



## SUMMER CAMP SCHEDULE 2017

CAMP WEEKS	SESSION	GRADE K-2	GRADE 3-5	GRADE 6-8
July 10 - July 14	Morning (9-12)	ROBOTICS - ANIMAL ANTICS	CODING - PYTHON JR	ENGINEERING - ELECTRONICS & SOLDERING-I
	Afternoon (1-4)	ENGINEERING - SILLY CIRCUITS - I	ROBOTICS - EV3 MARS MISSION	CODING - PYTHON-I
July 17 - July 21	Morning (9-12)	CODING - SCRATCH ANIMATION	SCIENCE - CRAZY CHEMISTRY	ENGINEERING - ARDUINO EXPRESS-I
	Afternoon (1-4)	SCIENCE - CRAZY CHEMISTRY - I	ENGINEERING - ELECTRONICS LAB-I	CODING - JAVA FUNDAMENTALS-I
July 24 - July 28	Morning (9-12)	BAKING IS FUN - I	ENGINEERING - ELECTRONICS LAB-II	CODING - JAVASCRIPT/HTML5/WEBSITE-I
	Afternoon (1-4)	ROBOTICS - MILO THE ENGINEER	CODING - JAVA with MINECRAFT	ENGINEERING - ELECTRONICS & SOLDERING-II
July 31 - Aug 4	Morning (9-12)	SCIENCE - CRAZY CHEMISTRY - II	MAKE & BAKE	CODING - PYTHON-II
	Afternoon (1-4)	ROBOTICS - SHOOTING FOR THE STARS	SCIENCE -OPTICS & LASERS	ENGINEERING - ROCKET SCIENCE
Aug 7 - Aug 11	Morning (9-12)	ENGINEERING - SILLY CIRCUITS	DIGITAL ARTS	CODING - RASPBERRY PI
	Afternoon (1-4)	DIGITAL ARTS	ROBOTICS - EV3 ART BOTS	ENGINEERING - ARDUINO EXPRESS-II
Aug 14 - Aug 18	Morning (9-12)	CODING - SCRATCH PROGRAMMING	ENGINEERING - 3D PRINTING & CAD-I	CODING - PROGRAMMING EV3
	Afternoon (1-4)	BAKING IS FUN - II	STOP MOTION ANIMATION	CODING - JAVASCRIPT/HTML5/WEBSITE-II
Aug 21 - Aug 25	Morning (9-12)	ROBOTICS - CARS, TRUCKS & MORE	CREATIVE WRITING	CODING - JAVA FUNDAMENTALS-II
	Afternoon (1-4)	WATER PAINTING	CODING - JAVA with MINECRAFT	ENGINEERING - 3D PRINTING & CAD
Aug 28 - Sep 1	Morning (9-12)	CODING - SCRATCH ANIMATION	ROBOTICS - ROBOT ZOO EV3	CREATIVE WRITING
	Afternoon (1-4)	SCIENCE - CRAZY CHEMISTRY - III	ENGINEERING - 3D PRINTING & CAD-II	PUBLIC SPEAKING

**HALF DAY SESSION**

1 WEEK COST - \$275

**FULL DAY SESSION**

1 WEEK COST - \$450

**NEW Location Promo (register before June30th)**

Get \$50/week off for FULL DAY CAMP

\*REGISTER 4 FULL WEEKS or more and get 10% OFF

\*SIBLING DISCOUNT 10% on second child

\*LUNCH NOT INCLUDED

\*\$15/day for Early Drop or Later Pickup

\*Early Drop - 8:00 AM, Late Pickup - 5:30 PM



**EXPERIENCE THE BEST  
 SUMMER CAMPS  
 IN THE REGION**

**\$50 OFF\***

EXP DATE: 06/30/2017, COUPON CODE: STEAM50

Only valid at the Marlboro location.

