SUMMER STEAM BOOST CAMP 2024

GRADES K-2

Monday to Friday (5 Days each week, 7 Hours each day)- Use Code SUMMER24 to get $100 off until April 15th!

	July 8th-July 12th	July 15th-July 19th	July 22nd-July 26th	July 29th-Aug 2nd	Aug 5th-Aug 9th	Aug 12th-Aug 16th
	Little Doctors	**Around the World**	**Little Architects**	**Green Tech**	**Music and Art**	**Silly Circuits**
9:00-12:00 PM	Little Doctors camp presents medicine, science, and the importance of health & hygiene in an entertaining & fun way! Role play with tools doctors use in the real world to learn about the body & how it works. Activities include making a stethoscope and a mechanical hand! This camp is sure to inspire our little doctors of tomorrow!	In our Around the World camp, we'll travel around the world in 5 days! While visiting the earth's continents, your camper will learn about directions, how to read maps, and about various countries on several continents. At the end of the camp, they'll take home their homemade passports stamped with the countries they've visited.	Learn to build castles, bridges, and towers in this exciting architecture camp! Throughout the week campers will learn about famous architectural structures including the Eiffel Tower, Empire State Building, the Shard, and many others! Plus, try your hand at building using our mini construction kits!	In a world where we are rapidly running out of resources, sustainability is key! Learn all about green technologies and clean energy. In this hands-on camp, students will build solar powered phone chargers and robots that can water house plants. They will also spend time outdoors planting milkweed to aid pollinators.	Sing your heart out at our Music and Arts camp! Try your hand at different instruments including Piano, Guitar, Drums and Ukulele. Learn to make your own maracas! 3D print a whistle! Discover the magic of crafting music on a computer by making a virtual piano using drag and drop coding! Dress up and participate in a musical play!	Your camper will learn all about basic electronics while creating their own cool silly circuits! They'll add LED lights, motors, and sounds to create their own play dough, wood, and paper circuits. Explore the fun world of electronics while making amazing creations to take home!

LUNCH 12:00 PM -1:00 PM + Outside Play

	Making LEGO Movies	**Arcade Games**	**Space Bots**	**Cartooning**	**Flight Science**	**Super Science**
1:00-4:00 PM	Lights, camera, action! In this camp, campers call the shots. Using stop motion animation, students will create their own mini movie masterpiece! From crafting clay characters, LEGO mini figures and backdrops to painting backgrounds, from editing to story boarding to script writing, these budding Spielbergs will learn all there is about movie making.	SCRATCH, developed by MIT, helps young kids learn to think creatively, reason systematically, & work collaboratively. To create their own projects, students will use intuitive drag & drop block programming to build their framework, as well as added sounds, backdrop images and drawings to bring their games to life. Get kids to code!	Space is the place! In this camp students are challenged to make a Lunar Base while learning robotics, science and engineering skills. They will use LEGO bricks, sensors, motors, gears, and block coding to prep their rover for an outer space expedition! They will be able to create projects about energy, water, food, air, and transport on the moon!	Interested in getting started with comic strip creation? How about creative fantasy writing, or drawing your favorite characters? Loosen up those fingers and come stretch your creative muscles with us as we work on creating some short comics and cartoons together!	Explore the wonders of sky and space! From birds to planes, we'll study the workings of flying machines. Campers will spend the week crafting mini rockets, airplanes, parachutes, and more! Loads of colorful hands-on activities, music & art combined with physical discovery and role play!	A hands-on science camp for kids to gain experience and knowledge through experimentation! Conduct experiments with food coloring, baking soda, and other child safe ingredients. Make your own oobleck! Learn about light and lasers! And have a blast with elephant toothpaste!

Healthy Snacks + Drinks - Included
Healthy / freshly prepared Lunches - $75 per week

BEFORE CARE - 8:00 - 9:00 AM - $100 per week
AFTER CARE - 4:00 - 5:30 PM - $100 per week

Register by going to https://tinyurl.com/steamworksstudiosummer2024 (<-Click here)

SUMMER STEAM BOOST CAMP 2024

GRADES 3-5

Monday to Friday (5 Days per week, 7 Hours each day) - Use Code SUMMER24 to get $100 off until April 15th!

