



Spartan Engineering for TEENS

COLLEGE OF
ENGINEERING

6/13 - 6/17

Audience

This commuter program was attended by 14 participants with a variety of male and female students (21% Minority). The participants ranged from grades 8 to 9. Students were mostly local with one student coming from out of state, and were selected based on completed applications.

Funding

Participants paid a fee of \$325, which covers all academic sessions.

Objectives

The program goals are to:

- Expose participants to the various fields of engineering.
- Learn about an engineer's everyday work
- Develop teamwork and problem-solving skills
- Introduce participants to the Grand Challenges of engineering and provide opportunities to work through and solve these problems
- Apply Science, Technology, Engineering and Math (STEM) knowledge to solve problems
- Analyze and interpret data
- Gain research and professional skills through the development of a presentation on a specific field of engineering

Description

Intended for rising 8th and 9th graders considering engineering as their career choice, the program is designed to give in-depth experiences in different engineering majors. Students explored the various fields of engineering through hands-on workshops, problem-solving activities, short lectures by MSU professors and graduate students, lab and engineering research facility tours and presentations. Students also have the opportunity to work with VEX IQ to explore their interest in robotics. Programs include approximately 20 intentional contact hours within the session.



Outcomes

Participants completed a post-evaluation and provided the below feedback on several aspects of the program, including academic sessions, college readiness, staff, social activities, and more.

- The highest-rated benefits of the program were a more clear identification of the student towards engineering, interact with people different from themselves, and develop social skills.
- After participation, 71% of students rated their knowledge of engineering as "Moderate understanding" or "Very good understanding."
- 85% of participants rated the program as "Excellent" or "Good"
- The majority of participants agreed that College of Engineering Faculty was helpful and easy to approach.

Participant testimonials:

- "TEENS provided many in-depth and hands on experiences while learning new concepts"
- "The best part of the TEENS program was getting to work with VEX IQ"

Additional Significant Information

TEENS staff includes personnel from the office of Recruitment & K-12 Outreach as well as professors from many departments. The engineering sessions provide a great opportunity for prospective students to explore engineering at MSU and connect with faculty.

Contact Information

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