

# Computer Camp

FOR STUDENTS AGES 7-14

## **ADVANCED ROBOTICS (AGES 7-14)**

During this class your team will learn to program a robot to overcome daily class challenges using visual and text based programming. You will see firsthand how your program translates into action as you attempt to control your robot and participate in daily team challenges. You and your teammate will apply programming concepts while using the scientific method to formulate, observe, experiment, test, and modify your program based on your robot's observable actions. Each day you will have a new challenge for your team robot. *Projects/Videos will be available on a Black Rocket website to share with friends and family. Students will work in pairs or teams for most of the program.*

Tuition & fees: \$195.

**NCTEC-CC032-01 Aug 6-10 8:30-11:30am**  
(Ages 10-14 preferred)

**NCTEC-CC032-02 Aug 6-10 1-4pm**  
(Ages 7-10 preferred)  
Black Rocket Productions

## **ADVANCED 3D VIDEO GAME 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, intermediate event scripting, and the impact of game play on user experience. *Student-created games will be available on a password protected Black Rocket website to share with friends and family. Students will work in pairs or teams for most of the program.* Tuition & fees: \$195.

**NCTEC-CC033-01 July 16-20 8:30-11:30am**  
(Ages 7-10 preferred)

**NCTEC-CC033-02 July 16-20 1-4pm**  
(Ages 10-14 preferred)  
Black Rocket Productions

## **ADVENTURES IN SCRATCH PROGRAMMING (AGES 9-14)**

Scratch is the wildly popular educational programming language used by millions of first-time learners in classrooms and homes worldwide. By dragging together colorful blocks of code, campers can learn computer programming concepts and make cool games and animations. They will think creatively and learn how to program their own stories, games, and animations. *All work is done online and an email address will be needed to register.*

Tuition & fees: \$128.

**NCTEC-CC028-01 July 2-6\* 8:30-11:30am**  
\*No class July 4.

## **APP ATTACK! (AGES 7-14)**

Take the first steps into the world of mobile app design and customize your own game app! Using a specialized app & game development tool, students will explore the world of web-based (HTML5) mobile apps. In addition to learning the basics of mobile app design and game development, you will also see firsthand how the world of App publishing functions. *Student created apps will be accessible on a private site and can be played on any mobile device or computer. Publishing to App Stores not included. No prior experience is necessary. Students do not need to own a smart phone or tablet to take the class. Students will work in pairs or teams for most of the program. Returning students can create more advanced projects that build on previous years.* Tuition & fees: \$195.

**NCTEC-CC002-01 July 9-13 8:30-11:30am**  
(Ages 7-10 preferred)

**NCTEC-CC002-02 July 9-13 1-4pm**  
(Ages 10-14 preferred)  
Black Rocket Productions

## **APP IO: MAKE YOUR FIRST MULTIPLAYER APP! (AGES 7-14)**

The hottest new Apps are IO apps! If your child likes to play Agar.io or Slither.io they will love this class! Become the creator of the next viral web app and share with family and friends! In this class you will explore the most popular IO apps, design your own multiplayer experience, and learn how to code your own. *Students will work in pairs or teams for most of the program.* Tuition & fees: \$195.

**NCTEC-CC034-01 July 23-27 8:30-11:30am**  
(Ages 10-14 preferred)

**NCTEC-CC034-02 July 23-27 1-4pm**  
(Ages 7-10 preferred)

**NCTEC-CC034-03 Aug 13-17 8:30-11:30am**  
(Ages 7-10 preferred)

**NCTEC-CC034-04 Aug 13-17 1-4pm**  
(Ages 10-14 preferred)  
Black Rocket Productions



## CODE BREAKERS (AGES 7-14)

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 the next Mark Zuckerberg or the high school student who just made one million dollars for programming in his bedroom, this course has the essentials you need to begin your journey. *Student projects will be available on a password protected Black Rocket website to share with friends and family. Students will work in pairs or teams for most of the program. Returning students can create more advanced projects that build on previous years.* Tuition & fees: \$195.

**NCTEC-CC003-01 June 25-29 8:30-11:30am**  
(Ages 10-14 preferred)

**NCTEC-CC003-02 June 25-29 1-4pm**  
(Ages 7-10 preferred)

**NCTEC-CC003-03 Aug 6-10 8:30-11:30am**  
(Ages 7-10 preferred)

Black Rocket Productions

## CODE YOUR OWN ADVENTURE! INTERACTIVE STORYTELLING (AGES 7-14)

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. *Students will work in pairs or teams for most of the program.* Tuition & fees: \$195.

