

CAMP Summer 2018

Innovation

The Amazing STEM Camp for Grades 4-12!

JTCC
Midlothian
Campus



MathScience
Innovation Center
Imagine. Create. Lead.



Scan QR code to visit
mysic.org/camp

Full details and online registration at www.myMSiC.org/camp

Rising Grades 4-5

July 9-13

Engineering on the Go: What makes cars go fast and boats float? What are magnetic levitating trains? Explore the different types of transportation that makes the world move. Have fun discovering why hot air balloons fly and what makes a rocket soar. Design, build, and test your very own vehicle. The sky is the limit for imagination and adventure! **AM & PM Classes**

LEGO: Building to Explore: Did you know that you can build a lion out of LEGO's that will roar and move? Using LEGO's, motors, and programming you will work in small teams to construct and test different machines and then be challenged to create your own. **AM & PM Classes**

Snap, Crackle, Pop! Chemistry: The wonders of chemistry will unfold before your eyes and mouth as you make root beer, ice cream, and goo. See what it is like to work in a chemistry lab and discover what happens when certain chemicals react with each other. **AM & PM Classes**

July 23-27

Coding with Creativity: Are you curious about the world of coding and animation? Using Scratch, MakeyMakey, and a lot of imagination design animated worlds with your own characters and backgrounds that you can control using a simple circuit and everyday objects. **AM & PM Classes**

Gaming Galore: Why spend your days playing someone else's video game when you can create your own. Explore the world of game design using the free coding program, Kodu© and let your imagination go as you create your own world with characters and challenges. **AM & PM Classes**

Rocks, Crystals, and Gems: Have you ever wondered how a crystal forms or why a diamond can cut glass? Take a journey through the rock cycle to create crystals, explore rock features in Richmond, and go on a scavenger hunt at Lora Robin's gallery to find some amazing gems. **AM & PM Classes**

Camp Innovation is in 2 locations this summer. Go to www.myMSiC.org/camp for all the details about course locations, times, and pricing. Register today!

Rising Grades 6-7

July 9-13

Disease Detectives: Become a Disease Detective and develop your powers of observation and analysis to diagnose a variety of both common and mysterious illnesses. Perform lab activities and learn to use NIH image-Processing. Includes a clinical lab field trip.

AM & PM Classes

LEGO: Next Generation: Program your robot to move, sense objects, make sounds and more. Use Mindstorms® software to create projects and solve problems.

AM & PM Classes



July 23-27

Architectural Design: Discover the historic and modern elements of architecture used in the building of Richmond. Take tours and visit local museums. Design and build your own model of an urban building incorporating "green architecture". **AM & PM Classes**

Lasers, Fiber Optics, and Holograms: Learn the basics of light energy and use lasers to study the wave and particle nature of light. Develop a fiber optic communication link and create reflection holograms. Take home your own hologram!

AM & PM Classes

Rising Grades 8-9

July 9-13

D2P2, Digital Design Python Programming (full-days) Python is one of the easiest programming languages to learn and use yet it is very powerful. Learn to write your own programs and take them home with you. **Full-Day Class**

July 23-27

Digital Detectives (full-day): Examine the ever-changing world of cybersecurity and discover how items like Wireshark, packet analyzers, and keys are used to penetrate systems. Learn the ins-and-outs of hacking and what it means to be an ethical hacker. **Full-Day Class**

