmental Science And Engineering Program (ESEP)

ELIGIBILITY: Students completing 4th grade

The Environmental Science and Engineering Program (ESEP) is a five-week program designed to provide post-4th grade students with an introduction to Environmental Science and Engineering. ESEP will give the students an opportunity to learn the importance of environmental concerns and the responsibility we all have to ensure a clean and safe environment for future generations.

Aeronautical Engineering Program (AEP)

ELIGIBILITY: Students completing 5th grade

The Aeronautical Engineering Program (AEP) is a five-week program designed to provide post-5th grade students with an introduction to Aeronautical Engineering. Students learn how aviation improves lives economically, technologically and socially. Through classroom discussions, hands-on laboratory experimentation, computer activities and field trips participants are introduced to Aeronautical Engineering concepts and applications to everyday life.

Pre-Engineering Program (PrEP)

ELIGIBILITY: Students completing 6th grade

The Pre-Engineering Program (PrEP) is a five-week program designed to provide post-6th grade students with an introduction to Mechanical Engineering. Students will learn what engineers do and what it takes to become a practicing engineer. Through classroom discussions, hands-on laboratory experimentation, computer activities, and field trips, participants are introduced to Mechanical Engineering concepts and applications to everyday life.

Explore Careers In Technology & Engineering (ExCITE)

ELIGIBILITY: Students completing 7th grade

Explore Careers in Technology and Engineering (ExCITE) is a five-week program designed to introduce post-7th grade students to Civil Engineering and Energy principles. Students will learn that aspects of everyday life such as power stations that provide electricity, plants that purify drinking water, the roads we drive along and the airports from which we travel abroad are Civil Engineering projects that apply Energy principles.

Chemical Engineering Program (CHEM-ENG)

ELIGIBILITY: Students completing 7th grade

The Chemical Engineering Program (CHEM-ENG) is a five-week program designed to introduce post-7th grade students to the field of Chemical Engineering. This thematic focus allows students to view the world through the lens of a chemical engineer. Chemical engineers draw upon the vast and powerful science of chemistry to solve a wide range of problems, and find the best possible way to manufacture products.

Introduction to Chemical Industry in Engineering (IChIME)

ELIGIBILITY: Students completing 7th and 8th grades

The Introduction to Chemical Industry in Engineering (IChIME) program is a five-week program designed to give post-7th and post-8th grade students an opportunity to increase their understanding, awareness, and participation in the fields of chemistry and chemical engineering. The program includes formal classroom work, laboratory activities, projects, and seminar sessions. Participants learn about chemistry and chemical engineering, environmental science, computer programming, and applications.

Medical Robotics (Medibotics)

ELIGIBILITY: Students completing 8th grade

The Medibotics program is a five-week program designed to provide post-8th grade students with an introduction to real-world Biomedical Engineering problems. Students will learn, use, and apply robotics, and Information Technology concepts to medical problems through the programming and design of robots using LEGO® Mindstorms NXT.

Biomedical Engineering (BIO-MED)

ELIGIBILITY: Students completing 8th grade

The Biomedical Engineering Program (BIO-MED) is a five-week program designed to introduce post-8th grade students to the field of Biomedical Engineering. This thematic focus complements students' natural interest in the fields of health and medicine. Biomedical engineering is a discipline that advances knowledge in engineering, biology, and medicine and improves human health through cross-disciplinary activities that integrate the engineering sciences with the biomedical science and clinical practices.

Fundamentals of Physical Sciences (FPS)

ELIGIBILITY: Students completing 9th, 10th and 11th grades

Fundamentals of Physical Sciences (FPS) is a five-week program designed to prepare post-9th, post-10th, and post-11th grade students for college-level work while they are still in high school, a terrific start for students preparing for college. Students will be introduced to the fields of chemistry or physics.

FPS in Chemistry — Students who have not yet taken high school Chemistry

FPS in Physics — Students who have not yet taken high school Physics

In addition, all students will receive instruction in advanced mathematics, computer applications, language arts and communications, and develop problem-solving and critical thinking skills.

Academic courses will incorporate modules in standardized test preparation to prepare participants for the PARCC, PSAT, and SAT.

PROGRAM DATES & COSTS

ALL PROGRAM DATES:
July 6 - August 6, 2015 – 9:00AM to 3:30PM (Monday-Thursday)

PROGRAM COST:
$60 Non-Refundable Application Fee
$1210 Tuition – Includes Academic Materials

RECOMMENDATIONS

Fill in all items. Please print.

Student's Name: _____

The Center for Pre-College Programs at NJIT finds recommendations to be a valuable tool in the final evaluation of an applicant. We appreciate any comments that you can provide regarding the applicant's academic ability, attention and interest in classes, general behavior and interpersonal skills. Any additional comments are welcome.

Mathematics Teacher Recommendation *(Please answer all questions)*

1. How long have you taught the applicant?_____
2. Subject(s) _____
3. How would you evaluate the applicant in relation to others in class in the following areas on a scale of 1 to 5 with 5 being the highest?
   A. Problem-solving ability _____ C. Grasp of new concepts _____
   B. Attention and interest _____. D. Attention to detail _____
4. Briefly describe the applicant's behavior in class. _____
5. Describe the applicant's interpersonal skills (e.g., does he/she prefer to work alone or with others, outgoing, shy, etc.). _____

Teacher's Name _____ Signature _____

Science Teacher Recommendation *(Please answer all questions)*

1. How long have you taught the applicant?_____
2. Subject(s) _____
3. How would you evaluate the applicant in relation to others in class in the following areas on a scale of 1 to 5 with 5 being the highest?
   A. Problem-solving ability _____ C. Grasp of new concepts _____
   B. Attention and interest _____ D. Attention to detail _____
4. Briefly describe the applicant's behavior in class. _____
5. Describe the applicant's interpersonal skills (e.g., does he/she prefer to work alone or with others, outgoing, shy, etc.). _____

Teacher's Name _____ Signature _____