

SUMMER PROGRAMS

GENERAL INFORMATION



About Us

Maryville University's Center for Access and Achievement (CA²) partners with high need school districts and nonprofits to help prepare students with the skills and abilities they need to succeed in STEM fields in college and the careers of the future. Our summer programs include Elementary Science and Robotics, Middle School Teen Tech, and High School Coding Camp. We host over 100 courses for ages 4–18 taught by highly qualified faculty including professors, STEM professionals, and teachers with advanced education including gifted, early childhood, and STEM certification.

- Our summer program will be held on Maryville University's Campus from July 14-18 and 21-25, 2025. Registration will open January 20, 2025.
- Hands-on, creative experiences with cutting-edge technologies
- Includes all aspects of Science, Technology, Engineering, Art, and Math (STEM)

Wait List

If a desired course is full, you can choose to be added to a wait list in the store. If a space becomes available all participants on the waitlist will be notified via email. Sign ups are first come first serve. However, please keep in mind that seats rarely open up and it is generally better to sign up for another one of our engaging courses in that time slot to ensure placement within the program.

Lunch Options

Science and Robotics: A supervised lunch buffet lunch is available for purchase for full day participants at registration. Participants may also bring a nut-free lunch. Teen Tech: A supervised lunch buffet lunch is available for purchase for full day participants at registration. Participants may also bring a nut-free lunch.

Join Our Email List

Click here to join our email list!



Before and After Care

Before and after care is available for Science and Robotics and Teen Tech programs only. Before care is only available for students registered for the morning sessions. After care is only available for students registered for the afternoon session. Before care is from 7:30 a.m. – 9:00 a.m. After care is from 4:00 p.m. – 5:30 p.m. The price is \$75 per session (morning or afternoon) per week per child. When participants sign up for both before and after care at the same time, the price is reduced to \$100. Further details, including specific location information, will be sent in June.

Refund Policy

If the program is canceled due to university decision all participants will receive a full refund.

For those who register between registration opening through April 30th:

As families often need to make decisions about summer programs very early in the year to schedule the busy summer months and to ensure placement in our fastest selling courses, we understand that sometimes plans change. So that you feel confident paying tuition in the winter and spring for a July program, the Maryville Summer Science and Robotics Program offers a 100% refund policy for courses until April 30th.

However, in order to maintain small class sizes, we offer limited placements in each class and most of our classes sell out by spring. When you pay tuition for a class in our program, you reserve a placement for your child that no one else can purchase. By May, many families have made summer plans and we are often unable to resell placements. Therefore, unless we have a child on the course waiting list that takes your child's place, we can only offer a 50% refund from May 1 through June 15 and are unable to offer refunds June 16 and afterward except in extreme cases such as a death in the family or medical emergency.

Late registrant policy:

For those who register on May 1 or after, we offer a 100% refund through June 15 and a 50% refund through the onset of the program. For those who register after June 15, we offer a 100% refund through the onset of the program.



TABLE OF CONTENTS

Science and Robotics

<u>Ages 4-5</u>

<u>Ages 5-7</u>

<u>Ages 7-9</u>

Ages 9-12







TEEN TECH

Middle School <u>Program</u>





CENTER FOR ACCESS AND ACHIEVEMENT

Address

650 Maryville University St. Louis, MO 63141

Email

stem@maryville.edu

Phone

314.281.1120

Social Media





Coding Camp

<u>High School</u> <u>Program</u>





SCIENCE AND ROBOTICS OVERVIEW

9 a.m. - 12 p.m. Session

1 p.m. - 4 p.m. Session

Ages 4-5	July 14-18 am session	July 14-18 pm session	July 21-25 am session	July 21-25 pm session
Amazing Animal Adventures		x	x	
Battle of Champions with Sphero Robot	х			х
Imaginative Engineers: STEAM Park Explorers	х			х
Pre-Med Preschool	х	х		
Remarkable Reactions			х	

Ages 5-7	July 14-18 am session	July 14-18 pm session	July 21-25 am session	July 21-25 pm session
Amazing Animal Adventures	х			x
Blast Off to Outer Space		х	х	
Community Builders	х			x
Dive into Discovery: FIRST LEGO® League Explore Challenge		х	х	
Engineering the Future of Play		х	х	
Junior Detectives			х	
LEGO® WeDo Robotics: Animals in STEM		х	х	
Microscope Magic: Mysteries of the Tiny World		x	x	
Radiant Rainforest Biology	х	х		
RoboCraze: LEGO® Adventures in Creativity	х			х
STEM Explorers: Simple Machines	x			х

