

## STUDENT APPLICATION FORM

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)
- MEDICAL ROBOTICS **MEDIBOTICS** (8th Grade)
- INTRODUCTION TO **ICHIME** (7th & 8th Grade)
- FUNDAMENTALS OF PHYSICAL SCIENCE **FPS** (9th, 10th & 11th Grades)
  - CHEMISTRY
  - PHYSICS

Fill in all items. Please Print.

Name: \_\_\_\_\_  
First Name Middle Initial Last Name

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

City State Zip Code

Home Telephone: ( \_\_\_\_\_ ) — \_\_\_\_\_ — \_\_\_\_\_

County: \_\_\_\_\_ Last name on mailbox: \_\_\_\_\_

Social Security # (Required): \_\_\_\_\_ — \_\_\_\_\_ — \_\_\_\_\_

Date of Birth (Required): \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Gender: \_\_\_\_\_

Father's Full Name: \_\_\_\_\_

Mother's Full Name: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

School: \_\_\_\_\_

Grade: \_\_\_\_\_ High School Graduation Year: \_\_\_\_\_

School City: \_\_\_\_\_ School County: \_\_\_\_\_

### Emergency Contact Information:

Name: \_\_\_\_\_ Relationship: \_\_\_\_\_

Telephone ( \_\_\_\_\_ ) — \_\_\_\_\_ — \_\_\_\_\_ Please indicate:  Cell  Work  Home

### How did you hear about our programs?

Internet  School  Newspaper  Friend  Other: \_\_\_\_\_

**STUDENT'S RESPONSIBILITIES:** Acceptance is based on the student's commitment to participate in the full summer component and attend all scheduled activities. Should any incident occur involving improper conduct or violation of the program's rules and regulations, all students involved will be subject to disciplinary action that may result in the student's removal from the program.

\_\_\_\_\_  
Date Signature of Student

**PARENT'S/GUARDIAN'S CONSENT:** Please be aware that by signing this document you agree and understand all student's responsibilities listed above and the possible consequences. Furthermore, you are granting permission to the above student to participate in all scheduled activities such as classes, seminars, laboratories and field trips.

\_\_\_\_\_  
Date Signature of Parent/Guardian

## 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 8,500 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 disadvantaged 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.

### Interested? To be considered for admission students must:

- Maintain a **B or better grade average**
- Complete the attached application and recommendation forms
- Submit a transcript of all courses and grades
- Submit a copy of your 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, 2009, to guarantee consideration. Late or incomplete applications will not be considered.

Send all application materials including application fee to:



### CENTER FOR PRE-COLLEGE PROGRAMS

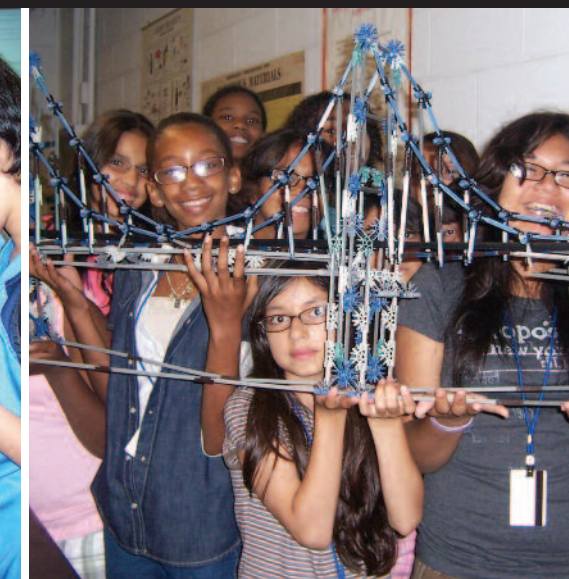
Central Avenue Building, 2nd Floor  
University Heights  
Newark, New Jersey 07102-1982

For more information please call the Center at  
(973) 596-3550 or visit our website at  
[www.njit.edu/precollege](http://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.



### CENTER FOR PRE-COLLEGE PROGRAMS



## Early College Preparation Programs in Science, Technology, Engineering and Mathematics Summer 2009

The Center for Pre-College Programs offers a series of summer programs for academically talented 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 Programs**)
- Environmental Science and Engineering Program (**ESEP**)
- Aeronautical Engineering Program (**AEP**)
- Pre-Engineering Program (**PrEP**)
- Explore Careers In Technology & Engineering (**ExCITE**) Program
- Medical Robotics (**MEDIBOTICS**)
- Introduction to Chemical Industry in Engineering (**ICHIME**) Program
- Fundamentals of Physical Sciences (**FPS**)

NEW JERSEY INSTITUTE OF TECHNOLOGY  
CENTER FOR PRE-COLLEGE PROGRAMS  
CENTRAL AVENUE BUILDING, 2ND FLOOR  
UNIVERSITY HEIGHTS, NEWARK, NJ 07102-1982

THE EDGE IN KNOWLEDGE

## SUMMER 2009 PROGRAMS

### Women in Engineering & Technology Initiative – FEMME Program

The Women in Engineering and Technology Initiative – FEMME Program is a five-week program designed to provide post-fourth through post-eighth grade girls with opportunities to enhance their mathematics, science and technological academic achievement, develop problem-solving and critical thinking skills, 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

In addition, all groups will receive instruction in advanced mathematics, computer applications, language arts and communications.

