



# School Year 2024-2025 Classes



	Grade	Quarter 1: Sep 14 - Nov 3	Quarter 2: Nov 9 - Jan 19	Quarter 3: Jan 25 - Mar 30	Quarter 4: Apr 5 - Jun 8	Time(s) Offered
<b>LEGO Eng and Robotics 1.0: FLL Explore and More</b>	<b>G1-3</b>	Learn LEGO robotics using human power (cranks, levers, winches) and electronics (motors, sensors, computers). Employ new skills as part of an FLL Explore team that will present at our Robotics Festival.				Saturday, 2 - 3:15 PM Sunday, 2 - 3:15 PM
<b>Engineering and Robotics 2.0: FLL &amp; Vex IQ</b>	<b>G4-8</b>	Join an Einstein's Workshop FIRST LEGO League (FLL) Challenge team for the first half of the school year. Try a Vex IQ Robotics competition in the second half of the school year.				Saturday, 10:15 - 11:45 AM Sunday, 2 - 3:30 PM
<b>FIRST LEGO League Skills</b>	<b>G3-8</b>			Learn skills to join an FLL team. (Q3 only)		Sunday, 12 - 1:15 PM
<b>Minecraft Classroom</b>	<b>G1-3</b>	Minecraft is a great motivator! The kids think they're playing a game, but we know they're learning a lot! Kids learn math, architecture, roller coaster design, programming, and electronics, all inside Minecraft.				Saturday, 10:15 - 11:30 AM
<b>Programming 2.0: Computer Game Level Design with Unreal Engine</b>	<b>G4-8</b>	Learn how to design and build video game levels using Unreal Engine, a powerful open-source industry tool used to make many of today's top games.				Sunday, 10:15 - 11:30 AM
<b>Hands-On STEAM 1.0: Intro to STEAM Concepts</b>	<b>K-1</b>	A great introduction to Einstein's Workshop and Maker culture. Become a mad scientist, treasure hunter, and inventor! Get your first introduction to programming and robots!				Sunday, 10:15 - 11:30 AM
<b>Hands-On STEAM 2.0: STEAM Concepts</b>	<b>G2-3</b>	A great intro to Einstein's Workshop and Maker culture. Have fun designing and testing things that fly, advanced LEGO robotics, handmade robots and upcycled machines, and computer art.				Sunday, 2 - 3:15 PM
<b>Hands-On STEAM 3.0: Fabrication and Design</b>	<b>G4-6</b>	A great intro to Maker tools starting with 3D Printing then following students' interests. Possible choices include laser-cutting, electronics, stop motion animation, computer art, board game design, and more.				Sunday, 4:30 - 5:45 PM
<b>Hands-On STEAM 4.0: Fabrication and Design</b>	<b>G6-12</b>	Learn or improve your knowledge of Maker tools starting with 3D Printing then following students' interests. Choices include laser-cutting, electronics, stop motion animation, computer art, and more.				Sunday, 4:30 - 5:45 PM

## Classes and Concentrations that may be joined on a rolling basis throughout the school year

<b>Science 1.0: Real Mad Scientists</b>	<b>G3-5</b>	Recreate experiments inspired by famous chemists, physicists, biologists, and mathematicians!				Sunday, 12 - 1:15 PM
<b>Science 2.0: Space Exploration with Kerbal Space Program</b>	<b>G4-8</b>	Learn about space exploration - from rocket design, to control, to orbital mechanics. Create your own space vehicle and the rockets to launch it! Learn by playing Kerbal Space Program, which NASA engineers say is a fantastic way to learn the science of space exploration.				Saturday, 2:15 - 3:30 PM
<b>Programming 1.0: Scratch</b>	<b>G3-6</b>	Learn or improve at Scratch, a programming language developed at MIT that caught on worldwide. Tell stories and write computer games. For beginners and kids who already know some Scratch.				Sunday, 10:15 - 11:30 AM
<b>Programming 3.0: Python, US CS Olympiad, Intro AI</b>	<b>G6-12</b>	Learn or get better at programming in Python, using the USA Computing Olympiad (USACO) as motivation. After the USACO season ends, we'll finish off the school year with an introduction to AI.				Saturday, 2 - 3:15 PM
<b>Math Club Jr.</b>	<b>G1-3</b>	Welcome to the secret world of mathematicians! Experiment with ideas and see what you can discover. Through hands-on activities, explore areas of math not usually taught until college. Engage in the playful side of math!				Thursday 4:30-5:45 PM Saturday, 12:15 - 1:30 PM
<b>Math Club</b>	<b>G4-8</b>	Experience the joy of mathematical problem solving. Through self-paced exercises, instruction, and interactive learning opportunities, enjoy interesting problems from elementary and middle school Math Olympiad (MOEMS) & Math Kangaroo competitions. Also explore graph theory, group theory, topology, and other areas of math not usually taught until college.				Thurs, 4:30 - 6 PM (G4-6) Thurs, 6:30 - 8 PM (G6-8) Sat, 12:15 - 1:45 PM (G4-8)
<b>Minecraft Adventures</b>	<b>K-4</b>	Learn the meaning of good digital citizenship, teamwork, and how to use computers, including keyboard and mouse skills, while playing Minecraft in a safe and supervised environment.				Sunday, 12 - 1:30 PM
<b>Chess Club</b>	<b>K-8</b>	Learn to play chess and practice with your classmates. Learn fun facets of chess history.				Saturday, 4:30 - 5:45 PM
<b>Dungeons &amp; Dragons</b>	<b>G4-12</b>	Embark on grand adventures! Explore long lost lands, battle perilous foes, and make new friends along the way. Dungeons & Dragons is great for developing imagination, creative problem solving, and teamwork.				Sat, 3:45 - 5:45 PM Sun, 3:45 - 5:45 PM