9 a.m. - 12 p.m. Session

1 p.m. - 4 p.m. Session

Ages 7-9	July 14-18 am session	July 14-18 pm session	July 21-25 am session	July 21-25 pm session
Animal Grossology		x	х	
Coding 101: Build, Play, and Code	х		х	
Colorful Creations: Exploring the Science of Color		x		
Geology Exploration	х			x
Gravity Grand Prix		х	х	
How to Train Your Robot			х	х
Junior Detectives	х			
LEGO® WeDo Robotics: Animals in STEM				х
Marvelous Makers			х	
Movie Making	х			х
Planet Protectors: Adventures with Animal Ecosystems		х	x	
Playground Engineering with WeDo 2.0 Robotics	х			
Quirky Creations with LEGO® Spike Essentials	х			
Today's Dinosaurs: A LEGO® Adventure to Save Our Planet	х			х
Vehicle Challenges with LEGO® WeDo 2.0 Robotics		х		

9 a.m. - 12 p.m. Session

1 p.m. - 4 p.m. Session

Ages 9-12	July 14-18 am session	July 14-18 pm session	July 21-25 am session	July 21-25 pm session
Board Game Design		x		
Colorful Creations: Exploring the Science of Color			x	
Crazy Contraption Challenges	x			х
Drone Rescue Missions	х	х		
Electricity Playground		х	х	
Forensic Science	х			х
Game On! LEGO® EV3 Robot Arcade		х	х	
Hollywood Film Makers: Green Screens and Beyond!	х			х
Intro to 3D Printing and Design with SketchUp	х	х	х	х
Minecraft Mania			х	х
Stop Motion Animation	х		х	
Super Smash Brothers Artificial Intelligence Academy		x	x	
Video Game Design with Mario Maker	х			х
Virtual Worlds and Beyond: Exploring 3D Creation and VR Technology	х	х	х	х

SCIENCE AND ROBOTICS OVERVIEW

9 a.m. - 12 p.m. Session

1 p.m. - 4 p.m. Session

Teen Tech	July 14-18 am session	July 14-18 pm session	July 21-25 am session	July 21-25 pm session
Blueprints to Reality: Tiny Home Challenge		x	x	
Drone Rescue Missions			х	х
Engineering the Future with LEGO® SPIKE Robotics	x	x	x	x
Game Makers: Design, Create, Play!	х	х		
GeoVisionaries: Storymaps and Solutions for a Better Future	x	x	x	x
In My Digital Storytelling Era	х	х	х	х
Level Up: Game Development with Unity	x		x	
Maker Studio: From Digital Designs to Custom Projects	x	x	х	х
Monument Makers: Design and Build History	х			х







Amazing Animal Adventures

Embark on an awesome adventure where students become nature detectives! In this super cool course, we'll uncover the secrets of how animals adapt to survive and have a blast inventing our very own critters designed for a special habitat. But that's not all - get ready to dive into the world of robots and coding games! With these cool tools, we'll bring our imaginary animals to life, seeing how they move and groove in their make-believe world. It's a mix of science, creativity, and tech fun, where young explorers get to be both scientists and inventors. Join us for a wild ride as we discover the wonders of animal adaptations in the coolest way possible!

<u>Session 1 | 1 pm-4 pm | \$ 15</u>0

Session 2 | 9 am-12 pm | \$150



Pre-Med Preschool

Discover how our bodies work and ways we can keep them healthy. Students will learn about the basic anatomy of various systems with an emphasis on bones, muscles, heart, lungs, brain, and the digestive system. Students will collaborate to explore how all of these parts have to work together through guided activities, including role playing and modeling.

Session 1 | 9 am-12 pm | \$ 150

<u>Session 1</u> | 1 pm-4 pm | \$150



Soccer Champions with Sphero Robot

Join the thrilling Battle of Champions with Sphero class and become a part of the United States' Battle Bot Soccer league championship team in St. Louis! As a team member, students will design a formidable Battle Shell for the ultimate showdown and learn to code their Sphero robot with precision. Get ready to showcase your engineering and programming skills as you aim to bring home the gold in this epic competition! It's time to gear up and conquer the championship with your Sphero expertise!

Session 1 | 9 am-12 pm | \$150

Session 2 | 1 pm-4 pm | \$ 150

Remarkable Reactions

Chemical reactions are fun, hands-on learning! From erupting LEGO® volcanoes to fizzing Pokeballs, and bath bombs participants will explore various chemical reactions and learn the science behind it all. As a bonus, students will also get the chance to code and operate KIBO the Robot. Students will share a selected activity with their family at the end of the week.

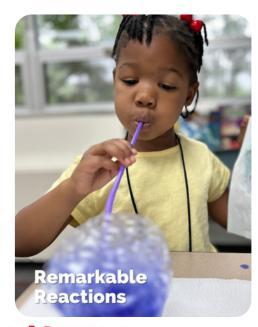
Session 2 | 9 am-12 pm | \$150



Imaginative Engineers: STEAM Park Explorers

Welcome to the whimsical wonderland of STEAM Park, where your child's curiosity takes center stage! This course is a magical journey through the realms of science, technology, engineering, art, and math (STEAM), all wrapped up in the joy of creative play. Imagine your little explorer constructing a vibrant park filled with dynamic moving rides, exciting games, and captivating scenes, all brought to life with the special selection of LEGO® DUPLO® bricks. As they embark on this adventure, young minds will blossom, delving into the mysteries of gears, unraveling the secrets of motion, exploring measurement, and solving problems together with newfound friends. Get ready for a blend of laughter, learning, and LEGO® magic that transforms every lesson into an unforgettable STEAM-powered playground!

