



ROBOTICS, TECHNOLOGY, STOP MOTION AND CODING

Dates: 8/30– 12/13

No Class Days: 10/11, 11/29

Fee (Early/Regular)

**Early registration by: 8/16
\$266/\$286**

Time:

2:30-3:30

Your child's STEM adventure into Robotics, Coding, Stop Motion and Technology.
Click name of program below for full details.

Ocee Elementary: **Friday**

Grades K-2 [Robo Rangers: An Adventure into Coding, Stop Motion, Robotics and Machines](#)

Watch the love for technology spark in your child as we make learning FUN!

Register Now

Split Payment Available

Imagine That! and Future Tech

www.ImagineThatFun.com

Fun@ImagineThatFun.com

770-455-1980

RoboRangers Class Details

Grades K-2 Robo Rangers: An Adventure into Coding, Stop Motion, Robotics and Machines



Please Note: Due to the large number of subjects included, the following subjects will be covered over the course of the year. Each semester will teach different subjects so more time will be available to learn the concepts being taught.

New! Computer Science: We find that while kids are smarter and faster with the technology these days, they don't have a basic understanding of the computer itself. What does www. mean? What is a browser? How do you find a port? What do the icons mean and what's the point of having them on the screen? We will address and discuss the basics of computers, tablets and phones they use every day.

Boost: Fantastic Creations for younger robotics kids. Students will build a base robot as they begin to learn the programming process. All instructions and programming are on an App called Boost[®] by Lego. The Hub of the robot can connect to the tablet using Bluetooth. Once they are comfortable moving their bots they will add a sensor that detects Color and Distance that also doubles as a light... From this base bot students build **Fantastic Creations**; robots that walk, wiggle and squirm their way through the room and your child's imagination!

New! Pivot Animator: Programming! We are so happy to offer Pivot Animator this year! Pivot Animator is a user friendly platform creating 2D stick-man animations. The stick figures can be easily moved by dragging handles. The animation is made frame by frame. While Pivot Animator is very easy to use, very complicated animations can be created. Your students animation can be exported to several formats to use as a GIF or on YouTube!

Stop Motion We will also reinforce frame by frame videos with Lego Stop Motion! Students create their own stop motion film laying out a plan that starts with a storyline, character development staging and more. Students will need to use their Sequential Reasoning capabilities and thought processes to create their video.

New! Makerspace: What is a Makerspace? This is a place that students can meet to create and engineer items that might solve a problem. With Lego[®] Education Simple Machines kits and supplies from around the room, students will Define a problem to solve, Brainstorm together for ideas, Identify Design Criteria, Go Make, Review and Revise and finally Communicate the Solution through their Maker project! Possible projects are Digital Accessories, Mechanical Toys, a Wearable, a Carnival Ride and so much more. Let's see what the kids design and Make!

Ozobots: Ozobots will go on adventures of their own this year! These are tiny little robots that can be programmed using color codes. Students start by drawing the codes to go from home to school, or the store, or the playground. They can go fast or slow or spin round and round, however the kids code them to go. Ozobot can also be programmed using the tablets to complete challenges.

Machines: Students will build pulley systems with **Lego[®] Simple and Motorized Machines**. How many different pulleys are there and how many can we build? We explore how pulleys work building the different stages of pulleys with a Crane and a Conveyor Belt. Both can be motorized with your students engineering skills and smarts.

With **Lego[®] WeDo Construction** set we offer brand New WeDo builds! Your student will think it's a night at the Fair, with rides and games to play. On the Carousel, WeDo Birds will spin round and round having a great ride. Next we'll play Hot Shots; students attempt to score in a spinning basketball hoop. What's a Fair without a shooting gallery? We play Duck Hunt by launching paper balls at moving ducks built on rack and pinion.

New! Computer Coding: Blockly Games is our newest addition, using fun games to learn coding language. The first puzzle students navigate show how to click commands to the blocks by matching traits of different animals. The following puzzles let students choose an avatar and adventure. As puzzles are solved with Drag and Drop, the code is also shown in Javascript.

New! Coding Apps: Code Karts and Bit By Bit. Wait until you see what they create!