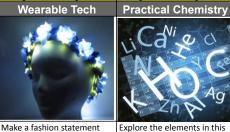|	July 8th-July 12th	July 15th-July 19th	July 22nd-July 26th	July 29th-Aug 2nd	Aug 5th-Aug 9th	Aug 12th-Aug 16th
	Missions in Robotics	**Wearable Tech**	**Practical Chemistry**	**Rocketry**	**3D Printing Projects**	**Movie Making**
9:00-12:00 PM	Campers learn basic elements of Robotics such as sensor utility, gear trains, engineering design, logical thinking & coding, testing and performance. This Robotics class is an excellent way to motivate children to move deeper into Robotics while they stay excited and engaged. Become creative problem solvers!	Make a fashion statement with electronics you can wear! Craft your own LED flower crown, learn to solder, and code flashing badges and earrings! Take home projects that will WOW your friends and family. The perfect blend of science and art infused MAKER activities that boost creative thinking & problem solving in a fun camp format!	Explore the elements in this brand new camp in a hands-on exploratory manner! Have you seen what happens when sodium is added to water? Why do some elements generate light when powered by electricity? Throughout the week, we will learn all about the elements on the periodic table through a series of experiments.	Students in this fantastic camp engage in building air pressured, alcohol powered rockets while also participating in rocket launches using real rocket engines! The scientific, technical, engineering & mathematical foundations of rocketry provide exciting opportunities for authentic hands-on experimentation!	CAD and 3D Printing introduces students to basic 3-D modeling. Students learn the principles needed to design exciting projects, such as primitive shapes, measurement, hollow objects & assemblies. Students keep the 3-D printed printed models that they make!	We see stop motion animation all the time: on TV, in movies, and all around us. This camp offers children the chance to create their own original stories. Throughout the week they'll craft clay characters, design backdrops, learn to edit films, learn how to storyboard, & even identify actors & props to use. You are the director of your own movie!

LUNCH 12:00 PM -1:00 PM + Outside Play

	Electronics Lab	Python is Fun!	Maker Lab	Medical Robotics	Chess	Cricut Marvels
1:00-4:00 PM	Explore electricity and magnetism, the basics of electronic circuits & how electronic components work. Students will use breadboards, resistors, capacitors, and LEDs to build circuits that blink, squeak, tick and whirl! Explore a very important skillset of tomorrow!	Python is a powerful, expressive programming language that's easy to learn and fun to use. We'll build cool graphics & games during this camp. We'll use IDLE as a development tool as well as common libraries that help with graphics and game building like tkinter and pygame to explore the power of Python language!	CAD, 3D printing, laser cutting, embossing and engraving, soldering & electronics, cheap microcontrollers, Arduino/Raspberry Pi coding... What can you create/invent and take home? This week, YOU can use our maker lab and tools, project ideas, and step by step guidance from experts to create the STEAM project of your dreams!	Build robots that can change and save lives! Robotics is helping mankind overcome many medical conditions. Learn to create a prosthetic arm or a cyborg arm, program a bedside bot that responds to your voice, or even craft a robot to build bone! Use your design and coding talents to have fun and learn invaluable skills at Med Bot camp!	Learn to play chess! Throughout the week kids will study the basics of chess, and once mastered, kids will focus on techniques and typical strategies while working in pairs. Learn to make the best move while practicing patience & strategy. We might even learn to 3D print a chess piece! This camp is sure to get young minds thinking!	An introductory camp for creating, printing and cutting stickers, cloth, vinyl, and more using a top-of-the-line Cricut machine. Using Cricut Design Space, learn how to set up a file for cutting and different printing techniques to assemble stickers, wallets, screenprinted totebags, and more!

Healthy Snacks + Drinks - Included	BEFORE CARE - 8:00 - 9:00 AM - $100 per week
Healthy / freshly prepared Lunches - $75 per week	AFTER CARE - 4:00 - 5:30 PM - $100 per week

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STEAM Works Studio

SUMMER STEAM BOOST CAMP 2024

GRADES 6-8

Monday to Friday (5 Days per week, 7 Hours each day) - Use Code SUMMER24 to get $100 off until April 15th!