Session 1 | 9 am-12 pm | \$ 150







Radiant Rainforest Biology

The students will explore the world of plants and animals that live in this unique biome. We will engage in hands-on activities that will bring the rainforest alive with technology, experiments, and a twist of robotics. Students will learn how to conserve and protect rainforest from afar.

Session 1 | 9 am-12 pm | \$ 195

Session 1 | 1 pm-4 pm | \$ 195



Blast Off to Outer Space

Put on your space suit and get ready for a journey throughout the solar system. Build a rocket, conduct experiments to learn about each planet, explore the power of the sun, drop craters on the moon, design your own Mars rover, and more. Students will also have the opportunity to use Ozobot the robot to model planetary motion and go on an imaginary space journey.

<u>Session 1</u> | 1 pm-4 pm | \$ 195

Session 2 | 9 am-12 pm | \$ 195



Community Builders with LEGO®

Design and build the city of your dreams! In this play-based class, students will use Map Mats, a coordinate map system designed for young children, paired with LEGO® My XL World and STEAM Park kits to design and build their own towns, cities, playgrounds and more. As they build and create, students will cooperatively solve stembased challenges. Students will also combine art with engineering as they use KIBO, a screen free robot, to create and code unique vehicles to travel around their communities.

Session 1 | 9 am-12 pm | \$ 195

Session 2 | 1 pm-4 pm | \$ 195



Dive into Discovery: FIRST LEGO® League Explore Challenge

Calling all junior engineers and ocean explorers! This year's FIRST LEGO® League Explore Challenge, SUBMERGED, invites curious minds to dive deep into the mysteries of the ocean. With LEGO® Spike Essentials Robotics, students will design and build motorized submarines, creative sea creatures, vibrant coral reefs, and more. Through hands-on engineering and robotics, participants will explore how and why we venture into the unknown depths of the ocean. Get ready for an exciting underwater adventure filled with innovation and imagination!

Session 1 | 1 pm-4 pm | \$ 250

Session 2 | 9 am-12 pm | \$ 250



Engineering the Future of Play

Spark your child's imagination and unleash their inner inventor this summer in our Toy Creator's Circuit Lab! Using Makey-Makey technology and Scratch Coding, students design and build their own unique circuit-powered toy that can make sounds or even "talk." Bring ideas to life by coding voices, noises, and interactions while turning everyday objects into exciting, one-of-a-kind inventions. Dive into the magic of circuitry and coding, and get ready to create, innovate, and bring toy ideas to life!

<u>Session 1 | 1 pm-4 pm | \$ 225</u>

<u>Session 2 | 9 am-12 pm | \$ 225</u>

Junior Detectives

Join us in the Maryville Crime Lab where we will solve puzzles about crimes just like a scientist! Step into the shoes of a forensic scientist and crack the case! In this thrilling hands-on class, students will solve mysteries by analyzing clues, collecting evidence, and using real forensic tools. From fingerprints to trace evidence and impressions, young detectives will explore the fascinating world of crime-solving through engaging science activities. Get ready to uncover the truth and become a crime-lab expert!

Session 2 | 9 am-12 pm | \$ 195



Microscope Magic: Mysteries of the Tiny World

Discover the Tiny World! Through hands-on exploration, students will actively engage with digital microscopes to unlock the secrets of the unseen. They'll have the opportunity to observe and investigate various specimens, from the intricate world of microorganisms to the detailed structures of everyday objects, all under the lens of a microscope. Get ready to explore the intricate, hidden world of the very small and witness the marvels of microscopy firsthand!

Session 1 | 1 pm-4 pm | \$ 225

Session 2 | 9 am-12 pm | \$ 225



LEGO® WeDo Robotics: Animals in STEM

We will utilize LEGO® WeDo Robotics to craft a diverse range of animals and machines. As students become acquainted with the fundamentals of WeDo, participants will have the opportunity to infuse their model designs with their own creativity and ingenuity. Join us in this exciting adventure, where the fun of building with LEGO® merges seamlessly with the magic of making robots come to life. Discover how the animal kingdom can inspire your journey through the realms of STEM, all while having a blast with hands-on robotics exploration.

