



*Edison & Ford*  
WINTER ESTATES  
Homes • Gardens • Laboratory • Museum

# ADVENTURES IN ROBOTICS

## MARCH - MAY 2019



Our popular weekend engineering series returns-- now featuring LEGO Robotics!

Students in GRADES 4 - 8 take a deep dive into the dynamic world of robotic engineering using the popular LEGO Mindstorm system. Participants will build on previous knowledge as they tackle new skills and take on new robotic challenges built entirely from LEGOS!

See reverse for dates and times. *Advance registration is required.* **Register online** (beginning December 1, 2018) at: [ecommerce.edisonfordwinterestates.org](http://ecommerce.edisonfordwinterestates.org)



**Are you a Member?** Family (or higher) level Edison Ford Members SAVE on ALL education programming!

**Questions?** Contact Program Registrar Leanne Criswell at 239-334-7419.

2350 McGregor Boulevard • Fort Myers, FL 33901 [www.edisonfordwinterestates.org](http://www.edisonfordwinterestates.org)

**INTRODUCTION TO LEGO MINDSTORM** • March 31, 1-3pm • Students are introduced to the key concepts of robotics and learn about the Mindstorm hardware, software, and mechanics. This foundational class teaches the basic skills needed to advance from concept to a roving robot.

**MOTORS AND MOVEMENT** • April 7, 1-3pm • Mechanical designs become more complex as students begin learn about their motors, manipulators, and attachments.

**SENSORS AND LOOPS** • April 14, 1-3pm • Can you program a robot to escape a maze? Students are introduced to EV3 sensors as they learn more advanced coding skills. Boolean logic is introduced as students program a robot to make simple decisions.

**ADVANCED SENSORS AND LOOPS** • April 21, 1-3pm • Students apply previous knowledge with code and mechanics to design an autonomous robot that displays three or more behaviors based on its environment. Class ends with a battle of the bots!

**ADVANCED COMPETITION TECHNIQUES** • April 28, 1-3pm • Robotic complexity continues to increase as students are taught advanced techniques that can be deployed at robotic tournaments. Focus of this class is to design eloquent code and mechanics to achieve a high level or repeatability and accuracy.

**COMPLETE THE MISSION!** • May 5, 1-3pm • In this final class, students apply all they have learned to accomplish as many LEGO based problems as possible by the end of the class!

**Cost:** *Members: \$15, or \$75 for 6 class series;  
Non-members: \$25, or \$125 for 6 class series.*

