Camps listed alphabetically by title
*All grades refer to rising grade levels. All campers must be at least 5 years old.

**App Design**
*Grade(s): 4-6*
*Week(s): 4, 5*
*Director: Hare*
Create your own Mobile App! In this camp, students will create their own, fully-functional app using MIT App Inventor. MIT App Inventor is an innovative beginner’s introduction to programming and app creation that transforms the complex language of text-based coding into visual, drag-and-drop building blocks. It’s fun for all ages! The simple graphical interface grants even an inexperienced student the ability to create a basic, fully-functional app within an hour or less. App Inventor diligently strives to expand the compass of formal and informal mobile computing education, and the blocks-based programming language serves as an alternative on-ramp to computational thinking education.

**App Design Camp--Kids Build Their Own Mobile App!**
*Grade(s): 3-10*
*Week(s): 3, 7*
*Director: Youth Digital*
In this camp from Youth Digital, kids learn foundational mobile app development skills as they design and program their own mobile game. During camp, kids will complete a mobile game from start to finish, including choosing characters, level design, and programming the app’s functionality. Kids learn the same app design concepts the pros use, including if-then statements, variables, debugging, and troubleshooting to make their own mobile app. They learn industry-standard skills including level design to make the app look great; the importance of user experience to make sure their game is playable; and gameplay mechanics to make their game exciting and challenging. At the end of camp, kids will be able to download and play their finished app on their Android or iOS device. They’ll also be able to access the online version of the course after camp, including video tutorials, interactive quizzes, and additional challenges so they can continue using their new skills! [http://www.youthdigitalcamps.com/app-design-camp.html](http://www.youthdigitalcamps.com/app-design-camp.html)

**Art Camp**
*Grade(s): K-3*
*Week(s): 3*
*Director: Lee*
Explore and create art inspired from around the world. Students will use Nienhaus geography puzzle maps as inspiration to explore works of art from different continents. We will use classic studio media (watercolors, drawing pencils, pastels, paint) and unconventional mixed media (ceramics, collage, etc.) to create quality works of art while learning art history. Ms. Lee teaches art at the Lower School and is an AMI-certified Montessori teacher.
Art Camp
Grade(s): 4-8
Week(s): 1
Director: Lee
Students will learn ways of seeing the world through an artist's lens and critique famous works of art to find the story behind pictures. They will learn studio techniques like drawing and painting to get their ideas across and will experiment with non-traditional mediums to create a modern twist in their unique expressions. Ms. Lee teaches art at the Lower School.

Broadway Bound
Grade(s): 3-8
Week(s): 6
Director: Greenway
Experience the excitement of theatre! In this camp, students will learn the basics of acting, improvisation, ensemble, and theatre games. Theatre helps students gain confidence in themselves, teaches children to work together as a group, and gives students a chance to express their creativity. There will be a small performance for family and friends at the end of the camp. Come join us as we explore the world of theatre!

Challenge Chess Camp
Grade(s): 1-6
Week(s): 4
Director: Kidd
Winning strategies is our focus for the Championship Chess Challenge Chess Camp for children who know how to play. Championship Chess coaches will help players develop new openings that set up an aggressive line of attack, keep the advantage with sound tactics in the middle game and play advanced endgames for the win. Campers will sharpen their skills and strategies with play, expert game analysis, and supportive video and interactive game software. They will win prizes for solving chess and logic puzzles and completing skills based on the “Chess for Success” achievement cards and play in a camp tournament – a great way to get ready to compete in future regional, state and national tournaments.

Challenge Chess Camp
Grade(s): 1-5
Week(s): 2
Director: Kidd
Chess campers will discover strategies that build a strong chess foundation, one piece at a time, including learning the moves through chess movement and music activities. We will put these strategies to work in games that build chess skills and sharpen critical thinking. Conquer the mysteries of check, checkmate, and stalemate. Then, learn to start the game with an advantage using an opening strategy that will keep your opponents on the defensive. Set up checkmate patterns that will help you win in the endgame and develop tactical skills that will make you a stronger player. Campers will have fun with supervised play, video instruction, and interactive software. A mini-tournament and recreational outdoor activities, including play with oversized outdoor chess sets, will be a part of our fun camp.

