

Grant Title: Michael P. Anderson Summer Outreach Program
Location: Alabama A&M University, Huntsville, AL
Contact Person: Dr. Trent Montgomery, (256) 372-5463

Program Description:

The Michael P. Anderson Summer Outreach Project is a 3-week hands-on learning experience for high school students designed to expose students to careers in engineering, science and technology. The project targets underserved minority students.

Program Relevance to NASA:

University engineering and science faculty teach team with NASA engineers and provide hands-on learning experiences in GPS surveying, robotics, mechanical assembly, web development and bridge building. Students gain a knowledge of and interest in fields of engineering. They also learn about NASA careers and the preparation required for such careers

Program Benefits to Society:

This project is designed to attract minority students to the field of engineering and encourage them to take advanced math and science courses in high school and to attend college and major in a STEM field.

Program Goals:

To engage high school students in hands-on learning experiences in engineering that create an awareness of varied engineering careers as well as the skills required to prepare for such careers.

To develop students' mastery of mathematics, especially as it relates to engineering.

Program Accomplishments:

Nineteen (19) students from 12 high schools participated in the project in FY 2007.

Units of study and student competitions were provided in robotics, bridge building, website design, electronics, computer programming and land surveying.

University faculty and NASA engineers developed the curriculum and provided the instruction.

Student Accomplishments:

Students competed for team and individual awards in robotics, website design, electronics and soldering, bridge building and computer programming.

Students participated in an advanced mathematics course.

Students developed and presented PowerPoint presentations on their engineering projects and mathematics skill mastery to their parents at a closing program.