**NCTEC-CC035-01 Aug 13-17 8:30-11:30am**  
(Ages 10-14 preferred)

**NCTEC-CC035-02 Aug 13-17 1-4pm**  
(Ages 7-10 preferred)

Black Rocket Productions

## DESIGN YOUR OWN BUSINESS (AGES 9-14)

Learn the foundations of sound business practice. Use the computer to design a product such as sneakers, tools, a bicycle, or a motorcycle, whatever you choose. Then, develop a company around the product. Design a logo! Set prices! Learn how to use and analyze spreadsheets and net worth statements. Create advertisements! Plan your marketing campaign, conquer the competition, and acquire a variety of new computer skills. Tuition & fees: \$165.

**NCTEC-CC015-01 June 25-29 8:30-11:30am**

**NCTEC-CC015-02 July 16-20 1-4pm**

## GRAPHICS & DESIGN FUN (AGES 9-14)

Are you planning on designing your own business, hosting a party or event, or do you want to personalize your back-to-school binders? Harness the power of Microsoft's Publisher program and internet photo editing software to create posters, calendars, cards and more. Click, drag and design, all in one class! Tuition & fees: \$160.

**NCTEC-CC016-01 June 25-29 8:30-11:30am**

## LEGO® VIDEO GAMES (AGES 7-10)

Students will create their own LEGO characters and adventures in an interactive 2D Video Game. Everyone is welcome in this one-of-a-kind class. *At the end of the program, every student will have a finished LEGO Video Game that can be shared with friends and family through a password protected Black Rocket website. Games are only compatible on PC computers; Mac versions can be created after the program for a \$15 conversion fee. Students will work in pairs or teams for most of the program. Returning students can create more advanced projects that build on previous years.*

Tuition & fees: \$156.

**NCTEC-CC019-01 July 2-6\* 1-4pm**

\*No class July 4.

Black Rocket Productions

## MAKE YOUR FIRST VIDEO GAME (AGES 7-14)

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 2-D 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 created games will be available on a password protected Black Rocket website to share with friends and family. Games are only compatible on PC computers, Mac versions can be created after the program for \$15.00 conversion fee. Students will work in teams for most of the program. Returning students can create more advanced projects that build on previous years.* Tuition & fees: \$195.

**NCTEC-CC008-01 June 25-29 8:30-11:30am**  
(Ages 7-10 preferred)

**NCTEC-CC008-02 June 25-29 1-4pm**  
(Ages 10-14 preferred)

Black Rocket Productions

### MINECRAFT™ ANIMATORS (AGES 7-14)

Bring your favorite Minecraft™ characters to life in an animated short film! Learn how studios like Pixar® and Disney® make movies like *Inside Out*® and *Frozen*® through using techniques like keyframing, tweening, texturing and animating rigged 3-D models! *Student projects will be available on a password protected website to share with friends and family. You do not need to own a Minecraft™ account to use the software in this class. Students will work in pairs or teams for most of the program. Returning students can create more advanced projects that build on previous years.* Tuition & fees: \$195

NCTEC-CC022-01 July 9-13 8:30-11:30am

(Ages 10-14 preferred)

NCTEC-CC022-02 July 9-13 1-4pm

(Ages 7-10 preferred)

Black Rocket Productions

### MINECRAFT™ DESIGNERS (AGES 7-14)

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. *To access their projects at home students, must own a PC/MAC version of Minecraft. Tablet, phone, and game console versions of Minecraft are not compatible. Parent email address is required to use 3D modeling software. Students will work in pairs or teams for most of the program. Returning students can create more advanced projects that build on previous years.* Tuition & fees: \$195.

NCTEC-CC010-01 July 23-27 8:30-11:30am

(Ages 10-14 preferred)

NCTEC-CC010-02 July 23-27 1-4pm

(Ages 7-10 preferred)

Black Rocket Productions

### MINECRAFT™ MODDERS (AGES 7-14)

Use your favorite game to learn the basics of modding and foundations of programming. Learn scripting and logic statements as you create your first mod! Introductory coding will also be taught through a simulated environment inspired by Minecraft™. *Student projects will be available on a Black Rocket website to share with friends and family. To access their project at home students must own a PC/MAC version of Minecraft. Tablet, phone, and game console version of Minecraft are not compatible. Students will work in teams, or pairs for most of the program. Returning students can create more advanced projects that build on previous years.*

Tuition & fees: \$195.

