

**SUMMER HANDS-ON ACADEMY  
ROBOT CHALLENGE COURSE**

**JULY 10-14**

Explore the world of robotics using the latest LEGO® Mindstorms® EV3 robotics technology. You will build robots with motors and sensors using logic and physics skills to get your robot to move, turn, and maneuver. You and your robot will participate in a maze obstacle course.

*LEGO is a registered trademark of the LEGO Group of companies which does not sponsor, authorize or endorse these programs.*

**Robot Challenge Course  
#10418**



**DATES**

July 10-14 (Monday-Friday)

**TIME**

1:00-4:00 p.m.

**LOCATION**

Friendship Court Community Center

**AGES**

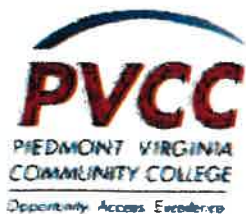
Rising 3<sup>th</sup>-6<sup>th</sup> graders

*All students receive PVCC certificate of completion.*

**TO REGISTER**

Contact Jessica Eldridge in the Community Center.

Fees paid by scholarship grant and PHA with a small fee to parents. Parent Registration and permission required.



## SUMMER HANDS-ON STEM & ART ACADEMIES AT PVCC - JULY 24-28, 1:00-4:15 P.M.

JAUNT transportation from Friendship Court Community Center

#	KidsCollege Academies	AGES (as of 2017 fall)
10417	<b>Code Breakers</b>	3rd-6 <sup>th</sup> , 6th-9th
7384	<b>Minecraft Designers</b>	3rd-6th
7423	<b>Invent Your World with 3D Printers <b>NEW</b></b>	6th-9th
7404	<b>¿Hablas Español? Spanish Adventures</b>	3rd-6 <sup>th</sup> , 6th-9th
7403	<b>Sculpey Clay Creations</b>	3rd-6th
7445	<b>Drones: Flying, Exploration &amp; Competition <b>NEW</b></b>	3rd-6th



### 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 the next Mark Zuckerberg or the high school student who just made \$1 trillion dollars for programming in his 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. Students will work in pairs or teams for most of the program. Returning students can create more advanced projects that build on previous years.  
Instructor: Black Rocket

### Minecraft Designers

If you love the game Minecraft, and always wanted to design your own world, this academy is for you! Learn how to create a custom map, the basics of creating 3-D 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 project 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 3-D 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.  
Instructor: Black Rocket

### **NEW!** Invent Your World with 3-D Printers

3-D Printers can transform the world! Explore how new 3-D Printer technology can solve difficult problems for individuals and communities. Choose your own personal or community problem to solve with a 3-D Printer. How will you design your new invention? What will it solve? What other uses might your invention have in the world? Learn about 3-D technology use and the advanced manufacturing field. Andrew Sank is director of business development at 3D Central. He has been 3D Printing since 2012 and has taught classes on 3D printing to children, adults and families.

### ¿Hablas Español? Spanish Adventures

Our adventure begins by making passports to tour in Spain. Next, we have to eat. We'll make authentic comida Latina. ¡Buen viaje! Come take a voyage to experience making art, cooking food, singing, crafts and speaking en Español! We will create a short skit in Spanish. No previous Spanish necessary. Open to 3rd-6th and 6th-9th grades.  
Amanda Evans is a Spanish teacher at Tandem Friends School. She has taught Spanish at Mountaintop Montessori, Rockbridge County Schools, Speak!, and in Japan.

### Sculpey Clay Creations

Let's create with clay! Learn the basics of hand sculpting, use of sculpting tools and skills to create your own unique design. We'll use polymer (sculpey) clay to learn the basics of how to design your own creation in clay. All pieces baked to take home. Materials fee included.  
John Haverkamp is skilled in a wide range of artisanal crafts and in various educational computer software programs, including 3D software and 3D modeling and animation. His artistic mediums include steel, bronze, and clay. He has taught youth and adults in community, school and university settings.

### **NEW!** Drones: Flying, Exploration & Competition

Fly, code, and learn all about drones! Work with your flight team using drone technology to pitch, roll, yaw and rotate to execute special missions that replicate real-life scenarios. You will use trial-and-error methods to control drones as they safely fly through hoops, maneuver around obstacles, hover over targets, and land on pre-determined coordinates. The last day includes a friendly competition as teams challenge one another in The Ultimate Drobot Games. You will receive your own Drobot Flight Book™. Drobot Company, Where Technology Meets Fresh Air™, inspires students to utilize drone technology in a setting that promotes collaborative project-based learning in a positive educational environment.

### TO REGISTER

Contact Jessica Eldridge in the Community Center. Fees paid by PVCC scholarship grants, PHA and a small fee to parents. Parent Registration and permission required. Limited spaces.

For information about KidsCollege@PVCC: [www.pvcc.edu/kidscollege](http://www.pvcc.edu/kidscollege)