<u>Session 1 | 1 pm-4 pm | \$ 225</u>

Session 2 | 9 am-12 pm | \$ 225



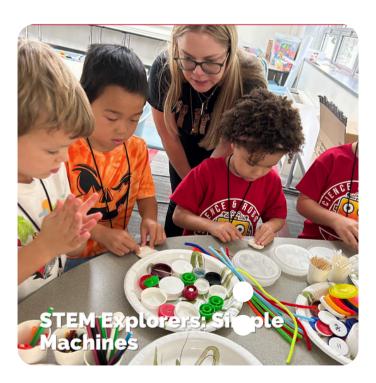


Amazing Animal Adventures

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Session 1 | 9 am-12 pm | \$ 195

Session 2 | 1 pm-4 pm | \$ 195





RoboCraze: LEGO[®] Adventures in Creativity

Dive into the world of LEGO® Spike Essentials in this action-packed, hands-on robotics adventure! Students will explore the basics of engineering and programming as they collaborate to create incredible designs. From building and programming vehicles to crafting amusement park rides, games, and beyond, this class pushes creativity to the limit. Get ready to use LEGO® bricks in quirky, unexpected ways that will ignite your inner engineer and spark endless fun!

Session 1 | 9 am-12 pm | \$ 250

Session 2 | 1 pm-4 pm | \$ 250

STEM Explorers: Simple Machines

Join our STEM Explorers class where we will learn about simple machines and get creative with recyclable materials as we design and build our very own projects. Get ready for a hands-on adventure that will have your little engineer excited to explore the world of science and engineering.

Session 1 | 9 am-12 pm | \$ 195



Animal Grossology

This is the ultimate adventure for curious minds ready to explore the icky, sticky, and downright fascinating world of animal biology! From slimy slugs to stinky skunks, and all the weird, wild creatures in between, this course dives into nature's grossest secrets. Young scientists will investigate bizarre bodily functions, peculiar survival tactics, and the science behind things like regurgitation, slime, and scat. Through hands-on experiments, interactive games, and plenty of laughs, kids will discover how the grossest parts of the animal kingdom play a critical role in ecosystems.

Session 1 | 1 pm-4 pm | \$195

Session 2 | 9 am-12 pm | \$ 195

Coding 101: Build, Play, and Code

In this beginner-friendly class, students will explore the exciting world of coding through fun, handson projects. They'll learn the basics of programming, like sequencing and loops, as they create animations, games, and more. No experience is needed—just bring your curiosity and creativity!

<u>Session 1 | 9 am-12 pm | \$225</u>

Session 2 | 9 am-12 pm | \$225



Colorful Creations: Exploring the Science of Color

Students will experiment with bleeding colors using markers and rubbing alcohol, explore the magic of watercolor painting with markers, and create whimsical circle critters from toilet paper rolls. We'll also dive into bubble painting, where science and art collide to form stunning designs. This class is perfect for young artists and scientists alike, blending fun, experimentation, and imagination to create colorful masterpieces!

<u>Session 1 | 1 pm-4 pm | \$ 195</u>



Gravity Grand Prix

Get ready for an action-packed adventure in our Gravity Grand Prix course! In this thrilling unit, young racers will dive into the exciting world of potential and kinetic energy, using a complete Hot Wheels set as their playground. Through hands-on experiments and interactive challenges, kids will explore the science behind making those minicars zoom and soar. Inspired by the skills of real-life NASCAR drivers, they'll become engineers in training, tweaking variables to boost the distance their Hot Wheels travel with precision and flair. Science Spectacular Speedway is revved up and ready to ignite the spark of scientific curiosity in our young racers, just like the pros on the NASCAR track!

Session 1 | 1 pm-4 pm | \$ 195

Session 2 | 9 am-12 pm | \$ 195



Geology Exploration

Crack open a geode and explore the coolest rocks and minerals on the planet. Through hands-on activities we will make exciting discoveries about the earth's physical structure and substance, its history, and the processes that act on it. There will be videos, demonstrations and even an edible rock cycle!

Session 1 | 9 am-12 pm | \$ 195

Session 2 | 1 pm-4 pm | \$ 195

How to Train Your Robot

Fuel your child's curiosity and drive to create with this dynamic session focusing on Machine Learning! Through engaging activities with 'Smart Motors,' young innovators will delve into ML, tackle practical problems, and unleash their inventive spirit—preparing them for a future where creativity and technology go hand in hand.

Session 2 | 9 am-12 pm | \$ 250

Session 2 | 1 pm-4 pm | \$ 250



ravity Grand Prix



Junior Detectives

Join us in the Maryville Crime Lab where we will solve puzzles about crimes just like a scientist! Step into the shoes of a forensic scientist and crack the case! In this thrilling hands-on class, students will solve mysteries by analyzing clues, collecting evidence, and using real forensic tools. From fingerprints to trace evidence and impressions, young detectives will explore the fascinating world of crime-solving through engaging science activities. Get ready to uncover the truth and become a crime-lab expert!

Session 1 | 9 am-12 pm | \$ 195

Marvelous Makers

Join us for a journey of exploration, invention, problem-solving, and hands-on tinkering in our dynamic MakerSpace class! Each day, students will face exciting new building challenges that will ignite their creativity and innovation. They'll have the chance to dive into both high-tech and low-tech opportunities, including working with Little Bits, Makey Makey, LEGO® Technics, and a variety of tools and raw materials. On your mark, get set, make!