Claymation Animation Camp
Grade(s): 4-12
Week(s): 1
Director: Lee
Students will learn the basics of stop motion animation by creating two movies: whiteboard and claymation. After studying examples of cause/effect and morphing styles, they will organize their creative ideas into short movies. Ms. Lee teaches art and animation at the Lower School.

**CSI (Crime Scene Investigation) Camp**  
*Grade(s): K-3 (week 8), 4-6 (week 6)*  
*Week(s): 6, 8*  
*Director: DuBose*  
This camp is for those detective sleuths who want to explore work in the crime scene lab. Campers will collect evidence from sample crime scenes, do detective work, and use lab evidence to solve crimes. Campers will perform real detective investigations!

**Dancing Divas**  
*Grade(s): K-3*  
*Week(s): 4, 5*  
*Director: Greenway*  
This camp is geared toward young dancers of all skill levels. Each day the dancers will begin with ballet but also will get to explore the worlds of Broadway jazz, jazz, hip hop, modern dance, lyrical dance, and creative movement. Campers will create dance-related costumes and other arts and crafts that will be used in the final performance piece. The camp culminates in a last day showcase for the parents to see what their child has learned throughout the week.

**Doll Camp: Tea Parties & Tiaras**  
*Grade(s): 1-3*  
*Week(s): 4*  
*Director: Bailey / Baugh*  
Girls will learn about historical fiction and events during various eras through the roles of the American Girl Doll characters. They will create and read books and will additionally enjoy art activities, cooking, tea parties, and sewing.

**Escape the Room Breakout EDU**  
*Grade(s): 2-3*  
*Week(s): 3*  
*Director: Heming*  
Can you escape the room? Students will work together using critical thinking skills, problem solving skills, and teamwork to break out of the classroom. Clues and puzzles will be hidden in the classroom, and students have only a set amount of time to break out! If you love solving puzzles, finding clues, and solving mysteries, this camp is for you. You will need grit, perseverance, and organization to make it. Do you have what it takes?

**Fashion Camp**  
*Grade(s): 4-8*  
*Week(s): 2*  
*Director: Aspinwall / Lee*
This camp offers students hands-on skills to create fun, wearable projects to take home. Students will learn basic hand stitching techniques and sewing machine basics. We will create handmade accessories including headbands, bags, and jewelry. Students will express their design ideas using ink and watercolor with Fashion Illustration techniques. We will have a Project Runway Challenge with prizes for the best designed costume. Ms. Lee teaches art at the Lower School and minored in Fashion Illustration. Ms. Aspinwall teaches 5th grade Transition and is the Lower School cheerleading coach.

**Grounded Kids Yoga Camp**  
**Grade(s):** 4-8  
**Week(s):** 2  
**Director:** Lee  
In yoga camp, students will learn poses that promote mindfulness, strength, flexibility, balance, and concentration. With proper breathing techniques and alignment, beginners will learn Surya Namaskar A (Sun Salutations), while advanced students may continue with the Grounded level bandhas. Kids will enjoy doing creative partner poses and playing games to connect the mind and body. Ms. Lee teaches art and yoga at the Lower School. [www.gogrounded.com](http://www.gogrounded.com)

**Guitar Camp**  
**Grade(s):** 6-9  
**Week(s):** 4  
**Director:** Hunt  
Beginner and intermediate guitar instruction. Campers will enjoy learning and working on the fundamentals of playing guitar.

**Jewelry & Marketing Design Camp**  
**Grade(s):** 4-10  
**Week(s):** 4  
**Director:** Lee  
Students will learn the basics of jewelry making to create their own designs. Using quality materials, we will practice twisting silver and copper as well as incorporate bead work to make earrings, necklaces, pins, and other accessories. Students will learn marketing and package design tips to sell their work or present their creations as gifts. They will design their own business card logo using computer software. Ms. Lee teaches art at the Lower School and minored in Fashion Illustration/Visual Communication.

