

Summer@Brookwood 2019 Camp Guide

Week 1: June 17-21

Morning Only (9:00 a.m. - 12:00 p.m.)

Children's Theatre (Rising Grades K-1)

Stephanie Charlton

Does your child love to sing, tell stories, act on stage, and play drama games? Then they'll be a star in Children's Theatre, a fun and active introduction to creative drama. Instructor Stephanie Charlton will inspire your rising thespian. Beginner or intermediate students will discover the magic of life on the stage and have a blast doing it! **Cost: \$220**

Tinkertime (Rising Grades K-1)

Erin Koeplin

If you like to build, experiment, try new and old methods, collaborate, work independently, work aimlessly (no such thing, of course!), and with purpose, then this camp is for you! In "Tinkertime," we will use a great variety of materials to create independent and group projects that we will discover throughout the week. We will use our own creative minds, friends, recycled and repurposed materials, and well, just about EVERYTHING as inspiration! Bring a project that you already have begun and build upon it, or come with an open plan! The world is your oyster, and you, it's pioneer. Come explore, experiment, and discover that you are our next great inventor! **Cost: \$230**

Junior Drone Pilots (Rising Grades 1-3)

Drobots Staff

Junior Drone Pilots is specifically designed for campers with little to no experience flying drones. We use the safest and most reliable drone products on the market, including the Parrot™ drones for enhanced safety and most of all, fun. Campers will learn the basics of drone technology and safety before taking to the air. Through the use of iPad flight simulators and clear instructions on basic flying maneuvers, young Drobots' pilots will experience a program filled with excitement, games, challenges, and learning. Campers work all week long to prepare for the most enjoyable part of the week: the Ultimate Drone Games that include events such as: Tic-Tac-Drone, Drone Darts, Duck-Duck-Drone, and more. All campers go home with interactive workbooks and plenty of Drobots Company keepsakes and trinkets so the memories last long beyond the summer. Drone safety and the social responsibilities of flying drones are included in this program. **Cost: \$240**

Inspired Artists (Rising Grades 2-3)

Marleen Wood

This camp uses famous artists and illustrators as inspiration for creating artistic masterpieces. Campers will enjoy learning about the life and motivation behind five famous artists before creating their own impressionist paintings, clay sculptures, self-portraits, glass flowers, and cubist compositions. We will also examine works of children's book illustrators and create collages and paintings in their styles. "Inspired Artists" will be led by Brookwood School's after-school instructor extraordinaire, Marleen Wood. She ties together her love of art history with her passion for encouraging children to create art. **Cost: \$230**

Multisport (Rising Grades 3-6)

Monika Carbochova

Do you love to move, run, and be active? Do you like to play sports and be part of a team? If so, Program Director Monika Carbochova is ready for you to join the fun! This high-energy camp will explore the following sports: soccer, flag football, Wiffle ball, kickball, Ultimate Frisbee, and anything else we can find to have fun outside. Floor hockey, basketball, and indoor games can also give relief from summer storms or heat. Enjoy three hours of the most delicious game buffet. Have fun with friends, keep fit, and master new skills. Monika is a math teacher at Brookwood and an experienced and passionate coach who loves working with this age group. What a great opportunity for young sports enthusiasts! **Cost: \$215**

Drone Racing & Obstacle Course Challenge (Rising Grades 4-8)

Drobots Staff

Drone Racing is filled with pure action as students enjoy one of the world's fastest growing sports, Drone Racing. Campers will first learn about the basic safety of drone flying and the history behind drone racing as a sport. From there, campers will progress through various skill challenges and learn how to perform various exercises and maneuvers to become familiar with the drone's speed and agility. Flight squads post up against one another in friendly competition when they race themselves and the clock. Students first maneuver the drone through creative obstacle courses before taking on the challenge of flying for speed. Participants contribute fully in this program as they create the design and help build the the obstacle course in preparation for the last day's final activities and competition. All campers go home with interactive workbooks and plenty of Drobots Company keepsakes and trinkets so the memories last long beyond the summer. Drone safety and social responsibilities of flying are included in this program. **Cost: \$240**

Full Day (9:00 a.m. - 4:00 p.m.)

