



LEGO Mindstorms Robotics Building and Programming LEGO Robots, Grades 4-6

Learn about engineering, mathematics, design, and problem solving methods to solve a mission based on a national robotics competition.

Day 1, Let's Get Moving: Learn about power and motor control and integrate math skills in order to program the robots to travel appropriate distances and angles.

Day 2, Sensing your surroundings: Explore how sensors such as touch, ultrasonic, light, and sound can be integrated into a robotic system.

Day 3 Transporting Objects (IMAX Integration with *Hubble* film): Design and construct attachment devices in order to collect and transport objects based on the mission at hand.

Day 4 Smart Move Mission Design: Putting it All Together

As a team, program one of five available missions as you learn about design parameters and put their acquired programming skills to the test.

Day 5 Smart Move Mission Programming and Friendly Competition

Showcase your programmed robot in friendly competition on your Smart Move Playing Field. Present your robot and program to the other engineering teams for feedback and review.