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Make.. Create.. Innovate

Marlboro, NJ

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## Program Details for Grades K-2

	10 Jul - 14 Jul	17 Jul - 21 Jul	24 Jul - 28 Jul	31 Jul - 4 Aug	7 Aug - 11 Aug	14 Aug - 18 Aug	21 Aug - 25 Aug	28 Aug - 1 Sep
MORNING (9-12 PM)	<b>ROBOTICS</b> 	<b>CODING</b> 	<b>ART</b> 	<b>SCIENCE</b> 	<b>ENGINEERING</b> 	<b>CODING</b> 	<b>ROBOTICS</b> 	<b>CODING</b> 
	<b>ANIMAL ANTICS</b> Enhance students' curiosity and science and engineering skills with a wonderful introduction to ROBOTICS with LEGO Bricks, Tilt and Motion Sensors, Motors and gears, Block coding. Children will be building these fun Animal Robots with and then sensing and controlling them using block coding. Develop spatial thinking, motor skills, creative and logical problem solving!	<b>SCRATCH - ANIMATION</b> Kids learn to create their own games & fun stories & animations with SCRATCH using "drag and drop programming". SCRATCH, by MIT, helps young kids to learn to think creatively, reason systematically, & work collaboratively. Color coded, intuitive drag & drop block programming, as well as sounds, backdrop images and drawings are used. Get them to code!	<b>BAKING IS FUN</b> Baking is a wonderful way to spark a lifelong love of the kitchen in your children. It teaches kids about the processes of cooking: following a recipe (even if you're the one doing it), measuring, combining ingredients and applying heat to create a wonderful transformation. It's messy (and therefore fun!) and the results are hard to resist. Rainbow Cookies, Fruit Tarts, Moon Cycle Cakes and much more!	<b>CRAZY CHEMISTRY</b> Practical Chemistry is lots of fun! Learn about the chemistry that you encounter every day in your house and at school. Experiment hands-on with real chemical reactions and test different liquids, salt, vinegar and learn about chemistry. Create your own chromatography applied Tshirt to take home. What is Electrolysis? Make and eat exothermic ice cream!	<b>SILLY CIRCUITS</b> Learn about Electronics while doing fun crafts. Add LED lights, Motors, Sound to your paper circuits ex Greeting Cards, Paper crafts, Origami projects. Explore the fun world of electronics! Squishy circuits are fun Play Dough based circuits with Lights, Sound and movement like a glowing LED light clay Frog or a mean looking Octopus that makes sounds	<b>SCRATCH</b> Kids learn to create their own games & fun stories & animations with SCRATCH using "drag and drop programming". SCRATCH, by MIT, helps young kids to learn to think creatively, reason systematically, & work collaboratively. Color coded, intuitive drag & drop block programming, as well as sounds, backdrop images and drawings are used. Get them to code!	<b>CARS, TRUCKS &amp; MORE</b> Get ready to build! Learn how to use motors, sensors, and simple machines like gears and pulleys to build vehicles, construction trucks, fork lifts, cranes and many more creative projects that move! Make a speedy Go Cart or a winch crane or a fork lift which senses when a brick payload is put on it! Learn to build and program your robots. Develop problem solving and logical thinking with block coding!	<b>SCRATCH ANIMATION</b> Kids learn to create their own games & fun stories & animations with SCRATCH using "drag and drop programming". SCRATCH, by MIT, helps young kids to learn to think creatively, reason systematically, & work collaboratively. Color coded, intuitive drag & drop block programming, as well as sounds, backdrop images and drawings are used. Get them to code!
LUNCH TIME (12:00 - 1:00 PM)								
AFTERNOON (1-4 PM)	<b>ENGINEERING</b> 	<b>SCIENCE</b> 	<b>ROBOTICS</b> 	<b>ROBOTICS</b> 	<b>ART</b> 	<b>ART</b> 	<b>ART</b> 	<b>SCIENCE</b> 
	<b>SILLY CIRCUITS</b> Learn about Electronics while doing fun crafts. Add LED lights, Motors, Sound to your paper circuits ex Greeting Cards, Paper crafts, Origami projects. Explore the fun world of electronics! Squishy circuits are fun Play Dough based circuits with Lights, Sound and movement like a glowing LED light clay Frog or a mean looking Octopus that makes sounds!	<b>CRAZY CHEMISTRY</b> Practical Chemistry is lots of fun! Learn about the chemistry that you encounter every day in your house and at school. Experiment hands-on with real chemical reactions and test different liquids, salt, vinegar and learn about chemistry. Create your own chromatography applied Tshirt to take home. What is Electrolysis? Make and eat exothermic ice cream!	<b>MILO THE ENGINEER!</b> Enhance students' curiosity and science and engineering skills with a wonderful introduction to ROBOTICS with LEGO Bricks, Tilt and Motion Sensors, Motors and gears, Block coding while MILO pretends to be a super engineer lifting tables, dragging and cleaning up spaces. Block coding is super easy and fun while developing creative & logical problem solving skills!	<b>SHOOT FOR THE STARS</b> A LEGO Robotics program with a SPACE theme. Think STAR WARS™ and Lunar Landers and Mars Rovers! Campers will have a blast using motors, gears, pulleys and motion sensors to create fun space themed LEGO builds! Campers will learn about simple machines like gears to create motion! Develop problem solving and logical thinking with block coding!	<b>DIGITAL ARTS</b> An introduction to learning Japanese form of Graphic arts and many more digital styles using Tablets. Learn to combine multiple brush types using a pressure sensitive digital tablet. Blend watercolour and textures from old textiles and photos to create a mixed media artwork. An experienced teacher trains the whole class step by step while helping each child techniques.	<b>BAKING IS FUN</b> Baking is a wonderful way to spark a lifelong love of the kitchen in your children. It teaches kids about the processes of cooking: following a recipe (even if you're the one doing it), measuring, combining ingredients and applying heat to create a wonderful transformation. It's messy (and therefore fun!) and the results are hard to resist. Rainbow Cookies, Fruit Tarts, Moon Cycle Cakes and much more!	<b>WATER PAINTING</b> People are drawn to watercolors due to their vibrant, delicate, and luminous qualities. This fun camp is about experimenting with different color combinations and patterns! Learn about masking, flower printing, water color with coffee filters, stamping, salting, splattering, and stenciling, resist art, water color on canvas. There are so many creative ways to enjoy water painting!	<b>CRAZY CHEMISTRY</b> Practical Chemistry is lots of fun! Learn about the chemistry that you encounter every day in your house and at school. Experiment hands-on with real chemical reactions and test different liquids, salt, vinegar and learn about chemistry. Create your own chromatography applied Tshirt to take home. What is Electrolysis? Make and eat exothermic ice cream!

