



**Session #3**

**Junior Engineering Club (Grades K – 2nd)**

The Engineering Club introduces students to a new hands-on project based lesson every week from various engineering disciplines. For each lesson, students focus on developing problem solving, critical thinking and peer collaboration skills.

Mechanical Toy Engineering – Poppers  
 Environmental Engineering - Who Eats Who?  
 Electrical Engineering - Who's making all that Noise?

Civil Engineering - Smarter than your average Bear  
 Mechanical Engineering - Make like a Tree and Leave  
 Robotics Engineering - Spinner

Location: St. Joseph Catholic School  
 Program Fee: \$155.00  
 Day Date: Time:  
 Wed 1/16 – 2/20 2:15PM-3:45PM – 6 weeks

**Apprentice Engineering Club (Grades 3rd – 5th)**

The Engineering Club introduces students to a new hands-on project based lesson every week from various engineering disciplines. For each lesson, students focus on developing problem solving, critical thinking and [HYPERLINK "https://www.amilia.com/store/en/engineering-for-kids-lake-county/shop/programs/34785"](https://www.amilia.com/store/en/engineering-for-kids-lake-county/shop/programs/34785), Build, Test & Improve.

Electrical Engineering – Flashlight  
 Hardware Engineering - Gumball Machine  
 Biomedical Engineering - Handy Dandy

Environmental Engineering - Mining Mountains  
 Civil Engineering - Tower Challenge  
 Software Engineering - Intro to Python

Location: St. Joseph Catholic School  
 Program Fee: \$155.00  
 Day Date: Time:  
 Wed 1/16 – 2/20 2:15PM-3:45PM – 6 weeks

**Session #4**

**Junior Robotics Engineering – Wild Animals (Grades K – 2nd)**

This class is a perfect mixture of fun and learning, using LEGO® WeDo™ Robots. Using LEGO® bricks, students build a hungry alligator, a flying bird, and a roaring lion. They also learn how to program and operate their creations using a laptop computer.

Location: St. Joseph Catholic School  
 Program Fee: \$155.00  
 Day Date: Time:  
 Wed 3/13 – 5/1 2:15PM-3:45PM – 6 weeks No class 3/27 and 4/24

**Apprentice Video Game Design – Invader Defense Shark Attack (Grades 3rd – 5th)**

Watch out! It's a shark attack! In Invader Defense: Shark Attack, we will create our own version of an invader defense game that will allow us to protect a coral reef from hungry sharks. We will use the Engineering Design Process to create a storyboard and outline the rules of play for our game. Then we will use Clickteam Fusion 2.5® to bring our storyboard to life with programming. At the end of the class, everyone takes home a working Windows-compatible game (Clickteam Fusion 2.5® does not support Mac or Android operating systems).

Location: St. Joseph Catholic School  
Program Fee: \$155.00  
Day Date: Time:  
Wed 3/13 – 5/1 2:15PM-3:45PM – 6 weeks No class 3/27 and 4/24

**Session #5****MinecraftEDU - Traveling into the Future Part 1 (Grades 2nd – 5th)**

This computer based class will immerse students in the expansive world of Minecraft, and will challenge student's ingenuity and problem-solving skills as they navigate through engineering challenges. Students will learn how to use teamwork and manage resources like an engineer in the real world. Building in Minecraft allows students to experiment with designs and materials, all without the risks associated with building structures in reality.

Location: St. Joseph Catholic School  
Program Fee: \$79.00  
Day Date: Time:  
Wed 5/8 – 5/22 2:15PM-3:45PM – 3 weeks