

2012 Summer Engineering Camps:

Tulsa Alliance for Engineering

June 18-22, 2012

FREE – application deadline - April 20th

Grades – 8 (summer before and after 8th grade)

Target students: Low income, and under-represented groups in engineering: women and minorities

With hands-on activities, exciting tours, college labs and student mentors, students will learn about a field with limitless possibilities! Alternative Energy, Computer Engineering, Electrical Engineering, Civil Engineering, Mechanical Engineering, Aerospace Engineering, Petroleum Engineering, it's in there!

This camp includes all of the educational partners within the Alliance – Tulsa Community College, Oklahoma State University, Oral Roberts University, Tulsa Technology Center, the University of Oklahoma, and the University of Tulsa, as well as local engineering companies and manufacturing facilities. Students must be recommended by a Math and/or Science teacher. **Application deadline – April 20th.**

Contact: Susan Thompson, sthompson1@tulsacc.edu, 918-859-9791

Oral Roberts University

A Hands-On Program in Mathematics and Science

Residential

June 11-15

FREE

Grades 8-9

This academy provides opportunities for developing skills to learn mathematics and science. Mathematical activities include code-breaking cryptology and fractal pattern recognition. Science experiences include field trips, real-world technologies, rocketry and laboratory work where students seek to understand the natural world. The use of problem-solving ideas and project-based learning integrate these mathematics and science experiences.

Contact: Dr. John Matsson, jmatsson@oru.edu, 918.495.6935, or get an application at www.oru.edu/current_students/my_academics/schools/college_of_science_engineering/pdf/summer_academy_application.pdf

Oklahoma State University

Fired Up About Research Science and Engineering

Residential

July 22-2

FREE

Grades 8-11

Explore and experience the excitement of the technology and sciences that reshape our world. During an intensive weeklong residential program, participants are challenged with laboratory- and field-based scenarios centered on a common theme: fire. Participants investigate careers, learn new skills and prepare for the fascinating world of technology. Specific activities include biosystems, robotics, and the science and engineering of fire.

Contact: Jovette Dew, Jovette.dew@okstate.edu, 405.744.5335, or visit <http://www.diversity.okstate.edu>

Oklahoma State University

Smart Cars Summer Academy

Residential

July 15-20

FREE

Grades 11-12

One of the fastest growing technologies is use of hi-tech sensors. "Smart sensors" are being used in hundreds of application areas, like environmental monitoring, homeland security, medicine, aerospace and automobiles. Students will use smart sensor concepts to stimulate interest in science, math and technology during a weeklong residential academy. The students will develop a smart sensor system for steering an autonomous race car.

Contact: Jovette Dew, Jovette.dew@okstate.edu, 405.744.5335, or visit <http://www.diversity.okstate.edu>

Oklahoma State University

DISCOVER ARCHITECTURE

Residential

June 13-16

Students 16 and older

Application Deadline is May 1, 2012

The "DISCOVER ARCHITECTURE" summer workshop introduces several aspects within the fields of Architecture and Architectural Engineering to potential university students through academic projects that are designed to stimulate creativity... and be fun! Participants live in campus housing, and complete projects that include the application of sketching, designing in model, and using computer presentation tools - to help students understand if a career in Architecture might be right for them. The program is offered by Oklahoma State University faculty, at the Stillwater campus, for students who are at least 16 years of age.

For further information, call the OSU School of Architecture at (405) 744-6043, or email Professor Bilbeisi at suzanne.bilbeisi@okstate.edu

Application: <http://www.tulsacc.edu/sites/default/files/Career%20Academies%20.pdf>

**Seminole State College
Peek Into Engineering
Residential**

July 29-Aug. 3

FREE

Grades 9-12

During this academy, which targets rising ninth- through 12th-grade students, teams of students will design and assemble underwater remote-operated vehicles and model boats. Participants will also be exposed to simple electronic circuitry. Exciting activities will expose participants to aerospace, computer, electrical, material, mechanical and systems engineering. Field trips will be taken to either Oklahoma State University or the University of Oklahoma and an engineering facility (an OG+E power plant and/or Blue Wave Boats). Competitions will be held throughout the academy.

Contact: 405.382.9217 or www.sscok.edu/PieAcademy/PieMainPg.htm

**Tulsa Community College • Northeast Campus
SCIENCE & ENGINEERING CAREERS ACADEMY**

June 18-21, 2012

Grades 10-12

Come and see what all the hype is about! Explore careers that involve science and engineering and learn that it is a lot more interesting than you first thought. Through hands-on approaches, experience the excitement and fascination of these careers that are in high demand.