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**Program Details for Grades 3-5**





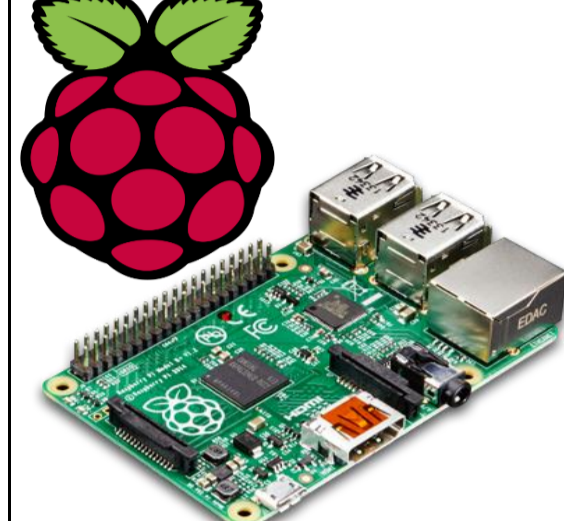
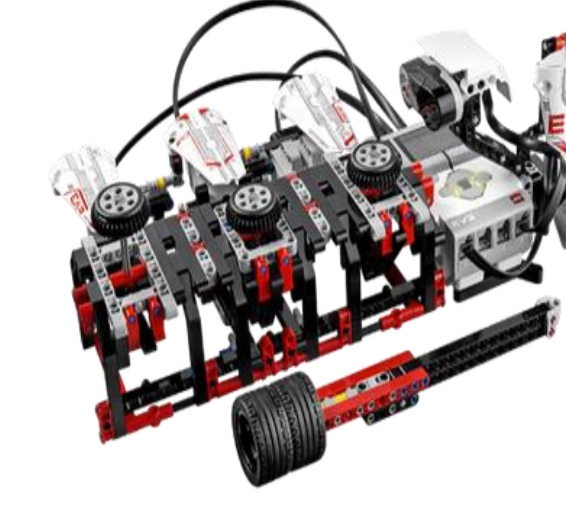
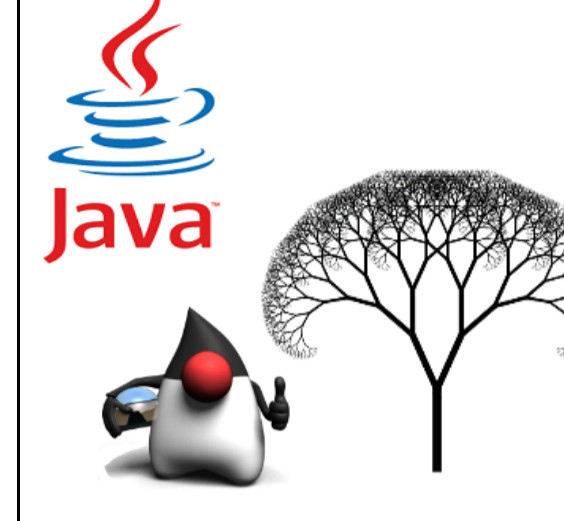