Brookwood in Revue (Rising Grades 4-7)

Alex Edwards

Alex Edwards is excited to lead this highly successful and very popular camp in 2019! Joined by a cast of very talented theatre instructors, they will direct and produce a high quality musical theatre production in one week's time! Campers will enjoy both individually tailored and group lessons in voice, acting, and dance. At the end of the week, students will perform a musical revue! Students will repurpose costumes, sets, and scores. Come act, sing, and perform a full length junior musical! Wish you starred in that stunning Brookwood eighth grade play? Now you can. **Cost: \$415**

Brookwood in Revue Pit Band (Rising Grades 4-7)

Gary Backstrom

Campers will steep themselves in music for a week of inspiration, skill development, and performance. The group will include guitarists, intermediate piano/keyboard players, vocalists, drummers, and bass players. Students will learn the basics of technique, music theory, and the dynamics of playing in a group. They will then work toward a final performance as the accompanying musical ensemble for Brookwood in Revue. Gary Backstrom was lead guitarist for Jiggle the Handle and currently tours with the Gary Backstrom Band. He has opened for such bands as the Allman Brothers, The Spin Doctors, Collective Soul, and recently played with Billy Joel drummer Liberty DeVito as well as members of Todd Rundgren's band. He has been teaching individual music lessons at Brookwood School for over a decade. **Cost: \$415**

Afternoon Only (1:00 - 4:00 p.m.)

STEM Superhero with LEGO (Rising Grades K-2)

Drobots Staff

Save the world with Superheroes! Campers will start out building projects such as Tightrope Walkers, Space Shuttles, and an Igloo. Then build the hideouts and vehicles of your favorite caped crusaders, and learn what makes them not only Superheroes and Superheroines, but Superhero Engineers! Design, build, and save a city where ingenuity and imagination can solve any conflict in this engineering camp.

Cost: \$240

Sciensational: Brick Building with Lights and Sound (Rising Grades 2-6)

Sciensational Staff Member

How would you like to become an architect and electronics scientist? Make endless combinations of brick construction and electronics. Invent anything and make it operational by doing it the Sciensational Way!! How about building your own light post with color effects? Build and design your own brick tower, light it up, play music, and turn on your LED'S. Build your own brick bridge with melody and sound. Construct a brick mammal, a three level house, and lighthouse. Put in overhead lights. Now it is your time to design, think, and use your inventors skills. The sky's the limit! Take it all home and STEAM your way to the future! **Cost: \$240**

Mobile App Development (Rising Grades 4-8)

Drobots Staff Member

Create an interactive mobile game that uses a smartphone's gyroscope to control characters through mazes and obstacles to find the goal! This camp focuses on the unique advantages of the mobile platform for development, teaches participants modern approaches in game design, and uses haptic and SFX feedback to enhance the game's feel. Students walk away with a robust mobile app that can be exported to a native app and downloaded by others. Camper-created apps will be accessible post camp and can be played on any computer or mobile device. No prior experience is required. We provide all technology on location. **Cost: \$240**

Week 2: June 24-June 28

Morning Only (9:00 a.m. - 12:00 p.m.)

Let's Bake! (Rising Grades K-1)

Erin Koeplin

Do you love to mix and measure, divide and decorate? Do you enjoy getting messy and experimenting with ingredients? Does working with your friends to create something delicious and decadent interest you? Baking is a way of life and a way to bond with friends, family, and neighbors. In "Let's Bake!", you will learn how to read and follow a recipe, work with a variety of delicious ingredients, and create your very own cookbook filled with scrumptious recipes to take home! We will bake cookies, bread, vegan, gluten-free, muffins, pizza...the list is endless for the time and bakers abound! Let's get bakin'! **Cost: \$245**

Soccer (Rising Grades K-5)

Enrique Polletta

Campers will enjoy a week out on the turf field with Brookwood's very own kindergarten teacher, Enrique Polletta. We'll focus on improving individual technique, skill development, and the fundamentals of team play. Perfect for players of all levels, our program challenges each camper to expand his or her athletic horizons. Offense, defense, footwork, passing, shooting, and "rules of the

game” are all taught in a supportive and fun atmosphere. With more than 30 years of playing and coaching experience, join Enrique for a fun week of skill growth and teamwork. **Cost: \$215**

