

# Introduction of Sophomores to Engineering Principles (INSTEP)

Each summer, the UT Office of Engineering Diversity Programs presents the *Introduction of Sophomores to Engineering Principles* (INSTEP) program. This event brings rising high school freshmen and sophomores to the Knoxville campus for a full week of classes, workshops and presentations designed to motivate minority students with an interest and aptitude to consider a career in engineering.

## Who are Engineers?

Engineers are problem-solvers—people who search for quicker, better, and less expensive ways to use the forces and materials of nature to meet tough challenges. Through the ages—from the construction of the Egyptian pyramids to the design of spacecraft—engineers have been the shapers of progress.

## Who Should Attend?

INSTEP is open to students entering 9th or 10th grade next fall with an interest in science and math who identify with the following ethnicities:

- African American
- Alaskan Native
- Pacific Islander
- Hispanic/Latino
- Native American

## Program Overview

Students chosen to participate in the INSTEP program will be introduced to the fundamentals of engineering and the design process—with an emphasis on the importance of mathematics—through the following workshops:

- Engineering Tools
- Mathematics
- Engineering Disciplines
- Computers



Lectures are immediately followed by hands-on projects allowing students to apply their knowledge of the concepts to identify a problem, design a solution and present their work to peers and mentors.

Throughout the week, students will get a taste

of college life by living in a campus residence hall and interacting with engineering students. Participants will also have an opportunity to explore engineering careers during an industry field trip where they will meet practicing engineers in the workplace.

*Participation in all classes and events is mandatory. Students will be required to be on time and prepared for all activities. Failure to comply will result in dismissal from the program.*



## 2008 INSTEP Information

- Dates: July 13–18, 2008
- Location: The University of Tennessee, Knoxville
- Check-in: July 13th, 2008, 3:00–5:00 p.m.
- Fee: No charge
- Capacity: 20 students

Students should report to their assigned residence halls during the check-in period listed above and be picked up at their residence hall by 5:00 p.m. on the last day.

- Students will be housed in a residence hall and receive three free meals per day at a campus cafeteria.
- All classes will take place in College of Engineering facilities.
- Transportation will be provided for all activities.
- Students will be able to enjoy coordinated group activities during their free time such as use of UT's recreation center facilities including outdoor and indoor pools.
- Parents or guardians are welcome to attend the presentation session and awards luncheon on the final day of the program.

## How to Apply

Please complete the attached application form along with two letters of recommendation (one from a math or science teacher and one from another faculty member who knows you well enough to evaluate your ability and potential for success). Send or fax the forms to the address below before May 1, 2008.

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