

Introduction to Robotics

July 11th - July 15th, 2022, 8:30 am - 3:00 pm daily Ages: Entering 5th through 8th grade

Campers will work in pairs to design and build SPIKE Prime LEGO robot, working together programming their robot to solve a variety of simulated problems. For campers with no previous through beginner level robotics and programming experience. This camp will build programming, design, and problem solving skills in an exciting and fun environment.

Beyond Frozen: The Science, Math, and Art of Fractals

July 11, 2022 - July 15, 2022, 8:30 am - 3:00 pm daily Ages: For campers entering 4th through 7th grade.

If you've never paid much attention to the song, "Let It Go," you may not have noticed, but there's a line that Elsa sings that says, "My soul is spiraling in frozen fractals all around." Many patterns in nature have fractal qualities in different forms and sizes from mountains, sea shores, snowflakes, blood veins, and inside cell structures. All these beautiful patterns look like magnificent works of artwork. Fractals have deep roots in math, science, and computer science and many applications in modern science and engineering. The cool thing is that we can reproduce and generate fractals as art works by art and computer coding.

Campers will observe and describe natural fractals and create their own.

University of Northern Iowa

Biotech: Tools of the Trade

July 18th - July 22, 2022, 9:00 am - 4:00 pm daily Ages: entering 9th through graduating high school seniors

An immersive experience with the tools of biotechnology will provide campers an introduction to the techniques that are used in university, hospital, and industrial laboratories. Campers will gain hands-on experience with DNA extraction, culturing microbes, digital microscopy, polymerase chain reaction (PCR), and gel electrophoresis by performing their own experiments. Campers will work at their own pace, prior experience is not required.



Camperships are available for these three camp sessions. Applications are accepted from local youth who are members of the following groups: Black/African American, Hispanic/Latino/Latina, Native North American, Asian Americans and Pacific Islanders, females, potential first generation college students and youth who were eligible for the Free and Reduced Lunch Program during the previous school year or will be eligible in the next school year. If awarded a campership, then the registration fee for the camp session will be waived. Click Register on the camp session page and see campership application for additional details. Camperships are funded through a gift from Alliant Energy.