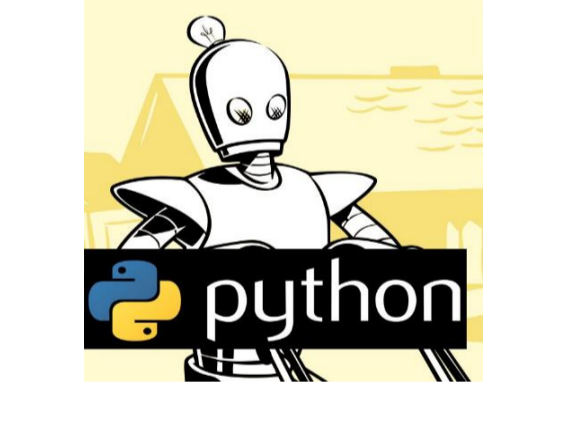
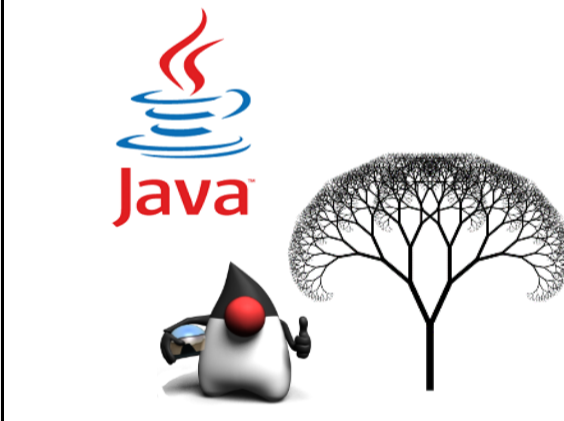