Junior Drone Coders (Rising Grades 1-3)

Drobots Staff

Junior Drone Coders is specifically designed for campers with little to no experience flying drones or coding. Campers will learn the basic principles of how to code drones to fly. To complement the coding aspect of the program, we teach the campers how to utilize basic flight terminology to conquer fun and interactive flight challenges. Campers will learn to pitch, yaw, and roll through self-created obstacle courses and then utilize iPads to code the drones through the obstacle courses. All campers go home with interactive workbooks and plenty of Drobots Company keepsakes and trinkets so the memories last long beyond the summer. Drone safety and the social responsibilities of flying drones are included in this program. **Cost: \$240**

Children’s Theatre (Rising Grades 2-3)

Stephanie Charlton

Does your child love to sing, tell stories, act on stage, and play drama games? Then they'll be a star in Children's Theatre, a fun and active introduction to creative drama. Instructor Stephanie Charlton will inspire your rising thespian. Beginner or intermediate students will discover the magic of life on the stage and have a blast doing it! **Cost: \$220**

Drone Escape and Rescue (Rising Grades 4-8)

Drobots Staff

Drone search and rescue is a necessity for first responders around the world, adding a new layer of solutions to save lives across the globe. Now campers can take part in and learn from simulated missions during this action-packed, creative, and educational program. Participants will learn to fly drones and rely on their rescue team to collect vital data in specific “rescue areas” to locate “victims” and safely rescue them. We use age-appropriate and cutting-edge technology methods available for creating plans, missions, and maps. Participants will also learn invaluable lessons on how to simply, quickly and accurately make informed and targeted suggestions for real-world positive applications.

Cost: \$240

Full Day (9:00 a.m. - 4:00 p.m.)

Pop Rock Band (Rising Grades 4-8)

Gary Backstrom

Band camp at Brookwood is a great way to get your kids involved with the skills it takes to be in a real band for fun or professionally. “Pop Rock Band” is led by national touring artist, Gary Backstrom, who has taught guitar, bass, voice, piano, and drums, as well instructed many ensembles in the style of rock, pop, jazz and R&B at Brookwood School. He will guide a week-long exploration of what it takes to play in an ensemble setting and the skills needed to make a tight, cohesive band. Children will learn how to dial-in great tones on amps, sound systems, and how to effectively use their voices and musical instruments. Children can expect to cover music from Bruno Mars, Taylor Swift, Daft Punk, Red Hot Chili Peppers, as well as classics from the Beatles, U2, and more. The week will culminate with a pop rock performance for friends and family members that none are sure to soon forget! **Cost: \$410**

Afternoon Only (1:00 - 4:00 p.m.)

Nature's Palette (Rising Grades K-1)

Anya Ciarametaro

Imagination and creativity soar as we explore bugs, birds, leaves, seeds, and more! Join us for a week of hands-on fun as we take on a new adventure each day. Not only will we become excellent explorers and observers of nature, but we will find the beauty in the world around us and use that beauty to make fun works of art! Come prepared to get dirty, get creative, and most importantly, to have a blast! **Cost: \$220**

StemQuest: Aliens vs Wizards (Rising Grades 1-3)

Drobots Staff

StemQuest unplugs campers from the computer screen in this action-packed, story-based program. Throughout the week campers will be constantly on the move as they experiment and play. StemQuest has intentionally extracted the wide-array of exhilarating challenges and mysteries from popular gaming apps and turned it all into a live adventure. Campers will use age-appropriate rovers, bots, drones, and autonomous creative technology to jump over walls, push down obstacles, lift up boulders, and navigate through galaxies. Teams of campers work together in indoor, outdoor and open-spaced "worlds" throughout the week. In doing so, campers utilize life skills such as: collaborative problem solving, design, and curiosity, to outwit, out-build, and out-smart the program instructor, The Wizard. **Cost: \$240**

Digital Mythical Creature Creations (Rising Grades 4-8)

