

The HBCU-UP Project at Tennessee State University is designed to support the success of students enrolled in science, technology, engineering or mathematics (STEM) disciplines for entrance into STEM careers and/or graduate school. The project includes the STEM Rising Freshman Summer Institute, Peer-led Mentoring/Tutoring Program, the Rising Sophomore STEM Research Skills Institute and Faculty Undergraduate Research Mentors for sophomore, junior and senior student participants.

**Science
Technology
Engineering
Mathematics**



The National Science Foundation (NSF), through their Historically Black Colleges and Universities Undergraduate Program (HBCU-UP), provides grant support to Tennessee State University's efforts to enhance STEM education and research (HRD-0715004).

The HBCU-UP Project at TSU is a collaborative effort between the College of Agriculture, Human and Natural Sciences, the College of Engineering, Technology and Computer Science, the Center of Excellence for Learning Sciences, the Division of Research and Sponsored Programs, and the Massie Chair of Excellence.



Please submit application package to:

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HBCU-UP Project
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Also visit the HBCU-UP website at www.tnstate.edu/hbcu_up



**Are you a high school senior?
Interested in a summer program?
Need a jump start in college-level
STEM courses in chemistry, physics
or mathematics?
HBCU-UP may be
what you need!**



Apply to attend the

STEM RISING FRESHMAN SUMMER INSTITUTE
a free five-week residential pre-college program for prospective
STEM majors.

June 11 - July 13, 2012

Students selected to participate, and who plan to enter TSU in the fall 2012, are eligible to receive financial support up to \$5,000 – in their first year of college.

Overview

The STEM Rising Freshman Summer

Institute at Tennessee State University is a five-week academic program to support students who plan to pursue a college degree in a STEM discipline – agricultural science, biology, chemistry, engineering or math.

During the Institute, students will participate in chemistry, physics, mathematics, computer science classes and labs, and pair with a peer mentor/tutor. Students who participate in this program also have an opportunity to: learn basic research skills and principles; dialogue with guest speakers; and visit local businesses and industries that employ STEM graduates.

After receipt and review of all applications, twenty-four (24) rising freshman students, who demonstrate **strong** capability in science and mathematics, will be selected to participate in the Summer Institute. [You can also visit the TSU website (www.tnstate.edu) or the HBCU-UP website at www.tnstate.edu/hbcu_up for additional information.]

Note: Special consideration will be given to applicants interested in pursuing a college degree in mathematics.

Goals of the STEM Summer Institute

1. To provide the participants with the fundamentals and practices necessary for successful completion of a degree in a STEM area.
2. To strengthen and enhance analytical problem solving skills.
3. To familiarize students with experimental tools and their usage.
4. To introduce students to career possibilities in STEM areas.

Benefits

1. The program will allow students to:
 - Develop skills to work effectively with peers and develop and maintain collegial relationships.
 - Develop an effective relationship with peer mentors/tutors and faculty mentors to provide support throughout the freshman and sophomore years.
 - Develop working academic relationships with faculty members teaching core science and mathematics courses in the freshman and sophomore years.
2. During the summer, on-campus housing, meals and a stipend will be provided for participants (valued over \$1,000). The stipend will be adjusted as appropriate for students who do not complete the full five weeks of the program.
3. Students who make satisfactory progress during the Summer Institute, and continue to pursue a STEM major at TSU, may be eligible to receive additional financial assistance – **up to \$5,000** -- with tuition, books and other expenses during their freshman year.

Participants will be selected for participation based on the following criteria:

- Science and mathematics courses taken in high school – particularly in senior year
- Recommendation letters or forms submitted from high school teachers (forms can also be downloaded from HBCU-UP website)
- Scores on ACT and/or SAT tests
- Quality of one-page essay
- Admission to TSU
- Selected major within four STEM disciplines

To Apply

Important: Each applicant must be at least conditionally admitted to TSU for the Fall semester following the STEM Summer Institute.

Your application packet must include:

1. An application form for the STEM Summer Institute. To request a form, call or e-mail Dee Green (*see contact information on the back of this brochure*) or visit www.tnstate.edu/hbcu_up.
2. An official transcript. (*This transcript is in addition to the one sent to the TSU Office of Enrollment Management for admission to the university.*)
3. Three (3) Recommendation Letters or Forms from high school teachers. At least two (2) letters must be from mathematics or science (including computer science) teachers. Please go to www.tnstate.edu/hbcu_up to use the online Student Recommendation Form.
4. A one-page essay stating your high school extracurricular activities, educational and career goals.

Application deadline

The deadline for submission of completed application packet is March 16, 2012.

INCOMPLETE APPLICATION PACKETS WILL NOT BE CONSIDERED.

Applications from underrepresented populations are strongly encouraged.