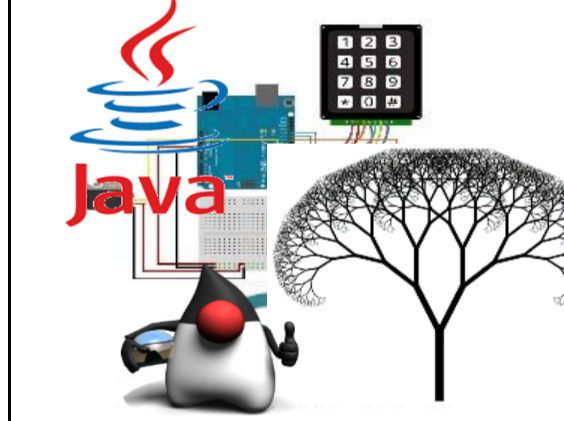

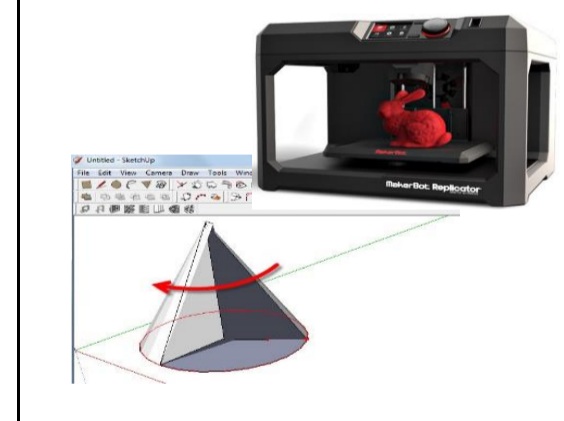

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<b>MORNING (9-12 PM)</b>	<b>CODING</b> 	<b>SCIENCE</b> 	<b>ENGINEERING</b> 	<b>ART</b> 	<b>ART</b> 	<b>ENGINEERING</b> 	<b>ART</b> 	<b>ROBOTICS</b> 
	<b>PYTHON JR.</b> Python is a powerful, expressive programming language that's easy to learn and fun to use. Python for kids easily brings kids into the world of programming. Turtle graphics and tKinter allow students to enjoy making fun graphics, create music and game and animation projects while learning Python language basics. A fun way for a young child to get introduced to coding!	<b>CRAZY CHEMISTRY</b> Practical Chemistry is lots of fun! Learn about the chemistry that you encounter every day in your house and at school. Experiment hands-on with real chemical reactions and test different liquids, salt, vinegar and learn about chemistry. Create your own chromatography applied Tshirt to take home. What is Electrolysis? Make and eat exothermic ice cream!	<b>ELECTRONICS LAB</b> Young makers can explore this exciting and popular field by learning the basics of electronic circuits and how electronic components work, which they can then apply to an idea of their own. They will be able to create their project using everyday materials. Students will use breadboards and will learn to build circuits that blink, squeak, tick and whirl.	<b>MAKE &amp; BAKE</b> In this fun, five-day camp, young chefs will practice essential kitchen skills and master the fundamentals of cooking. Kids will enjoy working alongside campers learning techniques in measuring & baking. Campers are instructed on cleanliness and elements of healthy cooking. Pizza, Muffins Baking, Smoothies, Taco Cookies, Guacomole dips, Fruit Tarts are amongst many fun activities!	<b>DIGITAL ARTS</b> An introduction to learning Japanese form of Graphic arts and many more digital styles using Tablets. Learn to combine multiple brush types using a pressure sensitive digital tablet. Blend watercolour and textures from old textiles and photos to create a mixed media artwork. An experienced teacher trains the whole class step by step while helping each child techniques.	<b>3D PRINTING &amp; CAD</b> The CAD and 3D Printing camp introduces students to 2-D sketching and basic 3-D modeling. Primitive shapes, measurement, hollow objects, assemblies Students learn the tools needed to design exciting projects. The last day is for coming up with your own complete design. Students keep the 3-D printed printed models that they make! Save all your work and continue learning more!	<b>CREATIVE WRITING</b> You will be guided surely and safely into the writing life. There's no pressure to work on a specific project or even settle on which type of creative writing you prefer. The idea is to explore—see with a writer's eyes, spark ideas to life, gain confidence, and experiment with both fiction and nonfiction. This will cover writings related to Story Structure, Poetry Writing, Memoir Writing and Photo Analysis!!	<b>ROBOT ZOO - EV3</b> Learn about robotic locomotion and balancing. Build mechanical versions of your favorite animals like a three legged spider robot or a slithering snake like motion. Understand the mechanics required to make efficient multi-pod movements while learning EV3 Mindstorms coding! Campers will heavily utilize different kinds of sensors as well as remote control!