Session 1 | 9 am-12 pm | \$ 225



LEGO® WeDo Robotics: Animals in STEM

We will utilize LEGO® WeDo Robotics to craft a diverse range of animals and machines. As students become acquainted with the fundamentals of WeDo, participants will have the opportunity to infuse their model designs with their own creativity and ingenuity. Join us in this exciting adventure, where the fun of building with LEGO® merges seamlessly with the magic of making robots come to life. Discover how the animal kingdom can inspire your journey through the realms of STEM, all while having a blast with hands-on robotics exploration.





Planet Protectors: Adventures with Animal Ecosystems

In this class, students will explore how climate change affects our planet's incredible biodiversity! From polar bears in icy habitats to buzzing bees in our backyards, students will discover how rising oceans, extreme weather, wildfires, and higher temperatures impact animals and their ecosystems. Using LEGO bricks and makerspace materials, they'll design creative solutions to combat these challenges, learning how their ideas can help protect our Earth. Packed with hands-on activities and imaginative problem-solving, this course inspires young changemakers to dream big and make a difference for the future of our planet.

Session 1 | 1 pm-4 pm | \$ 225

Session 2 | 9 am-12 pm | \$ 225

Playground Engineering with LEGO[®] WeDo 2.0 Robotics

In this exciting class, students will dive into the engineering design process to dream up and create groundbreaking playground inventions. Drawing inspiration from innovative playground equipment, participants will design, build, and program their own imaginative playground features using LEGO® WeDo 2.0 kits. This playful, hands-on experience encourages creativity, problem-solving, and collaborat; as students bring their unique ideas to life!

<u>Session 1 | 9 am-12 pm | \$ 225</u>

Movie Making

Welcome to the movies! Come on in to discover how movies are made. Students will get to be writers, actors, videographers, and editors as they create a short film to share in a film festival at the end of the week. Students will be using iPads, greenscreens, and editing software to explore and produce a creative masterpiece of their own. Grab your popcorn and register now!

<u>Session 1 | 9 am-12 pm | \$ 225</u>







Quirky Creations with LEGO® Spike Essentials

Unleash your creativity in this hands-on course where you'll design, build, and program unique projects using LEGO® Spike Essentials! Learn fundamental engineering, coding, and design concepts as you create quirky, interactive models that move, light up, and solve fun challenges. Perfect for budding inventors and curious minds, this course combines problem-solving, teamwork, and play to bring your ideas to life!

<u>Session 1 | 9 am-12 pm | \$ 225</u>





Wildlife Heroes: A LEGO Adventure to Save Earth

Help protect "today's dinosaurs"—birds—and other incredible animals impacted by climate change! Through fun, hands-on activities using LEGO® bricks and makerspace materials, students will explore how rising oceans, extreme weather, wildfires, and higher temperatures affect habitats around the world. They'll investigate real-world challenges like water pollution and habitat loss, then dream up and build creative solutions to make a positive impact. This playful, problemsolving adventure empowers kids to be heroes for our planet while learning how their ideas can create a brighter future.

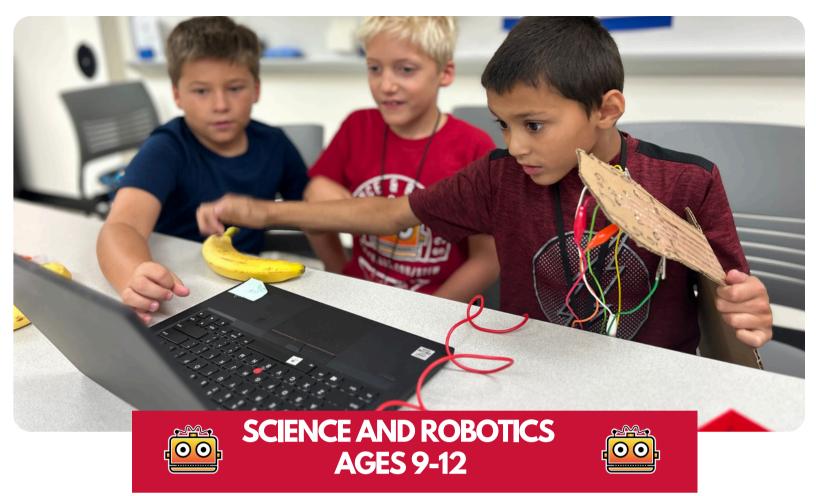
Session 1 | 9 am-12 pm | \$ 195

<u>Session 2 | 1 pm-4 pm | \$ 195</u>

Vehicle Challenges with LEGO® WeDo 2.0 Robotics

Transportation and construction are all around us! Come learn how to construct a garbage truck, bulldozer, helicopter, and forklift using LEGO® WeDo 2.0 kits. Then, program these machines to do amazing things! Participants will be required to use critical thinking skills to program their vehicles to complete various challenges. After learning how to construct and program different models of machines, participants will have the opportunity to design and build their own!

