Preview our Summer Youth STEAM Courses

New! Courses for middle-school students ages 12-14

YOUNG INVESTORS AND ENTREPRENEURS

Teach your kids the secrets of building financial wealth and security! Whether you want to build the next great American company, become a Wall Street tycoon, or be the millionaire next door by investing wisely—this camp is for you! In this course you will learn the basics of investing in the stock market, the difference between assets and liabilities, the importance of diversification, and how to evaluate companies. You will also develop your own business plan and present your ideas to your peers to compete for their investments in a mock Shark Tank style activity.

MODEL UNITED NATIONS

Become one of the 400,000 students around the world in Model United Nations! Assume the role of an ambassador and represent your country to solve current world issues. Throughout the week students will research a world problem, develop solutions, and negotiate consensus with their peers. This program teaches teens and tweens core skills such as research, writing, public speaking, problem solving, and conflict resolution. Model UN alumni have gone on to become supreme court justices, world leaders, lawyers, and business professionals. No prior experience is needed.

Courses for students ages 8-12

CODE BREAKERS

Calling all future coders, programmers and designers! Learn the basics of coding languages like HTML, JavaScript, and CSS through a series of web projects and design challenges each day and be on your way to becoming the next tech star! Whether you want to be a Silicon Valley CEO or the high school student who just made $1 million dollars for programming in her bedroom, this course has the essentials you need to begin your journey. Projects will be available on a Black Rocket website to share with friends and family. Returning students can create more advanced projects that build on previous years.

NEW! CYBER SPIES

With the world's increased reliance on digital data, cyber security is more important than ever! In this class you are all that stands between a group of international hackers launching cyber attacks and world peace. Through a series of challenges, students will learn to apply tools used by professional digital forensics teams to crack codes and use encryption. Working in teams you will collect clues, recover lost data, and explore the tools of the trade to become the next great cyber spy!

POKÉMON® MASTERS: DESIGNERS AND 3D MAKERS UNITE!

Calling all PokéMasters who want to be the designers of the future! Use your Pokemon imagination and bring your ideas to life. Begin by creating your own digital Pokemon-style custom playing card game. Progress onto designing action figures, jewelry, and toys in professional-level modeling software. Learn how to prepare a model for 3D printing and create a design portfolio to showcase your work! No prior experience is necessary and 3D designs will be available on a password protected Black Rocket website to share with friends and family.

VIRTUAL REALITY: THE FUTURE IS NOW

Embark on an EPIC adventure in virtual reality! In this cutting-edge class, learn the foundations of VR design by creating your own virtual worlds, exploring simulated environments, crafting 3D experiences, and learning basic programming concepts. At the end of the week, take home your first cardboard VR headset to show friends and family the new worlds you created. VR projects can be viewed on a website or mobile device. Students do not need a mobile device to take the class, but will need access to a mobile device at home. VR projects will be available on a password protected Black Rocket website to share with friends and family.

MINECRAFT MODDERS

Customize your own Minecraft world and mod the classic game in this one of a kind class. Learn scripting and logic statements as you create your first mods. Students will create a wide variety of new elements, gameplay mechanics, and world generating mods to change the way you play Minecraft. Projects will be available on a password protected Black Rocket website to share with friends and family. **Students must have the Java version of Minecraft to take this class.** Tablet, phone, and game console versions of Minecraft are not compatible. Returning students can create more advanced projects that build on previous years.

ROBLOX® MAKERS

Unlock the power of ROBLOX® Studio, the world creation tool used by real-world ROBLOX® developers! Learn how to build 3D models and create an adventure in your ROBLOX® world. Bring characters to life with unique animations you design. Student-created projects will be available on a password protected Black Rocket website to share with friends and family.

MINECRAFT® REDSTONE ENGINEERS

Take the next step beyond simply "playing" Minecraft and become a true Redstone engineer. Expand your Redstone knowledge by constructing your own carnival with a variety of mini-games, roller coasters, and attractions powered by Redstone. Learn how to use Command and Structure blocks to incorporate them into your builds. Activate your skills and take your Minecraft structures to the next level! **Students must have the Java version of Minecraft to take this class.** Tablet, phone, and game console versions of Minecraft are not compatible.

ROBLOX® CODERS AND ENTREPRENEURS!

Discover the Lua language through a visual block coding system while designing worlds in ROBLOX®, an online universe where you can create anything you dream of. This new class combines game design concepts, coding, and fun! Young entrepreneurs will also learn how to navigate ROBLOX's fast-growing marketplace to publish their games. Student-created games will be available on a password protected Black Rocket website to share with friends and family.

NEW! BEATS AND JAMS: DIGITAL MUSIC CREATORS

Begin your rise to the top of the charts with digital music production! Just like today's top artists, you can design your own beats or remix a mashup of your favorite songs to become a digital composer and sound engineer. In this course, students will learn to produce digital music, record sound, make sound effects, and mix their own tracks. No prior music experience is necessary. Student-created soundtracks will be available on a password protected website to share with friends and family.

JAVASCRIPT DEVELOPER JAM

Learn programming tools so powerful they seem like magic! Start off by exploring an array of core programming concepts with JavaScript by experimenting in a series of digital challenges. Start with programming your first animated memes, then tackle more advanced skills such as interactive 3D experiences and game creation. Projects will be available on a password protected Black Rocket website to share with friends and family.

YOUTUBE® CONTENT CREATORS

Find your voice and leave your mark on the world! Whether you are six or sixteen, it's time to start a career as the next YouTube star. Explore the variety of content and personalities that exist on YouTube and how to find your own niche. Learn the Dos and Don'ts of the platform and how to practice good digital citizenship. Develop your on-camera presence, your own channel branding, and professional editing skills. Take home a plan for launching your own channel with the content created in class! Student projects will be available on a password protected Black Rocket website to share with friends and family.

PYTHON PROGRAMMERS

Want to learn the world's fastest-growing programming language favored by Google, NASA, Youtube, and the CIA? Learn how to code with Python to create engaging apps and games. Each lesson takes you step-by-step on a programming path that will let you challenge friends with fun content you create from start to finish! Returning students can create more advanced projects that build on previous years.