**K’NEX Engineering**  
**Grade(s):** K-6  
**Week(s):** 2  
**Director:** Hipp  
This camp will be a week of building fun using K’NEX! In the morning, campers will learn basic engineering principles and concepts of physics to construct many great structures. Campers will learn about gears, pulleys, bridges, and levers. In the afternoon, campers will build an amusement park, complete with a 4-foot-tall Ball Run, six-foot-tall ferris wheel, multiple roller coasters, and a miniature golf course!

**Knitting Camp**
Grade(s): 4-8  
Week(s): 4  
Director: Lee  
Take a break from technology and learn how to knit this summer! Beginners will learn how to cast on and knit a cozy, warm scarf. Advanced students will knit, purl, and read patterns. All levels welcome. Brain research shows handwork benefits memory and attention span while involving visuospatial processing and problem-solving abilities. Students who knit practice grit and determination to complete tasks, which provides them confidence to succeed in other areas. Materials provided but students are encouraged to bring their own needles and yarn to knit outside of class. Ms. Lee teaches art and knitting club at the Lower School.

Learning to Code with Scratch!  
Grade(s): K-4  
Week(s): 5, 6  
Director: Hare  
With Scratch, students can program their own interactive stories, games, and animations. Scratch helps young people learn to think creatively, reason systematically, and work collaboratively—essential skills for life in the 21st century.

Lego WeDo Robotics  
Grade(s): K-4  
Week(s): 1  
Director: Hipp  
Each day, campers will learn about robotics by building, programming, watching training videos, and working with our teammates. In the morning, campers will use the Lego WeDo robotics platform to build 15 different robotics animals, vehicles, athletes, and structures. In the afternoon, campers will help create a Lego amusement park complete with a roller coaster, train, Minecraft sets, and town square buildings!

Let's Scrap It!  
Grade(s): K-3  
Week(s): 4  
Director: French  
This camp is designed to help students use their creativity to capture their favorite memories by creating a scrapbook of their very own. Students will need to bring several pictures of favorite pastimes, vacations, experiences, sports, or academic accomplishments!

Little Diva Girls  
Grade(s): 1-5  
Week(s): 2  
Director: Coleman  
The focus of this camp is to build healthy, self-confident young girls by promoting Girl/Diva Power. This week of camp consists of themed days such as the Dancing Diva with Mindfulness (dance, movement, mindfulness, positive affirmations); the Mannerable Diva (manners and etiquette); the Financially Fit Diva (how to save, spend, and share money); the Healthy-Smart Diva (organizational skills for school and home, with emphasis on staying healthy through eating well and activity); the Creative Diva (arts and crafts, making fun projects). Teaching girls to be confident and strong—intellectually, physically, and emotionally—creates the best kind of Diva!
Little Five Points Camp  
Grade(s): 4-6  
Week(s): 7  
Director: Derk  
Campers focus on embracing diversity as an integral part of being in a caring community of lifelong learners. We are committed to affirming the identity of each camper, building a supportive and caring community, and cultivating leadership. Please join us for awesome activities, fun fellowship, and candid conversations intended to celebrate our diversity in joyful, authentic ways while creating an inclusive environment through relevant conversations.

Mad Scientists  
Grade(s): K-4  
Week(s): 3, 5, 7  
Director: Brown  
This awesome, action-packed camp is for those mad scientists who are ready for a hands-on chemical reaction experience! Spend your week creating your own lava lamp, slime, and bouncing bubbles. Don’t forget the exploding soda and Alka-Seltzer rockets. This camp will keep you on your toes and excited to come back the next day!

Magic Camp  
Grade(s): 4-9  
Week(s): 1  
Director: Widener  
Campers will have a fun week learning many types of magic, including stage and close-up. The camp will teach sleights (method) that enable a camper to perform effects with cards, coins, handkerchiefs, rubber bands, and more. Campers will learn to perform these effects at any time and seemingly spontaneously. The students will not only be taught method, but they also will be instructed on how to present the effect to create an entertaining and baffling performance for family and friends.