<u>Session 1 | 1 pm-4 pm | \$ 225</u>





Board Game Design

In this hands-on, collaborative, creative exploration class, student design their own board game. Students play their favorite games, learn the basics of board game mechanics and techniques, and develop their own game from concept to board and pieces design. Students are encouraged to embrace their ideas, collaborate with new friends, get creative through craft materials, and challenge themselves through play.

Session 1 | 1 pm-4 pm | \$ 195



Colorful Creations: Exploring the Science of Color

Students will experiment with bleeding colors using markers and rubbing alcohol, explore the magic of watercolor painting with markers, and create whimsical circle critters from toilet paper rolls. We'll also dive into bubble painting, where science and art collide to form stunning designs. This class is perfect for young artists and scientists alike, blending fun, experimentation, and imagination to create colorful masterpieces!

Session 2 | 9 am-12 pm | \$ 195



Crazy Contraption Challenges

In this action-packed course, young inventors will embark on a thrilling journey using cutting-edge Sphero Mini robots, crafting intricate Rube Goldberg machines, and mastering exciting maze challenges. Unleash your creativity as you design, build, and program your Sphero Mini to navigate through mind-bending mazes, and work collaboratively to construct elaborate Rube Goldberg contraptions that accomplish simple tasks in the most imaginative ways. Get ready to push the boundaries of innovation and problemsolving in a dynamic makerspace setting, where endless possibilities await your ingenious ideas!

Session 1 | 9 am-12 pm | \$ 195

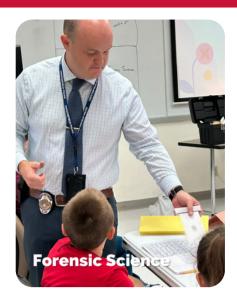
<u>Session 2 | 1 pm-4 pm | \$ 195</u>

Electricity Playground

Explore the electrifying wonders of "Electricity Playground!" Unleash your creativity by making music with bananas and crafting cardboard electric guitars. In this hands-on course, we'll discover the fascinating world of conductivity and learn how to harness its power. From crafting working stop lights to designing light-up greeting cards, get ready for a thrilling journey where science and imagination fuse together. Join us for an electrifying experience that promises to spark your curiosity and ignite your love for all things electric!

<u>Session 1 | 1 pm-4 pm | \$ 250</u>

Session 2 | 9 am-12 pm | \$ 250



Forensic Science

In our forensic science, you will become a junior detective! In this hands-on class, students will use their five senses to investigate clues and solve mysteries. Explore fingerprinting and learn what makes yours unique, experiment with identifying mystery powders, and analyze yarn prints and teeth molds to uncover hidden details. This engaging class combines science and critical thinking, sparking curiosity and a love for discovery. Perfect for young sleuths eager to sharpen their observation and problem-solving skills!

Session 1 | 9 am-12 pm | \$ 195



Game On! LEGO® EV3 Robot Arcade

Ready to level up your coding skills? In this class, we will recreate arcade games of luck and skill with LEGO® EV3 robots. Students will learn how to code with sensors to create games like pinball, claw machine, fortune wheel, and more! At the end of the week, students will have a game showcase where guests will be able to playtest the class' games.

Session 1 | 1 pm-4 pm | \$250

Session 2 | 9 am-12 pm | \$ 250



Hollywood Film Makers: Green Screens and Beyond!

Ever wondered how movies create special effects? How the weatherman displays the forecast? All will be revealed as students learn how to use green screen and animation technology to create special effects. They'll get to be actors, videographers, and editors as they create short films to share in a festival at the end of the week!

Session 1 | 9 am-12 pm | \$ 225

Session 2 | 1 pm-4 pm | \$ 225

Intro to 3D Printing and Design with SketchUp

Explore the fascinating world of 3D modeling in our "Intro to 3D modeling and design with SketchUp" class. Students will learn fundamental design principles and 3D modeling basics. SketchUp is simple enough for a beginner to learn, yet powerful enough for use in a variety of professions, including architecture and interior design, video game development, movie set and exhibit design, and for creating and prototyping models for 3D printing. Students may choose their own project or select from options provided. At the end of our class, students will display their digital 3D model or 3D printed prototype in a culminating mini-exhibition. Join us for a dynamic and inspiring course where young minds turn imagination into tangible, three-dimensional wonders!

Session 1 | 9 am-12 pm | \$ 270

<u>Session 1 | 1 pm-4 pm | \$270</u>

Session 2 | 9 am-12 pm | \$ 270







Stop Motion Animation

Create your own stop-motion movie! Learn to insert special effects in films, animation, and more. Students will be able to animate any object and bring it to life. They can also experiment with "freeze-frame" while working with a human subject. Use the Stop Motion Animation App to capture and edit images, add sound, then create your final product to become a real life producer!