Academic courses will incorporate modules in standardized test preparation to prepare FEMME 4-5-6-7 participants for the New Jersey Assessment of Skills and Knowledge (NJ ASK); FEMME8 for the Scholastic and Assessment Test (SAT) and the High School Proficiency Assessment (HSPA) Exam.

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

**ELIGIBILITY:** Female students completing 4th through 8th grade

**PROGRAM COST:** \$60 Non-Refundable Application Fee and \$960 Tuition

### Environmental Science And Engineering Program (ESEP)

The Environmental Science and Engineering program (ESEP) is a five week program designed to provide academically talented post-4th grade students with an introduction to environmental science and engineering. ESEP will also provide instruction in advanced mathematics, computer applications, language arts and communications.

Academic courses will incorporate modules in standardized test preparation to prepare participants for the New Jersey Assessment of Skills and Knowledge (NJ ASK) a comprehensive assessment exam administered to New Jersey's 5th graders.

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

**ELIGIBILITY:** Students completing 4th grade

**PROGRAM COST:** \$60 Non-Refundable Application Fee and \$960 Tuition

### Aeronautical Engineering Program (AEP)

The Aeronautical Engineering Program (AEP) is a five-week program designed to provide academically talented post-5th grade students with an introduction to Aeronautical Engineering. This program will give the students an opportunity to enhance their mathematics, science and technological academic achievement, develop problem-solving and critical thinking skills through classroom discussions, hands-on laboratory experimentation, computer activities and field trips. Participants will learn about aeronautical engineering, computer applications, mathematics, language arts and communications.

Academic courses will incorporate modules on standardized test preparation to prepare participants for the New Jersey Assessment of Skills and Knowledge (NJ ASK) a comprehensive assessment exam administered to New Jersey's 6th graders.

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

**ELIGIBILITY:** Students completing 5th grade

**PROGRAM COST:** \$60 Non-Refundable Application Fee and \$960 Tuition

### Pre-Engineering Program (PrEP)

The Pre-Engineering Program (PrEP) is a five-week program designed to provide academically talented post-6th grade students with an introduction to Mechanical Engineering. Through classroom discussions, hands-on laboratory experimentation, computer activities, and field trips, participants are introduced to engineering concepts and applications to everyday life.

Academic courses incorporate modules on standardized test preparation to introduce participants to the New Jersey Assessment of Skills and Knowledge (NJ ASK) a comprehensive assessment exam administered to New Jersey's 7th graders.

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

**ELIGIBILITY:** Students completing 6th grade

**PROGRAM COST:** \$60 Non-Refundable Application Fee and \$960 Tuition

### Explore Careers In Technology & Engineering (ExCITE)

Explore Careers in Technology and Engineering (ExCITE) is a five-week program designed to introduce post-7th grade students to Civil and Industrial Engineering. Participants will also receive instruction in algebra, language arts, communications, computer technology and applications.

Academic courses incorporate modules on standardized test preparation for the New Jersey Assessment of Skills and Knowledge (NJASK), a comprehensive assessment exam administered to New Jersey's 8th graders.

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

**ELIGIBILITY:** Students completing 7th grade

**PROGRAM COST:** \$60 Non-Refundable Application Fee and \$960 Tuition

### Medical Robotics (Medibotics)

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® NXT. Participants will also receive instruction in algebra or advanced mathematics, language arts, communications, computer technology and applications.

In addition, during the summer the students will receive test preparation for the High School Proficiency Assessment (HSPA) exam and Scholastic Assessment Test (SAT).

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

**ELIGIBILITY:** Students completing 8th grade

**PROGRAM COST:** \$60 Non-Refundable Application Fee and \$960 Tuition

### Introduction to Chemical Industry in Engineering Program (IChIME)

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.

**PROGRAM DATES:** June 29-July 30 – 9:00AM to 3:30PM (Monday-Thursday)

**ELIGIBILITY:** Students completing 7th and 8th grades

**PROGRAM COST:** \$60 Non-Refundable Application Fee and \$960 Tuition

### Fundamentals of Physical Sciences (FPS)

Admission requirements at the top universities seek students who have taken challenging science, mathematics and computer courses. Fundamentals of Physical Sciences (FPS), is a five-week program, designed to prepare students for college-level work while they are still in high school. Helping these students to gain experience, confidence, and inspiration — a terrific start for students preparing for college! The program themes will include:

**Fundamentals of Chemistry—**

Students completing 9th, 10th and 11th grades ready to enroll in Chemistry in fall 2009.

**Fundamentals of Physics—**

Students completing 9th, 10th and 11th grades ready to enroll in Physics in fall 2009.

Students will also receive instruction in higher-level problem-solving strategies, computer programming, engineering and communications through classroom discussions, lectures, laboratory experiments, demonstrations, and projects.

In addition, during the summer the students will receive test preparation for the High School Proficiency Assessment (HSPA) exam and Scholastic Assessment Test (SAT).

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

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

**PROGRAM COST:** \$60 Non-Refundable Application Fee and \$960 Tuition

## RECOMMENDATIONS

**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.

### Math 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 \_\_\_\_\_

### Guidance Counselor Recommendation *(Please answer all questions)*

1. How long have you known the applicant? \_\_\_\_\_
2. Briefly describe applicant's behavior and/or are you aware of any behavior or social problems? Explain: \_\_\_\_\_  
\_\_\_\_\_

3. Would you recommend the student to our program?  Yes  No  Maybe

Please explain: \_\_\_\_\_

Counselor's Name \_\_\_\_\_ Signature \_\_\_\_\_