Master Movie Makers  
Grade(s): 6-8  
Week(s): 6  
Director: Broad  
Students will enjoy a brief introduction to filmmaking components. Fun projects designed to expose students to cameras and editing techniques will be the focus of the week. Learning how to storyboard and creating a stop-motion film are some of the projects planned. The week will culminate in production of a final short film and a best film contest.

Meet the Masters Art Camp  
Grade(s): 3-6  
Week(s): 5  
Director: Henggeler
We will develop artists' skills as we travel around the world and back to discover dramatic works of art by Vincent Van Gogh, Pablo Picasso, Claude Monet, Leonardo da Vinci, and others. Students will learn about each artist and reproduce the works of the masters. Campers will use various materials to implement a variety of techniques. Each camper will finish camp with a portfolio of work.

**MinecraftEDU--Let's Build, Explore, and Survive**

*Grade(s):* 2-6  
*Week(s):* 1, 2, 3  
*Director:* Heming

From beginners to advanced students, we will explore many of the Minecraft Educational worlds together. There are opportunities for every type of player. Some levels of Minecraft will engage campers who like to build and create, while other levels will challenge campers to team up and solve puzzles. Some levels may even include survival techniques and teamwork. We like to try different mods and explore different types of game play. Each day, campers will take a 10-minute break and enjoy a snack and fresh air. Come join the fun if you're not too afraid of creepers, skeletons, or the Ender Dragon!

**Mod Design Camp--Create Your Own Minecraft® mod!**

*Grade(s):* 3-10  
*Week(s):* 2, 5  
*Director:* Youth Digital

In this camp from Youth Digital, kids learn real Java™ programming as they design and code their own Minecraft mod from start to finish. Kids can use all their craziest ideas to create their own blocks, items, mobs, and more to add whatever they can think of into Minecraft! A sword made out of Pizza? How about a mob of marshmallow minions? Make it all happen in Mod Design Camp. Java™ is one of the most widely used programming languages in the world, and kids will use pro-development software, Eclipse, to learn all the fundamentals of coding including instantiation, methods, parameters, loops, and more. At the end of camp, kids will walk away with an awesome Minecraft mod that they can download and share with friends. They also will be able to access the online version of the course after camp, including video tutorials, interactive quizzes, and additional challenges so they can keep using their new skills.  
http://www.youthdigitalcamps.com/mod-design-camp.html

**Music Production Camp**

*Grade(s):* 3-12  
*Week(s):* 4  
*Director:* Woodruff

We will develop music skills as campers explore various genres of music. Students will compose, write, record, and perform music. We will introduce and investigate music notation as well as listening skills. In addition to singing, campers will explore the guitar, piano, and various percussion instruments. We also will introduce students to Garage Band music composing and recording tools. Performance opportunities will give campers a chance to enhance confidence and stage presence. Campers will create a recording of their performance that, along with their newfound skills, they’ll take home from this camp.
**Nexplore Mind & Movement**  
*Grade(s): 4-8*  
*Week(s): 5*  
*Director: Nexplore*

Nexplore’s Mind and Movement camp is fun and challenging both mentally and physically. Nexplore Games is an innovative program that uses a wide selection of internationally acclaimed strategy and mind games to enhance 21st century life skills and teach students *how* to think, rather than *what* to think. Zumba Kids® classes are fun, high-energy fitness classes that provide real results. Packed with specially choreographed routines to the latest hip hop, reggaeton, cumbia, and salsa, students have a blast playing games while learning imperative life skills. Campers keep happy and healthy with dance in Nexplore Mind & Movement!

**Pre-Grounded Kids Yoga Camp**  
*Grade(s): K-3*  
*Week(s): 3*  
*Director: Lee*

Pre-Grounded Kids Yoga Camp teaches children mindfulness and meditation through storytelling, songs, and games. Young students will learn yoga sequences using appropriate postures, mindfulness, and slow breathing. Children will learn how to ground themselves through fun and challenging yoga poses that inspire confidence. There will be lots of laughter and silliness, too, as we explore our imagination and flow with our bodies. Ms. Lee teaches art and Grounded Kids Yoga at the Lower School.