<b>LUNCH TIME (12:00 - 1:00 PM)</b>								
<b>AFTERNOON (1-4 PM)</b>	<b>ROBOTICS</b> 	<b>ENGINEERING</b> 	<b>CODING</b> 	<b>SCIENCE</b> 	<b>ROBOTICS</b> 	<b>ART</b> 	<b>CODING</b> 	<b>ENGINEERING</b> 
	<b>EV3 MARS MISSION</b> Learn about the challenges of creating and operating robots beyond our planet. Build Robots with Infrared, touch and color sensors and overcome terrain obstacles by applying engineering design and cool programming techniques! Applied robotics programs are great for engaging children in math, science, engineering, design, collaboration!	<b>ELECTRONICS LAB</b> Young makers can explore this exciting and popular field by learning the basics of electronic circuits and how electronic components work, which they can then apply to an idea of their own. They will be able to create their project using everyday materials. Students will use breadboards and will learn to build circuits that blink, squeak, tick and whirl.	<b>JAVA with MINECRAFT</b> A unique opportunity for young students to learn Java in an exciting & meaningful way. For every item, block or creature they want to add, kids first design the graphics, armor, skin and then add or modify JAVA code to quickly program their new features or change surroundings or character's behavior. Students can then take what programs they build home!	<b>OPTICS &amp; LASERS</b> This practical Physics program demystifies concepts in Optics (Light as waves, mirrors, lenses, Snell's laws, how do lasers work, communication with light etc. with a hands-on learn by making Periscopes, Galilean telescopes, Projectors, Virtual Reality Goggles, Laser experiments, optical illusions and much more!	<b>EV3 - ARTBOTS</b> Learn about the color spectrum and human vision. Build spin art machines, drawing robots and kinetoscopes (moving pictures). Each day of the camp is a completely new fun Robot building and block coding challenge with art or music in mind. Learn about light, color, touch sensors and controlling your robots while building fun robots!	<b>STOP MOTION ANIMA.</b> You see stop motion animation all the time on TV, movies — even if you don't realize it. This camp offers children ownership and autonomy in the film making process & encourages problem solving. Encourages kids to project & plan out where a story is heading and fosters iteration & experimentation through trying and testing!	<b>JAVA with MINECRAFT</b> A unique opportunity for young students to learn Java in an exciting & meaningful way. For every item, block or creature they want to add, kids first design the graphics, armor, skin and then add or modify JAVA code to quickly program their new features or change surroundings or character's behavior. Students can then take what programs they build home!	<b>3D PRINTING &amp; CAD</b> The CAD and 3D Printing camp introduces students to 2-D sketching and basic 3-D modeling. Primitive shapes, measurement, hollow objects, assemblies Students learn the tools needed to design exciting projects. The last day is for coming up with your own complete design. Students keep the 3-D printed printed models that they make! Save all your work and continue learning more!