- Explore the careers in Science and Engineering Technology
- Learn about alternative energy systems, electrical-electronic circuits, and cleanroom laboratory
- Demonstrate amazing science and engineering principles
- Participate in team projects
- Learn about nano-technology, robotics systems, and more!

Dates: June 18-21, 2012, M-Th • Hours: 8:30am to 4:30pm

E-mail: continuinged@tulsacc.edu

or Call 918-595-7200 - Cost: \$149. Call# 90220

<http://www.tulsacc.edu/sites/default/files/Career%20Academies%20.pdf>

Tulsa Community College • Northeast Campus

Extreme Robotics

June 25-28, 2012

Ages 11-15

Explore the world of robotics, including uses for robotics technology. Through hands-on application, students will explore multiple careers related to engineering and robotics engineering. This class will also teach what each school needs to know in order to build a robotics model with your team. Let us help “engineer” your summer!

Hours: 8:30am to 4:30pm

E-mail: continuinged@tulsacc.edu

or Call 918-595-7200 - Cost: \$179. Call# 90043

<http://www.tulsacc.edu/sites/default/files/Career%20Academies%20.pdf>

Tulsa Community College • Southeast Campus

Extreme Engineering Design

July 16-19, 2012

Ages 11-15

Are you inspired by the elegant design in modern consumer electronics? Work with creative teams to learn engineering and design principles to generate an interactive project using LED, computer programming, and everyday materials. Projects are inspired by MIT Media Lab @ www.media.mit.edu. Disciplines include: mechanical, electrical, chemical and computer engineering.

Hours: 8:30am to 4:30pm

E-mail: continuinged@tulsacc.edu

or Call 918-595-7200 - Cost: \$149. Call# 90810

<http://www.tulsacc.edu/sites/default/files/Career%20Academies%20.pdf>

University of Oklahoma

Bridges to College Math, Science and Engineering

Residential

Session I: July 15-20

Session II: July 22-27

FREE

Grades 11-12

This academy offers two, weeklong sessions providing students entering their junior or senior year with experience in the area of mathematics as it pertains to the study of physics, engineering and mathematics. Areas covered include probability, logic, statistics and calculus. The sessions will emphasize the use of extensive symbolic notation required to represent mathematical ideas. Students move from concrete examples to more abstract ones using hands-on methods. Students will be introduced to careers that stem from the fields of math, science and engineering. The experience gives students unique exposure to a college atmosphere. Twenty-five students will be accepted for each session.

Contact: Holly Mills, hollymills@ou.edu, 405.325.6897, or visit http://youth.ou.edu/summer_academies.html

University of Oklahoma

BP DEVAS

Residential

June 10-16 - Application deadline is April 30

Grades 10-12

http://www.ou.edu/content/coe/wssc/audience/mep_diversity/summercamps.html

DEVAS - (Discovering Engineering Via Adventure in Science) target audience is female high school students entering sophomore, junior, or senior year. June 10 -16, 2012 and, cost is \$250.00.

**University of Oklahoma
BP Engineering Academy
Residential**

June 10-16 - Application deadline is April 30

Grades 10-12

http://www.ou.edu/content/coe/wssc/audience/mep_diversity/summercamps.html

BP Engineering Academy: target audience is male high school students entering sophomore, junior or senior year. June 10 -16, 2012 and application deadline is April 30, cost is \$250.00.

**University of Oklahoma
AT&T Summer Bridge
Residential**

June 30 – July 28

http://www.ou.edu/content/coe/wssc/audience/mep_diversity/summercamps.html

AT&T Summer Bridge - For admitted engineering freshmen. June 30 – July 28, 2012 and cost is \$450.00

**The University of Tulsa
Summer Engineering Academy at The University of Tulsa for Precollege Students
Commuter**

June 25-29

FREE

Grades 8-11

This academy makes students aware of career opportunities in electrical and mechanical engineering through hands-on design projects, interaction with industry professionals and an integrating project. High school teachers will receive training and assist investigators with the academy's activities. Students will present their experiences in their math and science classes during the school year. Teachers will be supported in implementing academy exercises within their classrooms. The goal is to attract more Oklahoma students into engineering to help meet Oklahoma technical employer needs.

Contact: Peter LoPresti, peter-lopresti@utulsa.edu, 918.631.3274

Also, check out additional opportunities on the OSRHE website:

http://www.okcollegestart.org/Plan_for_College/Summer_Opportunities.aspx