Session 1 | 9 am-12 pm | \$ 225

Session 2 | 9 am-12 pm | \$ 225



Drone Rescue Missions

Discover the exciting world of drones and their amazing missions! Join the adventure and explore how drones can be superheroes in rescue missions, help grow forests, make cool movies, and even compete in sporting challenges! Get ready for a drone-tastic journey of fun and learning!

Session 1 | 9 am-12 pm | \$ 270

Session 1 | 1 pm-4 pm | \$ 270

Virtual Worlds and Beyond: Exploring 3D Creation and VR Technology

Step into the future with an immersive journey through virtual reality and 3D creation! In this class, students will use Meta Ouest headsets to explore breathtaking virtual environments, learning how VR transports us to new worlds. They'll get handson with Merge Cubes, which bring holograms to life right in their hands, allowing them to interact with 3D objects in real-time. With CoSpaces, students will create their own virtual scenes, from designing interactive worlds to building 3D stories. and then experience them through VR. This class combines technology, creativity, and exploration to help students understand and create within digital spaces like never before. Perfect for tech enthusiasts ready to dive into the amazing possibilities of virtual reality and 3D design!

Session 1 | 9 am-12 pm | \$ 270

<u>Session1|1pm-4pm|\$270</u>

Session 2 | 9 am-12 pm | \$ 270



Minecraft Mania

Minecraft Mania provides participants with an immersive virtual experience focused on the exploration of Minecraft in collaboration with fellow enthusiasts. Engage in structured classroom build challenges and block-based coding activities designed to enhance problem-solving abilities, foster collaboration, stimulate creativity, and cultivate coding skills, all while employing innovative ideas. This program promises to deliver an enriching and enjoyable experience sure to be WORLDS of fun!

Session 2 | 9 am-12 pm | \$ 225

Session 2 | 1 pm-4 pm | \$ 225



Video Game Design with Mario Maker

Learn how to design Super Mario Bros. levels like a pro! There are many aspects to game development that make getting started out difficult or intimidating. For an aspiring game designer, Mario Maker handles the artwork and programming, leaving the design aspects entirely up to you! Place blocks and enemies, establish clear conditions, and more to create fascinating levels that are fun for all. Students will follow a kidfriendly process similar to real video game designers who create the games they play at home! Additionally, students work on their communication skills as they present their games to the class and give/receive feedback.

Session 1 | 9 am-12 pm | \$ 250

<u>Session 2 | 1 pm-4 pm | \$ 250</u>



Super Smash Brothers Artificial Intelligence Academy

Discover the thrilling world of Super Smash Bros., where you can craft and mold your very own Nintendo character. Dive into the realm of Amiibos, Al-powered figurines that are cherished collectibles but often costly. In this course, we'll show you how to unlock the Amiibo magic without breaking the bank, using affordable NFC chips to simulate these coveted figures at home. Each week, you'll embark on a journey to train and refine your fighter, exploring various abilities and strategies to create the ultimate champion. Each participant will create their own amiibo to take home. Immerse yourself in the world of game design, where balance and problem-solving are the keys to success.

<u>Session 1 | 1 pm-4 pm | \$ 250</u>

<u>Session 2 | 9 am-12 pm | \$ 250</u>



Engineering the Future with LEGO® SPIKE Robotics

Engineer with LEGO® SPIKE PRIME! Dive into the exciting world of robotics as you build, code, and conquer new challenges each day. From designing innovative machines to solving real-world problems, you'll develop skills in teamwork, engineering, computational thinking, and programming—all while having a blast. With easy-to-use drag-and-drop coding based on Scratch, this class is perfect for aspiring creators and tech enthusiasts ready to turn their imagination into action. Get ready to innovate, collaborate, and bring your robotic creations to life!

Session 1 | 9 am-12 pm | \$ 250

<u>Session 1 | 1 pm-4 pm | \$ 250</u>

<u>Session 2</u> | 9 am-12 pm | \$ 250

Session 2 | 1 pm-4 pm | \$ 250



TEEN TECH

Blueprints to Reality: Tiny Home Challenge

Step into the innovative world of tiny homes and explore how creativity meets practicality in modern housing solutions. In this hands-on class, students will use Keyplan 3D design software to bring their vision to life, applying math skills to design a custom tiny home on the computer. Once their virtual designs are complete, they'll construct a physical prototype to showcase for a simulated market. This class combines technology, problem-solving, and design to inspire future architects, engineers, and innovators. Get ready to think big by designing small!

Session 1 | 1 pm-4 pm | \$ 250

Session 2 | 9 am-12 pm | \$ 250

Maker Studio: From Digital Designs to Custom Projects

Explore the exciting world of design and crafting in this hands-on class for creative thinkers! Learn to use digital tools like Canva to design custom graphics, then bring your ideas to life with a Cricut to create personalized shirts, stickers, and more. Take your skills to the next level with the Glowforge, crafting unique projects out of plexiglass and wood—such as custom signs, keychains, or ornaments. Whether you're interested in fashion, home decor, or creating meaningful gifts, this class will teach you the skills to turn your ideas into tangible creations. Perfect for beginners and experienced makers alike!