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**Program Details for Grades 6-8**

	10 Jul - 14 Jul	17 Jul - 21 Jul	24 Jul - 28 Jul	31 Jul - 4 Aug	7 Aug - 11 Aug	14 Aug - 18 Aug	21 Aug - 25 Aug	28 Aug - 1 Sep
<b>MORNING (9-12 PM)</b>	ENGINEERING 	ENGINEERING 	CODING 	CODING 	CODING 	CODING 	CODING 	ART 
	<b>ELECTRONICS &amp; SOLDERING</b> Learning how to solder is quite easy and, with a little practice, you will be soldering your own electronics circuits. Soldering is very rewarding and satisfying. You can create something new that never existed before. Campers in this class learn about electronics circuits and various components typically used to build LED flashers, a radio transmitter, a touch sensing lamp, a 555 IC based tone generator and much more!	<b>ARDUINO EXPRESS</b> Build fun & practical applications using the famous but inexpensive Arduino processor. Smart phone door openers, an Electronic kaleidoscope, wireless dog or home security camera that streams videos. There are endless applications for Arduinos in Home Automation & the world of Internet of Things! Learn both programming & applied electronics together!	<b>JAVASCRIPT/HTML5/Website</b> Learn to code HTML5, JavaScript & CSS to develop your own websites! Learn JavaScript to control & interact with Webpages you build yourself. Students will learn to customize the look & feel of their websites using CSS & HTML5 while also learning techniques to make blogs, counters, mobile friendly web pages. JavaScript allows students to develop interesting games & interactive widgets!	<b>PYTHON</b> Python is a powerful, expressive programming language that's easy to learn and fun to use. Python for kids easily brings kids into the world of programming. We build cool Graphics & Games during the course. We use IDLE as development tool as well as common Libraries that help with Graphics and Game building like tkinter and pygame.	<b>RASPBERRY PI</b> Learn computer hardware fundamentals like RAM, I/O buses, CPU, Cores and computer organization, Operating Systems while assembling a fully functional Raspberry Pi Computer. Build and control LED blinking lights, proximity sensors, a Musical organ and many other fun and educational projects. Coding will be conducted in Python.	<b>PROGRAMMING - EV3</b> Learn to programme and play Guitar. Programme EV3 to solve the Rubik's Cube, amazed how you will be able to control the Rubric's movement using programming techniques.. The course will also cover the 'Bridge Builder' that how programetically the bbridge can be build and removed.	<b>JAVA FUNDAMENTALS</b> A Jumpstart to Coding! Begin with a quick programming orientation using the Eclipse environment. Campers will learn to program using best practices and understand what makes JAVA unique and so powerful. Basics about JVM, Objects & Classes, Data Types, Arrays, Decision Structures, File I/O, and SWING Graphics will be introduced!	<b>CREATIVE WRITING</b> You will be guided surely and safely into the advanced writing. There's no pressure to work on a specific project or even settle on which type of creative writing you prefer. The idea is to explore—see with a writer's eyes, spark ideas to life, gain confidence, and experiment with both fiction and nonfiction. This will cover writings related to Story Structure, Poetry Writing, Memoir Writing and Photo Analysis!!
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<b>AFTERNOON (1-4 PM)</b>	CODING 	CODING 	ENGINEERING 	ENGINEERING 	ENGINEERING 	CODING 	ENGINEERING 	ART 
	<b>PYTHON</b> Python is a powerful, expressive programming language that's easy to learn and fun to use. Python for kids easily brings kids into the world of programming. We build cool Graphics & Games during the course. We use IDLE as development tool as well as common Libraries that help with Graphics and Game building like tkinter and pygame.	<b>JAVA FUNDAMENTALS</b> A Jumpstart to Coding! Begin with a quick programming orientation using the Eclipse environment. Campers will learn to program using best practices and understand what makes JAVA unique and so powerful. Basics about JVM, Objects & Classes, Data Types, Arrays, Decision Structures, File I/O, and SWING Graphics will be introduced!	<b>ELECTRONICS &amp; SOLDERING</b> Learning how to solder is quite easy and, with a little practice, you will be soldering your own electronics circuits. Soldering is very rewarding and satisfying. You can create something new that never existed before. Campers in this class learn about electronics circuits and various components typically used to build LED flashers, a radio transmitter, a touch sensing lamp, a 555 IC based tone generator and much more!	<b>ROCKET SCIENCE</b> The scientific, technological, engineering and mathematical foundations of rocketry provide exciting opportunities for authentic hands-on, minds-on experimentation. Learn prediction, data collection and interpretation, teamwork, problem solving, and history of rocketry. Campers engage in building paper/straw rockets, air pressure powered rockets and rocket engine.	<b>ARDUINO EXPRESS</b> Build fun & practical applications using the famous but inexpensive Arduino processor. Smart phone door openers, an Electronic kaleidoscope, wireless dog or home security camera that streams videos. There are endless applications for Arduinos in Home Automation & the world of Internet of Things! Learn both programming & applied electronics together!	<b>JAVASCRIPT/HTML5/Website</b> Learn to code HTML5, JavaScript & CSS to develop your own websites! Learn JavaScript to control & interact with Webpages you build yourself. Students will learn to customize the look & feel of their websites using CSS & HTML5 while also learning techniques to make blogs, counters, mobile friendly web pages. JavaScript allows students to develop interesting games & interactive widgets!	<b>3D PRINTING &amp; CAD</b> The CAD and 3D Printing camp introduces students to 2-D sketching and basic 3-D modeling. Primitive shapes, measurement, hollow objects, assemblies Students learn the tools needed to design exciting projects. The last day is for coming up with your own complete design. Students keep the 3-D printed printed models that they make! Save all your work and continue learning more!	<b>PUBLIC SPEAKING</b> You mean I have to stand up & say something in front of the class? This course's main goal is to improve public speaking and persuasive writing skills. Boys and girls must open up and practice this essential skill to be successful in their future careers! Each class we will be learning techniques on how to approach targeted audiences, how to change approaches based off the audiences.

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