**Robot Wars, Bot Battles and Games**  
*Grade(s): 2-6*  
*Week(s): 2*  
*Director: Heming*

Are you a maker at heart, or just good at programming robots? Maybe you have a knack for science, like outside-the-box thinking, or you love competition, or maybe you’d just like to learn more? Using Dash and Dot Robots in conjunction with Legos, come build the ultimate bot to take out your opposition. In teams of two, your goal each day will be to build and program or remotely control the best bot. We will have different types of events including races, obstacle courses, challenges, and even bot fighting in order to crown the ultimate champion team. All levels are welcome to join the fun!

**Robotics Camp**  
*Grade(s): 4-9*  
*Week(s): 3*  
*Director: Hipp*

Each day, campers will learn about robotics by building, programming, solving challenges, and working with their teammates. Campers will be exposed to the Lego Mindstorms, Lego EV3, VEX IQ, and VEX robotics platforms to build autonomous robotics. Other robot platforms will be introduced as well as basic soldering activities. The week will culminate with driver-controlled robotics competitions.

**Robotics Camp**
Students will build and program Vex IQ robots and participate in group competitions. We will build standard models and then branch out to customize them for specific tasks.

**Rock & Roll Film Camp**  
**Grade(s):** 6-8  
**Week(s):** 4  
**Director:** Broad  
Students will learn multicamera production skills focusing on live musical performances from guest artists. Together, we'll learn film and audio techniques in and outside of a studio setting.

**Science Camp**  
**Grade(s):** 5-7  
**Week(s):** 3, 4  
**Director:** Murphy  
Campers will build CO2 cars, rubber band boats, and planes. Campers race their models to test the best design. We also will build and launch a dry fuel rocket, a water rocket, and a coke/mentos-fueled rocket car. Campers will additionally perform several interesting chemical experiments: making glowing slime, gummy worms, and gel balls, as well as participating in other fun chemistry and physics activities. Students who attended last year will build more advanced models and do more detailed experiments, but have no fear—there will be a number of new, exciting activities this year!

**S.C.R.E.A.M. Camp (Science, Coding, Robotics, Engineering, Art, and Math)**  
**Grade(s):** 4-9  
**Week(s):** 5  
**Director:** Marshall  
Students will engage in engineering challenges, graphics-based coding, 3D design and printing, and robot building and driving.

**Server Design Camp--Kids Create Their Own Minecraft® Server!**  
**Grade(s):** 3-10  
**Week(s):** 4  
**Director:** Youth Digital  
In this camp from Youth Digital, kids learn professional Java™ programming as they design and build their own customized Minecraft® server that they can share and play with friends after camp. Kids will write the code to create whatever type of custom server they want. Maybe a custom Capture the Flag server? Or Mini Game? Or an all out Team Survival server? Kids design their map, design the levels and arena, and code their own custom rules and gameplay mechanics to make the ultimate multiplayer server. Kids learn to code in Java™, the most widely-used programming language in the world, including programming methods, parameters, if-then
statements, booleans, instantiation, and arrays to customize their server. After camp, kids also will be able to access the online version of the course, which includes video tutorials, interactive quizzes, and additional challenges so they can keep using their new skills!  
http://www.youthdigitalcamps.com/server-design-camp.html

**SketchUp for Architects & Designers**  
**Grade(s):** 4-12  
**Week(s):** 5  
**Director:** Lee  
Budding architects and interior designers will learn how to use Google SketchUp, the intuitive CAD alternative to create architectural or interior design proposals for their dream home. Due to specificity of instruction, space is limited. Ms. Lee teaches art at the Lower School, minored in Visual Communication, and has a Masters in Technology in Education.

**Spanish Immersion Camp**  
**Grade(s):** 1-6  
**Week(s):** 1  
**Director:** Wiseman  
This camp will create an immersive, Spanish-speaking environment for kids to practice Spanish while having fun, playing games, and engaging in cultural activities.

**Super Heroes and Heroines: Comic Book Creations**  
**Grade(s):** K-2  
**Week(s):** 2  
**Director:** Frye  
Wonder Woman, Supergirl, Spider-Man or The Hulk—have you ever thought about what it would be like to create your very own superhero? Students will create, develop, and bring to life their original superhero character. Participants will use various arts and crafts projects to create the ultimate superhero costume, super powers, evil villains, arch nemesis, and—ultimately—a full comic book. Good will triumph over evil on the last day with a costume presentation, superhero movie, and superpower party.