Drobots Staff

Join us for a week of animation and digital creations. Whether you engineer a friendly digital unicorn or a super scary three-headed monkey dragon, campers will have a blast transforming their imagination into reality. Using real HTML, CSS, and JavaScript code, campers customize their animated creature to give it a unique personality, appearance, and behaviors. Students explore programming fundamentals in a creative camp to bring their designs to life and share them with family and friends long after camp ends. **Cost: \$240**

Sciensational: CSI-Crime Scene Investigation (Rising Grades 2-6)

Sciensational Staff Member

You will be the super science sleuth. Have fun learning about forensics, crime scene investigations, and crime lab chemistry as you perform as many as 15 different experiments designed to show you just how those tricky cases are solved. Search for the evidence, gather clues, and discover how science can help solve a mystery. Participants will: Dust for fingerprints, analyze handwriting, test for blood type using simulated blood, examine hair and clothing fibers, practice chemistry to identify mystery substances and much more. Participants will then use their skills to solve crimes of the century. **Cost: \$240**

Week 3: July 1, 2, 3

July 1 & 2 full-days, July 3 half-day

STEM Fundamentals with LEGO® (Rising Grades K-2)

Drobots Staff

Gear up your engineering skills with an abundance of LEGO parts! Apply real-world concepts in physics, engineering, and architecture through engineer-designed projects such as Houseboats, Mini Golf Courses, Forklifts, and the London Tower Bridge. Design and build as never before in this new, full-day camp program for LEGO enthusiasts! Note: This camp will run full days on Monday and Tuesday, and until 12 p.m. on Wednesday. **Cost: \$240**

Drone Racing & Obstacle Course Challenge (Rising Grades 3-5)

Drobots Staff

Drone Racing is filled with pure action as students enjoy one of the world's fastest growing sports, Drone Racing. Campers will first learn about the basic safety of drone flying and the history behind drone racing as a sport. From there, campers will progress through various skill challenges and learn how to perform various exercises and maneuvers to become familiar with the drone's speed and agility. Flight squads post up against one another in friendly competition when they race themselves and the clock. Students first maneuver the drone through creative obstacle courses before taking on the challenge of flying for speed. Participants contribute fully in this program as they create the design and help build the obstacle course in preparation for the last day's final activities and competition. All campers go home with interactive workbooks and plenty of Drobots Company keepsakes and trinkets so the memories last long beyond the summer. Drone safety and social responsibilities of flying are included in this program. Note: This camp will run full days on Monday and Tuesday, and until 12 p.m. on Wednesday. **Cost: \$240**

Week 4: July 8-12

Morning Only (9:00 a.m. - 12:00 p.m.)

Creative Kids Production (Rising Grades K-3)

Alex Edwards/Anya Ciarametaro

Made for the stage! Alex Edwards and Anya Ciarametaro will lead young students in a fantastic production where everything from the music to the art is made by the campers. Come sing, dance, design sets, paint props, sew costumes, and have a week full of fun! All of this joyful noise will result in a wonderful, homemade production for everyone to see. Lights, camera, action! See you in July. **Cost: \$220**

Jedi Engineering with LEGO® (Rising Grades K-2)

Drobots Staff

Prepare for this half-day LEGO camp packed with hands-on and minds-on STEM fun! Build projects inspired by cool machines close to home such as Cities, Garbage Trucks, and Catamarans. Then build X-Wings, Energy Catapults, and Defense Turrets from a galaxy far, far away! Learn about BOTH kinds of The Force in this new full-day themed engineering camp for LEGO fanatics! **Cost: \$240**

Splish Splash (Rising Grades 2-3)

TBD

Get wet, get wild! When things heat up this summer, cooling your spirits with some water activities is just what the doctor ordered. Enjoy a week full of slip 'n slides, water balloons, and super soakers. Don't forget your bathing suit and a towel for the car ride home! **Cost: \$230**

Rainbow Unicorn Fan Club (Rising Grades 3-5)

Marci Johnson

Come ride a unicorn down a rainbow and bounce on some pink cloud slime with Miss Marci! This enchanting class involves all things magical and beautiful: rainbows, unicorns, sparkles, flowers, and making every wonderful kind of slime you can imagine: Cloud Slime, Fluffy Slime, Rainbow Slime, Edible Slime, Butter Slime, Glitter Slime... We will dance, weave flowers through our hair, learn all about unicorns and rainbows, and we will create magic! Your child will leave as a card-carrying member of the Rainbow Unicorn Fan Club! **Cost: \$230**

3D Video Game Creation with Unity (Rising Grades 4-8)

Drobots Staff

Learn to design video games like the pros using one of the world's most popular game development platforms, Unity. Build a unique game from the ground up by conceptualizing, designing, and then developing your ideas. Learn the fundamentals of C# in order to bring your games to life! Camper designs will be accessible post camp. No prior experience is required. We provide all technology on location. **Cost: \$240**

Afternoon Only (1:00 - 4:00 p.m.)

