



2024 Weekly Camp Offerings and Course Descriptions

| Week | Camp | Age Group |
|-------------|---|---|
| June 3-7 | Commotion in the Ocean | Entering 2 nd - 3 rd grade |
| June 3-7 | Makey- Makey | Entering 4 th -5 th grade |
| June 3-7 | Carnival Games | Entering 7 th - 8 th grade |
| June 10-14 | Ready, Set, GO | Entering 2 nd -3 rd grade |
| June 10-14 | 2024 SCORE Olympics | Entering 4 th -5 th grade |
| June 10-14 | Beginning 3D Print | Entering 4 th - 6 th grade |
| June 10-14 | To CODE or not to CODE-FIRIA | Entering 7 th - 9 th grade |
| June 24-28 | VEX IQ Competition Day Camp New 2024-2025 game | Entering 5 th - 6 th grade |
| July 8-12 | Intermediate 3D Print | Entering 7 th -9 th grade |
| July 8-12 | Search and Rescue- <u>Beginners</u> | Entering 5 th -6 th graders |
| July 8-12 | VEX IQ Competition Day Camp New 2024-2025 game | Entering 7 th -9 th graders |

Week 1: June 3-7

Commotion in the Ocean (entering 2nd- 3rd graders)

A recent natural disaster means there is commotion in the ocean. Do you enjoy science exploration and robotics. This camp will take STEM concepts and launch to the next level with coding. We need dedicated teams of scientists to explore the disaster and brainstorm solutions. Campers learn about ocean habitats, teamwork and the engineering design process to code their robots and solve teamwork challenges. Who will save the Parker Hall Ocean animals?

Makey-Makey Camp (entering 4th and 5th graders)

Do you have technology on the brain? Let's use your love of technology and tap into your creative juices to design something awesome! During this week of camp, we will combine the power of electronics, coding, and hardware to complete daily challenges, create musical instruments, interactive game controllers, and other fun projects! We will wrap up the week by building and playing in an arcade. So, come join us and "Makey-Makey" your dreams of innovation come true!

Carnival Games Camp (entering 6th-8th graders)

This camp will engage the engineering mind through challenges inspired by traditional carnival games. Your camper will explore STEM ideas and concepts as they engage in fun games and compete to build, drive, and code their unique robot. This camp uses the VEX-IQ platform for robot builds and focuses on fostering collaboration, engineering design challenges, problem-solving skills, and creativity.

Week 2: June 10-14

Ready, Set, GO (entering 2nd-3rd graders)

Do you want to be a scientist, engineer, designer, and creative thinker, all while having fun exploring and learning about STEM ideas and concepts with VEX GO! Campers will build a Super Car and test out how to make it go farther and faster. Then, campers will stretch their curiosity as they construct different models of the Super Car to explore how they move, building up to coding and driving with the Code Super Car and Code Base!

2024 Olympic Robot Challenge (entering 4th-5th graders)

Do you love working with a team to solve a challenge? Can you and your team race to win through coding? The 2024 Olympics challenge will inspire teams to code their robot to compete across many challenges. Campers will start out collaborating on a single challenge with their Sphero BOLT, then through the week, the stakes will increase, and teams will have to use effective communication to incorporate drawing, storytelling, swimming and more in their code. Will your robot reign supreme, will you earn the gold medal?

Beginning 3D printing camp (entering 4th-6th graders) –

This camp is designed for students who have no experience with 3D printing, where we will start with the basics. SCORE 3D printing camp will show you how to go from concept to product using Tinkercad and state of the art 3D printers. Campers will work to solve an everyday problem using the engineering design process, CAD modeling, and 3D printers, in an exciting hands-on experience with cutting edge technology. What can you create?

Firia Code Bot (entering 7th and 9th graders)

Have you started in block coding and are now ready to move to Python? This camp will help you with the next step in programming! The Firia Code Bot is a robot with sensors and programmable controls which puts the focus on programming. Using CodeSpace, a browser-based software, and the Code Bot, we will bring text programming to life!

Week 3: June 24-28

Design Has No Limits: 2023-24 VEX IQ Competition Camp (entering 5th-6th graders)

This exciting camp will focus on the VEX IQ 2023-24 Competition. Campers will work in teams to design, build, and program an original robot to compete in the new game and challenge fellow campers. We will focus on the engineering design process, notebooks, and game strategy. Students will get a jump start on the VEX 2024-2025 season.

Week 4: July 8-12

Intermediate 3D printing camp (entering 7th- 9th graders)

This camp is designed for students who have substantial experience with 3D printing or have completed our previous Beginner 3D printing camp. We will build on prior knowledge from day one and introduce students to the Prusa Slicer. This 3D printing camp will show you how to go from concept to product using Tinkercad. Campers will work to solve several everyday problems with new software and vocabulary. They will use the engineering design process, CAD modeling, and 3D printers, in an exciting hands-on experience with cutting edge technology. What can you create?

Beginning VEX IQ Search and Rescue Camp (entering 5th-6th graders)

Are you curious about building and coding robots? If you are **brand new to VEX IQ** but love to design, build, and solve problems, then this camp may be for you. Campers attending this beginner camp will transform into search and rescue agents and begin the week learning about the engineering design process. We will address design, gear ratios, torque, speed and much more as campers collaborate with their team to move objects as quickly as possible to save the day using both drive control and coding. By the end of the week our search and rescue agents will use optical sensors in their search and build and design different mechanisms for a robot to compete in the Up and Over Competition.

Design Has No Limits: 2024-25 VEX IQ Competition Camp (entering 7th-9th graders)

This exciting camp will focus on the VEX IQ 2024-25 Competition. Campers will begin the week learning engineering notebook design and the new VEX IQ game challenge, then move into concepts including gear ratios, torque, drive trains, programming and more. Campers will work in teams to design, build, and program an original robot to compete in the new game and challenge fellow campers. We will focus on the engineering design process, notebooks, and game strategy. Students will get a jump start on the VEX 2024-2025 robotics season. **Students must be younger than 15 on May1, 2025 to participate in this camp.**