



# 2020 COURSE DESCRIPTIONS

**Summer Online Details** 





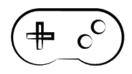












## TECH PROGRAMS THAT TAKE OFF!





## **Company Information**

If you include a biography of our company on your website or brochure please use the paragraph below.

"The magic in every camper comes to life as never before when they are empowered to be as creative as they were all born to be! Black Rocket has twenty years of experience designing camps in the S.T.E.A.M fields. Every program is powered by the camper's innate imagination and designed to bring their ideas to life in a fun, hands-on learning environment. From concept to creation students will demonstrate their masterpiece to the world at the end of each week! All Black Rocket programs mirror real-life experiences and the collaborative nature of the design process. Students will work in pairs or teams for most of the program."

### Summer 2020 Courses

**NOTE:** For our online classes the following descriptions need to be used. Please do not use the previous ones because they do not include the tech specs per course. Parents need to have this information prior to registering. In addition to the copy below you can also put a general link to the tech specs on this web page. <a href="https://blackrocket.com/online-tech-specs">https://blackrocket.com/online-tech-specs</a> \*\*Remember these tech specs are ONLY for parents at home and do not apply to your in room programs.\*\*

#### 3D Game Design with Unity

Are you ready to take your game design skills to another level? With Unity, an industry-grade design software, aspiring game designers will learn level editing, 3D modeling, impactful gameplay creation, as well as how to utilize scripts and variables. Student-created games will be available on a password protected Black Rocket website to share with friends and family. Returning students can create more advanced projects that build on previous years.

Ages: 8-11 and 11-14

\*This requires a 64-bit operating system.

\*Compatible with MAC and Windows OS only.

#### Battle Royale: Make Your First Fortnite® Style Video Game

Fans of Fortnite we need you! Instead of playing the game, design your own. Using a professional 3D game development software, build levels and assets inspired by popular battle royale games like Fortnite. Students can participate in eSports League matches against other schools across the country with a chance to have their levels featured in the Black Rocket master build of the game! This course includes cartoonish action and battle sequences. Student-created games will be available on a password protected Black Rocket website to share with friends and family.

Ages: 8-11 and 11-14

\*This requires a 64-bit operating system.

\*Compatible with MAC and Windows OS only.







#### **Code Breakers**

Calling all future coders, programmers, & 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.

Ages 8-11 and 11-14

\*Compatible with MAC, Windows and Chrome OS.

#### Code Your Own Adventure! Interactive Storytelling

Watch as the characters in your imagination come to life in this unique course that blends classic storytelling with animation techniques and coding. Start with a concept, design the characters, and choose not just one ending, but many! Learn how to create your own text-based adventure games with variables, conditional logic, images, HTML, CSS, and JavaScript. Student projects will be available on a password protected Black Rocket website to share with friends and family.

Ages: 8-11 and 11-14

\*Compatible with MAC and Windows OS only.

#### **eSports Apprentice - Streamers and Gamers**

Whether you want to be the next pro gamer, streamer, or gamecaster this course will teach you the basics to get started! No longer just a hobby, eSports is the fastest-growing career for the next generation. Over 400 million people watched YouTube videos and Twitch streams of video game competitions this year alone! In this course, students will develop game-play skills and compete using Black Rocket's eSports games and apps, learn how to produce commentary for live tournaments, use professional streaming software, and most importantly practice online safety. Student recordings will be available on a password protected website to share with friends and family. Videos will not be broadcast publicly but will be shared with all students in the class.

Ages: 8-11 and 11-14

\*A webcam is required for this course Software is compatible with MAC and Windows OS only.







#### **NEW!** Inventor's League - Prototyping for the Future!

Become an inventor of the future! Learn 'rapid prototyping' and problem solving as you conceptualize and design a product to solve a critical global issue. Each day begins with inspirational profiles of young inventors, such as the eleven-year-old who coded a robot to find victims of natural disasters. Next, research a problem to tackle in medicine, architecture, the environment, or a topic of your choosing. Once your vision is complete, learn how to draft 2D designs, create 3D models, and develop a website to pitch your ideas to the class. Student projects will be available on a password protected Black Rocket website to share with friends and family. Ages: 8-11 and 11-14

\*Compatible with MAC and Windows OS only.

#### **Make Your First Video Game!**

If you love playing video games, this is the camp for you! Make your first video game in this one-of-a-kind class that shows you the keys to designing your first **2D** platformer game. Conceptualization, play experience, level design, graphics, sounds, and simple coding are just some of the concepts that we'll explore. No prior experience necessary, just a desire to have fun. Student projects will be available on a password protected Black Rocket website to share with friends and family. Games are only compatible on PC computers. Returning students can create more advanced projects that build on previous years.

