

Spartaneering LEGO Robotics - Commuter 6/10-14, 6/17-21



- Knowledge of what robots do

Contact Information

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MICHIGAN STATE
UNIVERSITY

Audience

48 students in the 4th through 8th grade.

Funding

The fee of \$ 275 includes use of an NXT LEGO Mindstorms Robot and the computer and programs to build and program.

activities.

Objectives

Students have fun while learning to build with LEGOS and programming with NXTG programming language.

Build teamwork and communication skills

Develop problem solving skills

Learn about Robots and what they do

Apply **STEM** (Science, Technology, Engineering and Math) knowledge to solve problems

Description

Designed for students to explore various engineering fields, focus on problem identification, team-building, communication, problem-solving, programming and competition using the NXT Robotics Invention System

Outcomes

All students build a LEGO Mindstorms NXT Tribot. Students learn to program the robot to move, and respond to 4 sensors (Light, Touch, Sound & Ultrasonic) Once they have mastered the basics, they are given the challenge to revise their robot to solve challenges from the 2012 First LEGO League.

- Engineering concepts of problem solving
- Learning to work in teams.
- Development of problem solving skills.