



## ROBOTICS, TECHNOLOGY, STOP MOTION AND CODING

**Dates: 9/12-12/12**

**No Class Day: 11/28/19**

**Fee (Early/Regular)**

**Early registration by: 8/16**

**\$286/\$306**

**Time:**

**2:30-3:45**

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

**Hembree Springs Elementary: Thursday**

**Grades 2-5: [RoboTech: An Adventure into Coding, Stop Motion, Robotics and Machines](#)**

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

**[Register Now](#)**

***Split Payment Available***

**Imagine That! and Future Tech**

**[www.ImagineThatFun.com](http://www.ImagineThatFun.com)**

**[Fun@ImagineThatFun.com](mailto:Fun@ImagineThatFun.com)**

**770-455-1980**

# Robotics and Tech Class Details

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.

## Grades 2-5: [RoboTech: An Adventure into Coding, Stop Motion, Robotics and Machines](#)

**Robotics: Brand New Builds!** With Lego® **MINDSTORMS EV3's** students will build a walking man able to push a cart loaded with supplies! Students will program cart races with classmates. Who can dump the cart first and move on to the balance to ride with friends? This session will be "cart loads" of fun! Lego® **MINDSTORMS NXT's** are all new this year! Dizze Bot has monster tires to navigate around and over any obstacle course while students learn programming blocks. How fast will the Grasshopper race it across the room. The Chick has an issue with balancing on his 2 feet. Would an effective program help with his wobble?

**Pivot Animator: NEW Programming!** Pivot Animator is a user-friendly platform creating 2D stick-man animations. The animation is made frame by frame. Your student's animation can be exported to several formats to use as a GIF or on YouTube!

**Makerspace: New!** This is a place that students can meet to create and engineer items that might solve a problem. 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!

**New! Claymation Stop Motion:** We will also reinforce frame by frame videos with Claymation/Lego Stop Motion! Students create their own stop motion film laying out a plan that starts with a storyline, character development staging and more.

**Gaming:** Let's create our own game using the safe Roblox Studio! Students will create and play their game as they learn all about directionals, anchors and how to make a game that others will be challenged by.

**New! Computer Coding:** Blockly Games is our newest addition, using fun games to learn coding language. Older students will be challenged with games using parameters, angles, degrees and music notes to name a few, while showing how to write the commands in both Blockly and Javascript

**New! Computer Science:** We find that kids are smarter and faster with technology these days but many don't know the basics of the computer itself. We will teach them!

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

**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. From the base bot students build **Fantastic Creations**; robots that walk, wiggle and squirm their way through the room and your child's imagination!

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**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.

**Machines:** Students will build pulley systems with Lego® **Simple and Motorized Machines**. 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.

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. We'll play Hot Shots; students attempt to score in a spinning basketball hoop and more!

**New! Computer Coding: We will explore** Blockly Games, Code Karts, and Bit By Bit. Wait until you see what they create!