PREFACE

Summer Program 2016

July 10—July 23

PREFACE is a two-week residential summer experience at Rensselaer Polytechnic Institute for talented high school sophomores and juniors, who will enter the 11th or 12th grade in the Fall of 2016, from groups that have been historically and traditionally underrepresented or underserved in science, engineering, and technological fields, and are interested in pursuing careers in engineering and technological professions.
ELIGIBILITY & SELECTION
To qualify, applicants must be entering the 11th or 12th grade in September 2016. The PREFACE Selection Committee reviews each application and makes its recommendation to the project director. Selection is based on high school academic performance, standardized test scores, quality of essay, and recommendations. In addition, since all programs are taught in English, students must have a strong understanding of the English language.

The application deadline is March 25, 2016. No applications will be accepted after that date. Annually, the number of applicants far exceeds the available funding. The maximum number of participants for 2016 is 24. The program is limited to U.S. citizens and permanent residents from underrepresented and underserved backgrounds.

PURPOSE
Participation in the PREFACE Summer Program will:
- Provide experience using an engineering process approach to resolve a problem (e.g., design, troubleshoot, innovate, model, revise, and assess outcomes)
- Create opportunities to develop leadership and team-building skills
- Explore career opportunities available to the engineering professions as a means to develop a deeper understanding of the role and expectations of an engineering education
- Present a snapshot of college life, and its academic, social, cultural, civic, and environmental experiences.

CURRICULUM FEATURES
Core Disciplines—Introduction to Manufacturing Processes, Introduction to Electronics, Introduction to Engineering Design, and Computing with Solid Works
Engineering Disciplines—Biomedical, Mechanical, Aeronautical, Electrical, Computer and Systems, Civil and Environmental, Power Systems, Nuclear, Materials, Industrial, and Chemical
Leadership Development—Archer Center for Student Leadership—team building and engineering design projects
Career Development—Center for Career & Professional Development
Civic Engagement—Explore the region, volunteer, and give back to the community
College Preparedness—Sessions on the college application and financial aid processes
COST
PREFACE is funded through annual individual, corporate, and foundation contributions. PREFACE subsidizes each participant’s round-trip transportation to Rensselaer, tuition, fees (including laundry), and room and board for the two-week session. The only costs to participants are the health center fee, and personal and miscellaneous expenses such as snacks and souvenirs.

HOUSING AND MEALS
Students live in a residence hall on the Rensselaer campus. Students will share a room with another PREFACE student. Meals are provided on campus by Rensselaer Dining Services. Participants receive three meals per day.

RECREATION
Participants will have access to campus recreational facilities, including basketball, tennis and volleyball courts, outdoor track, baseball/softball fields, the Mueller Fitness Center, and the facilities of the Rensselaer Union.

APPLICATION AND DEADLINE
The completed PREFACE application [Part I (applicant information), II (essay), and III (scholastic information)], the student’s high school transcript, a letter of recommendation from the student’s math or science teacher, and a letter of recommendation from the student’s guidance counselor must be received at Rensselaer no later than March 25, 2016 for consideration for the 2016 PREFACE Program. The application may be mailed in its entirety, or in separate pieces if each is clearly identified with the applicant’s name. The application is found on pages 1 and 2 (attached), and on the PREFACE website at http://doso.rpi.edu/precollege.

Send your application to:
Rensselaer Polytechnic Institute
PREFACE Program 2016
Dean of Students Office
110 Eighth Street, Academy Hall 4629
Troy, NY 12180

For more information, send an e-mail to smithc@rpi.edu or call (518) 276-3098.

“Rensselaer complies with all federal, state and local non-discrimination laws and provides equal opportunities for all persons regardless of race, color, religion, sex, sexual orientation, gender identity, gender expression, age, marital status, national origin, citizenship status, disability, military status, veteran status, or any other basis prohibited by law.”
PART I: APPLICANT INFORMATION

Name ________________________________________________  
Date of Birth _________________________________________

Address ______________________________________________  
Telephone _____________________________________________

City ____________________________________________________  
Gender: Male _____  Female _____

State ____________________________  Zip ________________  
US Citizen or Permanent Resident: Yes _____  No _____

E-Mail ________________________________________________  
Current Grade in School  10th _____  11th _____

Rensselaer seeks students from all ethnic and racial backgrounds. We ask that you please complete the information below (optional).