July 8th-July 12th	July 15th-July 19th	July 22nd-July 26th	July 29th-Aug 2nd	Aug 5th-Aug 9th	Aug 12th-Aug 16th
3D Print Projects	**Python is Fun!**	**VEX Robotics**	**Rocketry**	**Arduino Magic**	**Game Design**

9:00-12:00 PM

3D Print Projects: CAD and 3D Printing introduces students to basic 3-D modeling. Students learn the principles needed to design exciting projects, such as primitive shapes, measurement, hollow objects & assemblies. Students keep the 3D printed models that they make! They'll learn design thinking and creative problem solving.

Python is Fun!: Python is a powerful, expressive programming language that's easy to learn and fun to use. We'll build cool graphics & games during this camp. We'll use IDLE as a development tool as well as common libraries that help with graphics and game building like tkinter and pygame to explore the power of Python language!

VEX Robotics: Build a fully autonomous robot using a programmable VEX ARM® Cortex® based microcontroller & various sensor types. Students will learn programming skills such as Robot-C, robot design and engineering processes. Students can use this camp to get ready to participate in VEX competition opportunities across the country!

Rocketry: Students in this fantastic camp engage in building air pressured, alcohol powered rockets while also participating in rocket launches using real rocket engines! The scientific, technical, engineering & mathematical foundations of rocketry provide exciting opportunities for authentic hands-on experimentation!

Arduino Magic: Learn the fundamentals of electrical engineering! Explore autonomous robotics code with an Arduino microcontroller and its sensory motor ecosystem. Understand & learn to write code for line tracking, obstacle avoidance, IR remote control & Bluetooth control with an app on a phone.

Game Design: Using game objects, models, and levels to create game environments, students will program interactions with C# and Unity. Starting with a 2D game, students will transition to 3D libraries to create FPV arcade games leading into virtual reality experiences. This camp is meant to develop coding and design skills for campers and is sure to have an impact!

LUNCH 12:00 PM -1:00 PM + Outside Play

Applied Physics	Laser Cutting	Java Coding	Audio Engineering	Soldering + Circuits	Woodworking

1:00-4:00 PM

Applied Physics: See Newton's law in action with real measurements. What is centripetal force? Can you actually measure and see that it matches what your learn in your text books? Can you measure & see that the electromagnetic formula of attraction is indeed what you learn? Students explore how to use simple sensors & micro controllers with LCD displays to measure and see the incredible mathematical world of physics!

Laser Cutting: Learn 2D & 3D CAD design skills and make basswood creations infused with artwork. Make a wooden jigsaw puzzle and a box to keep the pieces in. Make an LED lamp cube. Make a laser cut torch light. An interdisciplinary class mixing art & craftwork, CAD design, electronics and engineering in this fun & highly engaging camp. Get ready to upgrade with the technologies and skills of tomorrow.

Java Coding: A jumpstart to coding! Begin with a quick programming orientation using the Eclipse environment. Campers will learn to program using best practices and understand what makes Java unique and so powerful. JVM, objects & classes, data types, arrays, decision structures, file I/O & graphics are introduced!

Audio Engineering: Introduces the fundamental steps of the music production process, such as recording & mixing techniques. Campers will understand basic music theory knowledge, how to arrange soundtracks, edit voice, record, add sound effects, and create their own compositions. Get ready for music business, podcasts and marketing in the future!

Soldering + Circuits: Learning how to solder is quite easy, and with a little practice, you will be soldering your own electronic circuits. Campers in this class will learn about electronic circuits to build LED flashers, a radio transmitter, a touch sensing lamp, and a 555 IC tone generator.

Woodworking: This totally safe working woodshop is a great way for kids to craft, create, build, and otherwise discover skills that can provide a lifelong source of enjoyment. Gain hands on experience with woodworking in this cool camp using tools such as the jigsaw, lathe, drill press, & sander. Make your own wooden bench, coat & hat rack, and storage box!

Healthy Snacks + Drinks - Included	BEFORE CARE - 8:00 - 9:00 AM - $100 per week
Healthy / freshly prepared Lunches - $75 per week	AFTER CARE - 4:00 - 5:30 PM - $100 per week

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