Ages: 8-11 and 11-14

\*Compatible with Windows OS only.

#### Make Your First 3D Video Game!

In this Black Rocket classic, you will go well beyond the limitations of the traditional 2D game design classes and create an immersive 3D world. Students will learn the physics behind 3D games, explore beginner event scripting, level design, controlling the flow of gameplay, and storytelling. Student projects will be available on a password protected Black Rocket website to share with friends and family projects are only compatible with Windows devices.

Ages: 8-11 and 11-14

\*Compatible with Windows OS only.

#### Minecraft® Animators

Create the next popular animated Minecraft video on YouTube! Practice the same skills professionals at Pixar and Disney Animation Studios use. Discover the process of keyframing and tweening, how to use it to bring your own animated stories to life, and how to publish your content on YouTube. Student projects will be available on a password protected Black Rocket website to share with friends and family. Mac users can play their project at home, but will not be able to edit the project without a PC. Returning students can create more advanced

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projects that build on previous years.

Ages: 8-11 and 11-14

\*Compatible with Windows OS only.

#### Minecraft® Designers

If you love the game Minecraft and always wanted to design your own world, this class is for you! Learn how to create a custom map, the basics of creating 3D models using a new software to design your very own objects, how to build with Redstone and Command blocks, and create custom textures for you to import at home or share with friends. **Students must own a Java version of Minecraft to take this class**. Tablet, phone, and game console versions of Minecraft are not compatible. Parent email address is required to use 3D modeling software. Returning students can create more advanced projects that build on previous years.

Ages: 8-11 and 11-14

\*Compatible with MAC and Windows OS only. Purchase Minecraft Java Edition

#### Minecraft® Modders

Use your favorite game to learn the basics of modding and foundations of programming. Learn scripting and logic statements as you create your first mods! Introductory coding will also be taught through a simulated environment inspired by Minecraft. Student projects will be available on a password protected Black Rocket website to share with friends and family. **Students must own a 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.

Ages: 8-11 and 11-14

\*Compatible with MAC and Windows OS only. Purchase Minecraft Java Edition



#### **NEW!** 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 own a Java version of Minecraft to take this class.** Tablet, phone, and game console versions of Minecraft are not compatible.

Ages 8-11 and 11-14

\*Compatible with MAC and Windows OS only. Purchase Minecraft Java Edition

#### **NEW!** Pokémon® Masters: Designers & 3D Makers Unite!

Calling all boys and girls who want to be the designers of the future! In this class, if you can dream it, you can make it! 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.

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Ages 8-11 and 11-14

\*This is a limited release only available for BR Instructor Creator Corps Schedules.

\*Compatible with MAC and Windows OS only.

#### **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.

Ages: 8-11 and 11-14

\*\$10 license fee per student with this class

\*Compatible with MAC, Windows and Chrome OS.

#### **ROBLOX® Coders & Entrepreneurs!**

Discover how to code in the Lua language while playing and 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.

Ages: 8-11 and 11-14

\*\$10 license fee per student with this class

\*Compatible with MAC and Windows OS only.

#### **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.

Ages: 8-11 and 11-14

\*Compatible with MAC and Windows OS only.



#### **NEW!** Rocket Kart Racers: Design A Mario Kart® Style Game

On your marks, get set, create! Blast off in making your first 3D Mario Kart® and Crash Team Racing® style game! Design your own tracks and customize your karts and characters. Using a professional 3D game development software, students will combine their creations into their own kart racing game that they can play with friends and family at home. Students can participate in eSports League races against other schools across the country with a chance to have their tracks featured in the Black Rocket master build of the game! Student projects will be available on a password protected Black Rocket website to share with friends and family. Ages 8-11 and 11-14

\*This requires a 64-bit operating system.

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#### **Video Game Animation**

Take your game design skills to the next level by creating and animating your own character sprites, objects, and backgrounds. Start with a name, develop the character's personality, signature moves, special powers, and a storyline. Finish with a fully animated character to be used in your very own game. Students do not need any prior experience in game design, animation, or sketching. Student-created games will be available on a password protected Black Rocket website to share with friends and family.

Ages: 8-11 and 11-14

\*Compatible with Windows OS only.

#### Virtual Reality: The Future is Now

Embark on an EPIC adventure in virtual reality! In this cutting-edge class, you will learn the foundations of VR design by creating your own *virtual* worlds, exploring simulated environments, and crafting memorable 3D experiences. 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 a mobile device. Students do not need a mobile device to take the class, but to use the VR headset a camper will need access to an Android or Apple mobile device. VR projects will be available on a password protected Black Rocket website to share with friends and family.

Ages 8-11 and 11-14

\*There is an additional \$11 lab fee per student for the VR Headset.

\*Compatible with MAC, Windows and Chrome OS.