Ninjaneering with LEGO® (Rising Grades K-2)

Drobots Staff

Enter the world of Ninjago and become an apprentice Ninjaneer! Engineering and Ninjanuity are the focus of this new full-day themed camp for LEGO fanatics. Learn to build Trains, Helicopters, Treehouses, and Beam Bridges before moving on to Skull Trucks, Dragons, and Spijitzu Spinners from Ninjago City! **Cost: \$240**

Sciensational: The Amazing 4 in 1 Robot (Rising Grades 2-6)

Sciensational Staff Member

Build your own interchangeable robot to take home with four unique modes. It is truly a four-in-one motorized robot kit. Learn how the different gears work as you are building. You will build the Cricket--a joy on six legs; Build the Beast--a master of bi-pedal movement; Trailer--the little engine that could move forward thanks to its motorized transmission; and finally, the best of all, Grandpa-Bot Robot. It is easy transforming between the four modes. Gain confidence, self esteem, and celebrate as you are the architect that built it. Plus have fun building a wide range of additional robotic designs with the Robotic Building System. Robots built in this portion of the workshop are not taken home. Have fun, learn, and have hands on experience the Sciensational way! **Cost: \$240**

Roblox® Entrepreneur: Imaginative Game Design (Rising Grades 4-8)

Drobots Staff

Join us for a week of Roblox, one of the fastest-growing game programming platforms on the planet. In this course, campers use the Roblox Lua code to create 3D worlds. Roblox is an entertainment platform that allows camper to imagine, create, and play together across millions of user-created virtual worlds. Join the more than 60 million players per month and top developers making over \$1 million a year. The types of gameplay on Roblox are just as limitless as the imagination of the campers themselves. Join us for a week of pure fun and learning: build the ultimate theme park, compete as a professional race car driver, star in a fashion show, become a superhero, or simply design a dream home. Campers will learn what makes a Roblox game a top hit and learn how to implement some of the same engagement and monetization strategies in their own work. In the end, all campers finish the week able to publish, share, and play games with friends on any platform from console to mobile. No prior experience is required. We provide all technology on location. **Cost: \$240**

Week 5: July 15-19

Morning Only (9:00 a.m. - 12:00 p.m.)

The Power of Play (Rising Grades PreK-K)

Katie Alexander & Erin Koeplin

Play is the critical vehicle by which children learn about and interact with their world. Through play, kids learn mental, physical, and social skills necessary for a successful future. Communication, problem

solving, and collaboration are just a few of the skill areas that young minds exercise during play in a group setting. This week of camp at Brookwood is sure to challenge your child's natural curiosity and creativity through structured play scenarios, imaginative free-play sessions, and guided art and literature activities. Allow your child the opportunity to experience the power of play at Brookwood! **Cost: \$220**

Magic Treehouse (Rising Grades K-1)

Marci Johnson

Does your child enjoy storytelling, art, exploration and adventure? Would you like your child to cultivate academic skills in a magical, fun environment? Then the *Magic Treehouse* Camp is for you! This dynamic camp will ignite your child's imagination through innovative, vibrant activities. Using the *Magic Treehouse* series as a starting point, students will listen to a story and then use the text to explore worlds of outer space, Viking Ireland, Ancient Greece, and more. Those campers who attended this camp last year will experience brand new activities. Brookwood parent and graduate of Harvard's Masters of Education program, Marci Johnson will bring these stories to life each day for your child, creating a world of light, laughter, and stardust wishes! **Cost: \$225**

Ninjaneering with LEGO® (Rising Grades 1-2)