Session 1 | 9 am-12 pm | \$ 250

Session 1 | 1 pm-4 pm | \$250

Session 2 | 9 am-12 pm | \$250

Session 2 | 1 pm-4 pm | \$ 250





Monument Makers: Design and Build History

Discover the stories behind world-famous monuments and bring them to life through design and modeling! In this class, students will research iconic landmarks from around the globe or within the United States, learning about their history, architecture, and cultural significance. Using 3D design software, students will create detailed digital replicas of their chosen monument, then build a scaled prototype to showcase their work. This class blends history, engineering, and creativity, inspiring students to appreciate and reimagine the marvels of the world.

Session 1 | 9 am-12 pm | \$ 250

Session 2 | 1 pm-4 pm | \$ 250



TEEN TECH

Level Up: Game Development with Unity

Embark on a game development journey with Unity 3D, a powerful engine for creating popular video games. Students will gain skills to develop 3-5 games for various platforms, fostering creativity and enabling them to share their creations online. All backgrounds and skill levels are welcome!

Session 1 | 9 am-12 pm | \$ 270

Session 2 9 am-12 pm | \$270

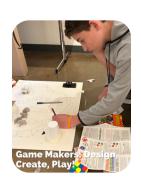


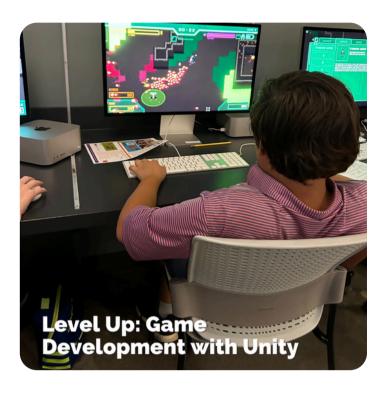
Game Makers: Design, Create, Play!

Join us for a thrilling week of game design and creation! In this session, you'll learn the fundamentals of board game design, from concept development to prototyping. You'll use cutting-edge technology like 3D printers and laser cutters to bring your game ideas to life. Collaborate with other young creators, test your designs, and experience the excitement of seeing your game come to life. Whether you're a budding designer or a seasoned gamer, this camp is the perfect opportunity to unleash your creativity and have fun!

<u>Session 1 | 9 am-12 pm | \$ 250</u>

Session 1 | 1 pm-4 pm | \$250





GeoVisionaries: Storymaps and Solutions for a Better Future

Discover the power of Geographic Information Systems (GIS) in this dynamic Teen Tech class! GIS is like a high-tech treasure map, helping us uncover patterns, solve problems, and make smarter decisions about our environment and communities. Dive into the design thinking process as you tackle a personal passion project, create engaging storymaps, and design innovative solutions for a better future. Whether you're mapping out climate trends, tracking wildlife, or planning sustainable cities, this class will inspire you to think globally and act locally.

Session 1 | 9 am-12 pm | \$ 250

<u>Session 1 | 1 pm-4 pm | \$ 250</u>

Session 2 | 9 am-12 pm | \$ 250

<u>Session 2 | 1 pm-4 pm | \$ 250</u>

TEEN TECH

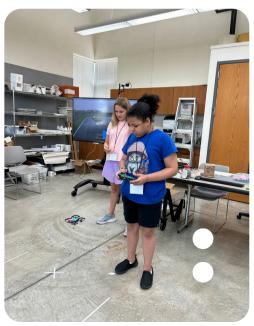
Drone Rescue Missions

Discover the exciting world of drones and their amazing missions! Join the adventure and explore how drones can be superheroes in rescue missions, help grow forests, make cool movies, and even compete in sporting challenges! Get ready for a drone-tastic journey of fun and learning!

Session 2 | 9 am-12 pm | \$ 270

Session 2 | 1 pm-4 pm | \$ 270







In My Digital Storytelling Era

Every era has a story. How will you choose to tell your story? This course encourages students to tap into their creativity using tools like collaging, podcasting, and video production, allowing them to craft unique narratives that reflect their lives, experiences, and imaginations. With a focus on self-expression and digital literacy, this class empowers students to engage with various storytelling forms, helping them build confidence in sharing their voice.

<u>Session 1 | 9 am-12 pm | \$ 250</u>

<u>Session 1 | 1 pm-4 pm | \$ 250</u>

<u>Session 2 | 9 am-12 pm | \$ 250</u>

Session 2 | 1 pm-4 pm | \$ 250









HIGH SCHOOL CODING CAMP



Coding Camp

Become a STEM innovator while immersing yourself in the college experience! The Maryville Coding Camp offers a week-long program crafted to enhance students' understanding of coding and its applications in the contemporary world. This year, participants will engage in hands-on activities using state-of-the-art technologies. Students can choose from a diverse range of coding activities, including crafting music with Python code, delving into Game Design, and exploring various other coding and college life experiences.

High School Session | July 14-18 9:00 a.m.-12:00 p.m. Cost: \$149