**Stop Motion Animation Camp**  
**Grade(s):** 4-12  
**Week(s):** 1  
**Director:** Lee  
Students will learn the basics of stop motion animation by creating two movies: whiteboard and clayimation. After studying examples of cause/effect and morphing styles, they will create a storyboard for their whiteboard drawing movies. Animation artists will write a clever story or theme for their clayimation movie. They will develop the backdrop and sculpt their characters to express their ideas and tell their story. Every aspect of production and editing, from using cameras to capture each frame to using a movie making software and adding a powerful soundtrack to their movie, will help students organize their ideas into a finished masterpiece.
Take Flight: Design and Build Drones with FlyBrix  
**Grade(s):** 4-8  
**Week(s):** 2, 3, 4, 6  
**Director:** Petitto  
Campers will learn the basics of drone design. Individually and in teams, campers will design and build various styles of drones using FlyBrix. Students will utilize design thinking principles to design their builds with the end goals in mind. With various individual and team design challenges and flight competitions, this is sure to be a blast for all who participate!

Terrific Tweens  
**Grade(s):** 4-8  
**Week(s):** 1  
**Director:** Juhan  
Terrific tweens are invited to join us in a week-long camp celebrating this exciting time in a young lady's life. We will spend the week pampering ourselves with manicures, pedicures, facials, and cooking lessons. We will learn to make our own facial masks, lip balms, and healthy snacks. Every terrific tween will create a personalized, one-of-a-kind bag for goodies.

Tween Cuisine  
**Grade(s):** 4-7  
**Week(s):** 3, 7  
**Director:** Johnson  
Tweens will have fun learning to make creative dishes and will be able to take their recipes and skills home to cook fantastic meals all by themselves.

Video Game Development--Kids design and program their own 3D Video Game!  
**Grade(s):** 3-10  
**Week(s):** 6  
**Director:** Youth Digital  
In this camp from Youth Digital, kids will create a video game just like they do in real game design studios. They will use Unity®, an industry-standard game design software, and C#, a professional programming language, to build and code their game from scratch. As kids code new features in their game, they will learn the most important concepts in programming, including if-then and conditional statements, logical operators, variables, methods, parameters, object types, and loops. They also will learn the fundamental techniques of game design, such as navigating and operating within a 3D environment, utilizing prefabs, generating custom particles, simulating artificial intelligence, and more. Not only will the kids use professional tools, but the game they make will look professional too. They’ll be excited throughout the week as they create just like the pros! At the end of camp, kids will have a complete, fully-functional game that they can play and share with friends. They also will be able to access the online version of the course after camp, including video tutorials, interactive quizzes, and additional challenges so they can keep using their new skills!

Web Design and Photoshop  
**Grade(s):** 4-6  
**Week(s):** 7  
**Director:** Hare
This camp teaches students to create original projects while learning computational thinking skills. We will focus on building student-centered learning communities that use industry-standard software in web design and photo-editing to emphasize design thinking and collaboration.

**Young Chefs**  
*Grade(s): K-4*  
*Week(s): 6*  
*Director: Dunkle / Keiffer*  
Move over, Rachael Ray and Guy Fieri—there's a new chef in town! Join us for a week of cooking excitement! We will try out various recipes, decorate baked goods, and go home with our very own cookbook. No need to send in snacks; we’ll be making our own!

**Young Surgeons**  
*Grade(s): 4-8*  
*Week(s): 2, 3*  
*Director: Bulleit*  
Come out and practice your future surgeon skills! We will be dissecting various specimens including frogs, starfish, worms, grasshoppers, clams, perch, crayfish, grantia (sponge), and a fetal pig! Campers will learn about the different body systems of these animals. We will focus on the anatomy of the fetal pig, which is very similar to our own. This camp is for those interested in becoming a surgeon or a veterinarian, or for those who just want to cut things open! Cost of camp includes the 17-piece dissection tool set and all specimens.