Drobots Staff

Enter the world of Ninjago and become an apprentice Ninjaneer! Engineering and Ninjanuity are the focus of this new full-day themed camp for LEGO fanatics. Learn to build Trains, Helicopters, Treehouses, and Beam Bridges before moving on to Skull Trucks, Dragons, and Spijitzu Spinners from Ninjago City! **Cost: \$240**

How To Train Your Dragon (Rising Grades 3-4)

Marleen Wood

Join Marleen Wood as we re-create the world of Vikings and dragons through the eyes of Hiccup and Toothless! Partake in dragon training exercises; build your very own shield and crest; enjoy our special dragon obstacle course and seek out those dragons with our customized dragon scavenger hunt! All this and more awaits the bravest adventurers in this summer camp! **Cost: \$225**

Digital Assistants: Hey Siri, Let's Build An AI (Rising Grades 4-8)

Drobots Staff

The ultimate Artificial Intelligence (AI) camp. Can you tell the difference between a human and a robot? Learn about the design and programming behind modern digital assistant software like Alexa, Siri, and Cortana in this innovative camp. Students build their own artificial intelligence personality that can answer questions, complete requests, and chat about topics of their choosing using real HTML and JavaScript code. No prior experience is required. We provide all technology on location. Campers will be thrilled to bring home their digital portfolio at the end of the week and continue to work on their AI creation or to share with friends or family. **Cost: \$240**

Full Day (9:00 a.m. - 4:00 p.m.)

Safari: Mystery Field Trip Adventures (Rising Grades 2-4)

Anya Ciarametaro

If you like adventures, you'll love this program which promises a *new* adventure every day! Every day we will get off campus and explore the unknown (well, Miss Shimmy knows--she's just big on grand reveals). Perhaps we will explore the seas, come eye-to-eye with tigers, and climb to great heights! No telling where you might end up, but one thing is for sure....it will be one safari you will never forget! **Cost: \$480**

Afternoon Only (1:00 - 4:00 p.m.)

Minecraft™ LEGO® (Rising Grades K-2)

Drobots Staff

Bring Minecraft to life using tens of thousands of LEGO parts! Build engineer-designed projects such as Snowmobiles, Catapults, and Merry-Go-Rounds. Then build a Portal to the Nether, Creepers, and Minecarts from the Minecraft universe! Engineer and craft innovative solutions in this exciting program.

Cost: \$240

Sciensational: Harry Potter's Magical Science Tour (Rising Grades 2-6)

Sciensational Staff Member

All aboard for lots of hands-on fun. Join the escapades of Harry and his friends. Play quidditch and make an edible wand. We will brew some fantastic potions to drink. Let's create and watch some amazing chemical reactions. Watch a mirage appear and make some cool crystals. You won't believe it! Wonder where the sorting hat will place you? Come join us where the magic of science, art, and literature meet. Harry, Ron, and Hermione are waiting for your arrival! **Cost: \$240**

Roblox® and 3D Game Development (Rising Grades 4-8)

Drobots Staff

Roblox offers students the opportunity to actively engage in the creative process and learn fundamental coding, design, and entrepreneurial skills that will give them the confidence to excel in this week of camp and beyond. Campers will learn how to use the Roblox engine to create games using the Lua programming language. Our creation tools and educational content will be used to expose campers to unique skills as they collaborate in teams to design blueprints and test their games. In the end, all campers finish the week with a published title that can be shared with families and friends. No prior experience is required. We provide all technology on location. **Cost: \$240**

Week 6: August 12-16

Morning Only (9:00 a.m. - 12:00 p.m.)

STEAM Explorers (Rising Grades PreK-K)

Einstein By Design Staff

At Camp Einstein By Design we practice the Innovator Mindset, tools which strengthen our communication, collaboration, creative and critical thinking skills. Our highly trained Lead Explorers will help children select project from the following modules: Music and Mechanical Engineering, Flight and Aerial Photography, Textiles and Technology, Smart Home IoT Build with Arduino, and Virtual Reality Game and App Creation with Google Cardboard. Children then complete these applied-technology adventures with a focus on digital arts, making, tinkering, designing, engineering and robotics, electronic circuitry and computer programming. Campers will have access to some of the latest technology tools, as well as traditional crafts and tools depending on the week and focus of the projects. Our weeks will be filled with Making and Tinkering, learning new tools, making new friends, inventing and gaining confidence as an innovative thinker. **Cost: \$225**

