

# Advanced Robotics Programming Camp

Hosted by the Division 1 State Champions, The Ruling Robot Falcons, a 5th year FIRST LEGO League robotics team, this exciting robotics camp is designed for kids who love robots and have participated in the First Lego League or already know the basic functions of Lego Mindstorms EV3 robots. We will be focusing on programming techniques that improve reliability and effectiveness in completing FLL missions.

**When:** July 30th - Aug. 2nd (Mon - Thur)

**Time:** 9:00am - 1:00pm

**Where:** Hilton Christian Church, 100 James River Dr., Newport News

**Cost:** \$100 (\$15 discount if participant brings their own robot)

**Who:** 10 yrs -14 yrs. and have experience using EV3 Mindstorms sensors and specific blocks, including as Move, Wait, Switch, and Loop blocks. Participants should be comfortable using math functions such as multiplication, division, decimals, negative numbers, fractions, and variables.

**What:** Participants will work with a partner to learn techniques that will be used to improve reliability in completing missions on various FLL mats. These techniques include:

- \*Creating MyBlocks w/ Parameters
- \*Calculating distance using math
- \*Parallel Programming
- \*Advanced Line Following
- \*Improved Turns
- \*Using Alignment to improve reliability
- \*...and more!

**\*\*All participants must bring their own laptop with Mindstorms EV3 program loaded.  
(Windows Vista or later or Mac OS 10.6 or later)**

**\*\*We will break for lunch. Please have participants bring their own lunch.**

To register, please contact Amy Nichols at [anichols@att.net](mailto:anichols@att.net).

(For exceptions to age requirements, please contact to discuss individual situations)