NCTEC-CC011-01 July 16-20 8:30-11:30am

(Ages 7-10 preferred)

NCTEC-CC011-02 July 16-20 1-4pm

(Ages 10-14 preferred)

NCTEC-CC011-03 July 30-Aug 3 8:30-11:30am

(Ages 10-14 preferred)

NCTEC-CC011-04 July 30-Aug 3 1-4pm

(Ages 7-10 preferred)

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### POWERFUL PRESENTATION FUN (AGES 9-14)

Learn the ins and outs of creating an effective visual presentation and then practice public-speaking techniques that will help ensure that your presentations will become a huge success. This “just in time” workshop will focus on the many PowerPoint™ features that assist successful speakers in presenting powerful presentations. Are you ready to become a power player this summer? Tuition & fees: \$165.

NCTEC-CC020-01 July 16-20 8:30-11:30am



### Music and Voice Production Camp (AGES 10-14)

See page 28 for course description.

NCENR-CC015-01 July 23-27 8:30am-4pm



## PYTHON PROGRAMMERS: MAKE YOUR OWN MULTIPLAYER GAME!

(AGES 10-14)

YouTube, Google, Instagram and Spotify - what do they have in common? They were created with Python. Learn how to code with Python and create your first multi-player adventure game. Each lesson takes you step-by-step to start you on a programming path that will let you challenge friends with a game you built from start to finish! *Students will work in pairs or teams for most of the program.* Tuition & fees: \$195.

**NCTEC-CC036-02 July 30-Aug 3 8:30-11:30am**

**NCTEC-CC036-01 Aug 6-10 1-4pm**

*Black Rocket Productions*

## ROBLOX™ MAKERS –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. Students will work in pairs or teams for most of the program.* Tuition & fees: \$195.

**NCTEC-CC037-01 July 2-6\* 8:30-11:30am**

*(Ages 7-10 preferred)*

**NCTEC-CC037-02 July 2-6\* 1-4pm**

*(Ages 10-14 preferred)*

**NCTEC-CC037-03 July 30-Aug 3 8:30-11:30am**

*(Ages 7-10 preferred)*

**NCTEC-CC037-04 July 30-Aug 3 1-4pm**

*(Ages 10-14 preferred)*

*\*No class July 4. Tuition & fees: \$156.*

*Black Rocket Productions*

## **STAR WARS™ STOP ANIMATION (AGES 7-10)**

Make your own Star Wars™ adventure come to life! Bring in your favorite action figure and create a short film with your friends. Whether you want to recreate a scene from Star Wars or design a new world of your own, this class brings your dreams to the screen. **Students will need to bring in Star Wars action figures or vehicles from home, but all other equipment provided.** *Student-created films will be available on a password protected website to share with friends and family. Student will work in pairs or teams for most of the program.* Tuition & fees: \$195.

**NCTEC-CC025-01 July 30-Aug 3 1-4pm**

*(Ages 7-10 preferred)*

*Black Rocket Productions*

## **VIDEO GAME ANIMATION (AGES 10-14)**

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 story line. 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 website to share with friends and family. Games are only compatible on PC computers; Mac versions can be created after the program for \$15.00 conversion fee. Students will work in pairs or teams for most of the program. Returning students can create more advanced projects that build on previous years.* Tuition & fees: \$156.

**NCTEC-CC031-01 July 2-6\* 8:30-11:30am**

*\*No class July 4.*

*Black Rocket Productions*

## **VIRTUAL REALITY: THE FUTURE IS NOW! (AGES 7-14)**

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 at home a camper will need access to an Android or Apple mobile device.** *Students will work in pairs or teams for most of the program.*

Tuition & fees: \$214 (\$195 + \$19 for VR headset).

**NCTEC-CC027-01 July 16-20 8:30-11:30am**

*(Ages 10-14 preferred)*

**NCTEC-CC027-02 July 16-20 1-4pm**

*(Ages 7-10 preferred)*

**NCTEC-CC027-03 Aug 13-17 8:30-11:30am**

*(Ages 10-14 preferred)*

**NCTEC-CC027-04 Aug 13-17 1-4pm**

*(Ages 7-10 preferred)*

*Black Rocket Productions*

## **ARCHAEOLOGY & PALEONTOLOGY CAMP (AGES 10-14)**



See page 24 for course description.

**NCREC-CC003-02 Aug 13-17 8:30am-4pm**