Are you of Hispanic or Latino descent? (Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture)

Yes _____  No _____

What is your race? (Select one or more)

American Indian or Alaskan Native _____  Native Hawaiian or Other Pacific Islander _____
Asian _____  White _____
Black or African American _____

List all pre-college programs not administered by your high school that you have participated in since your freshman year:

_______________________________________________________________________________________________________
_______________________________________________________________________________________________________

PART II: ESSAY

On a separate sheet of paper, comment on why you are interested in participating in the PREFACE Program, what you expect to gain from your participation, and who has most influenced you in pursuing a career in an engineering or engineering-related profession. The essay should be written in English, and MUST NOT EXCEED TWO TYPEWRITTEN PAGES. Attach your essay to the application packet.

PART III: SCHOLASTIC INFORMATION

This section is to be completed by the student and the student’s guidance counselor. The section is found on the PREFACE APPLICATION—page 2 of 2.

THE COMPLETE APPLICATION MUST BE RECEIVED NO LATER THAN MARCH 25, 2016. IT SHOULD BE MAILED TO:

Rensselaer Polytechnic Institute  
PREFACE PROGRAM 2016  
Dean of Students Office  
110 Eighth Street, Academy Hall 4629  
Troy, NY 12180

If the application is mailed in separate pieces, make certain that the applicant’s name is noted on each piece.
**PART I & PART II**
These sections on applicant information and essay are to be completed by the student. They are found on the PREFACE APPLICATION—page 1 of 2.

**PART III: SCHOLASTIC INFORMATION**

*This part is completed by the student:*

<table>
<thead>
<tr>
<th>Name __________________________________________</th>
<th>Date of Birth ________________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Grade in School _______ Year of High School Graduation _______</td>
<td></td>
</tr>
<tr>
<td>High School ____________________________________________________________________________________</td>
<td></td>
</tr>
<tr>
<td>School Address ____________________________________________________________________________________</td>
<td></td>
</tr>
<tr>
<td>City ___________________________ State _____________ Zip ____________________</td>
<td></td>
</tr>
<tr>
<td>Guidance Counselor Name ____________________________ School Telephone ________________________________</td>
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</table>

*This part is completed by the student’s guidance counselor:*

<table>
<thead>
<tr>
<th>PSAT</th>
<th>Critical Reading ______</th>
<th>Math ______</th>
<th>Writing ______</th>
<th>H.S. Average ____________</th>
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</thead>
<tbody>
<tr>
<td>SAT I</td>
<td>Critical Reading ______</td>
<td>Math ______</td>
<td>Writing ______</td>
<td>Rank / Class Size ________</td>
</tr>
<tr>
<td>PLAN Composite ______</td>
<td>ACT Composite ______</td>
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<td></td>
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*FINAL OR MOST RECENT GRADES IN:*

<table>
<thead>
<tr>
<th>Math</th>
<th>Course I / Math A ______</th>
<th>Algebra I ______</th>
<th>Trigonometry ______</th>
<th>Statistics ______</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course II / Math B ______</td>
<td>Algebra II ______</td>
<td>Pre-Calculus ______</td>
<td>Other (specify) ____</td>
<td></td>
</tr>
<tr>
<td>Geometry ______</td>
<td>Calculus ______</td>
<td>______</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>Earth Science ______</td>
<td>Biology ______</td>
<td>Chemistry ______</td>
<td>Physics ______</td>
</tr>
<tr>
<td>Computer Science ______</td>
<td>Other (specify) __________________</td>
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</tbody>
</table>

Guidance Counselor Signature ___________________________________________ Date ____________________

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**PREFACE APPLICATION CHECK LIST:**

- [ ] Completed PREFACE APPLICATION [Parts I (Applicant Information), II (Essay), & III (Scholastic Information)]
- [ ] High School Transcript
- [ ] Letter of Recommendation from current math or science teacher
- [ ] Letter of Recommendation from guidance counselor

Rensselaer must receive the completed application no later than **March 25, 2016.**