

**Creating the Engineering Bug in Elementary and Junior High School Students:
Texas Tech University's Engineering Outreach Program**

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Through Texas Tech University (TTU) College of Engineering (COE) Outreach efforts, local schools are participating in science and engineering projects as part of the Tech University Pre-college Engineering Academy Program[®]. The Center for Partnerships in Science and Technology and the College of Engineering have established a means for getting fourth through ninth-graders excited about science, engineering, and technology. Not only are COE faculty and staff involved in developing projects that will engage the students, but COE students are mentoring K-12 students and assisting K-12 teachers with after-school and in-class engineering projects. The outreach program is a win-win situation for everyone: public school students and teachers learn about engineering, university students become role models, faculty and staff become involved in developing skills and aptitudes desired for incoming engineering students, TTU students develop community service and service learning knowledge, and a bridge is spanned between public schools and the university. Projects in the Outreach Program consist of Super LEGO Robotics, Aeroscience (PongSat), Rocketry, Future Cities, and various exercises that can be integrated into the junior high or elementary curriculum. This paper will discuss the development, implementation, and outcomes of these programs.