Wizardry: The Chemistry and Coding of Magical Spells (Rising Grades 1-3)

Einstein By Design Staff

In this project-based course, students pull back the curtain to learn about the wizardry of Materials Science & Engineering, and Make magic! Build a codeable wand with the Kano Harry Potter codeable wand, and see instant effects on screen. You will make fire flow, pumpkins grow, feathers fly, goblets multiply, paint pictures, compose music, and more. You will also learn about chemistry and physics

concepts through experimentation and let our imaginations take flight by becoming wizards in-training. Campers leave with an understanding of how chemistry and change make up the world around us. **Cost: \$260**

Wizardry: Advanced Chemistry and Coding of Magical Spells (Rising Grades 4-5)

Einstein By Design Staff

In this project-based course, students pull back the curtain to learn about the wizardry of Materials Science & Engineering, and Make magic! Build a codeable wand with the Kano Harry Potter codeable wand, and see instant effects on screen. You will make fire flow, pumpkins grow, feathers fly, goblets multiply, paint pictures, compose music, and more. You will also learn about chemistry and physics concepts through experimentation and let our imaginations take flight by becoming wizards in-training. Campers leave with an understanding of how chemistry and change make up the world around us. **Cost: \$260**

Full Day (9:00 a.m. - 4:00 p.m.)

Retro Gaming System Build (Rising Grades 6-8)

Einstein By Design Staff

Love retro games like Super Mario Bros, Legend of Zelda, or even arcade classics like Pacman, Galaga or Donkey Kong? Enjoy building things with your hands? In this maker-lab experience, we'll learn electronics, woodworking, and tech skills as we build our own retro gaming system. Using a Raspberry Pi 3, small table, repurposed computer screen, and arcade style joystick and buttons, we'll hack together a working game system. The student makers will learn how to setup a Raspberry Pi 3 and install the RetroPie gaming system on it. In our engineering lab, we'll modify the table to fit the Raspberry Pi, as well as mount a screen and controls. We'll learn about circuits and soldering, as well as some fabrication and hacking skills. **Cost: \$460**

Afternoon Only (1:00 - 4:00 p.m.)

Candyology (Rising K-1)

Einstein By Design Staff

This is a camp you can really sink your teeth into! From composition to chomping, discover what science goes into every single piece of candy. Work with teammates to deconstruct the sugar compounds of different candy polymers. Each day, you will learn a recipe for a new type of candy. This exploration of engineering and chemistry will convince you that candy is more than just a tasty treat. **Cost: \$225**

Battle Bots (Rising Grades 1-3)

Einstein By Design Staff

Welcome to the field of Combat Robotics! Your life won't be the same once you've built and battled robots. Learn how to build a combat robot from scratch, then battle it in our custom arena. In our workshop, you will build Ant Weight Class (1 lb) robots to battle. Come up with your strategy, design it, and then build it. Will you design a bot with a weapon, or will you choose to make a more defensive-minded "wedge" bot? In the workshop, we'll teach you electronics and fabrication skills to help you build the chassis, program the microcontroller, solder together the electronics, connect our R/C controller, and troubleshoot issues found during testing. At the end of the week, we'll conduct our own battle-bot tournament to test our creations against one another. **Cost: \$260**

Underwater Drones and Robotics (Rising Grades 4-5)

Einstein By Design Staff

Have you heard about the underdog high school robotics team that crushed MIT in the big underwater robotics competition? Design and construct an underwater drone, then use it to navigate beneath the water's surface in this feat of robotics and mechanical engineering. Camp participants spend the first two days of camp learning basic electronics, soldering, and acrylic construction as they build an underwater drone from a kit. After assembling and calibrating the robot, they plan a "micro expedition" to test their new machine. Not only will they pilot the underwater drone through a jet pilot-like cockpit on their laptops, they will learn how to communicate their discoveries, sharing their stories and photos with the world through a digital field journal. **Cost: \$260**

Summer at Brookwood must comply with regulations of the Massachusetts Department of Public Health and be licensed by the local board of health.