



MathScience Innovation Center

Discoverers



February 23, March 2, and March 9, 2019

9:00am- 2:00pm

Calling all 4th and 5th graders!

Come explore STEM subjects during our Discoverers Program for 3 consecutive Saturdays and discover how science, technology, engineering, and math fit into the world around you. The Discoverers Program has lots to offer through inquiry-based, hands-on, minds-on problem solving activities, field-based experiences, guest speakers and design and build stations.

MSiC Campus Classes

Block by Block (Minecraft®)

The world of Minecraft® is a fun & exciting place to learn and explore. Experience the world of Minecraft as an engineer while you manipulate the constantly changing Minecraft® environment. Develop survival strategies by making your own shelter and tools, then share with classmates as your creativity and imagination lead you to your own unique product.

Codes, Ciphers, and Secret Messages

Learn code breaking skills and discover the history and science behind the many encoding methods used by organizations and government "spies." Develop your own "book of secrets" or treasure map and explore the world of cryptography from Ottendorf ciphers to invisible inks to microdots. You will use special equipment, including microscopes, GPS and metal detectors, to follow clues and unearth the Secret of the Center.

Engineering For the Future

Can we make it to Mars? What does it take to get there? Using a design-and-build framework, you will make rockets and Martian rovers, experience what astronauts eat in space, and see how close we are to getting to Mars. This class has everything a young engineer needs to help explore The Great Beyond in the 21st century!

LEGO: Building To Explore

Did you know you can not only build with LEGO building blocks, but you can also program them? Computers are used to program your creation so it can make noise, kick, chomp, and a host of other awesome builds. Working in teams you can construct, test, and problem solve as you hone your LEGO expertise.

Monsters Across the Millennia

Is Bigfoot real? Is Nessie the only monster of the deep? Were there ever any monsters like these? Join us as we dive to the depths of the oceans, explore the far reaches of the terrain and discover what monsters reside there. Explore where fascinating creatures live and how they survive. Go on a virtual fossil hunt to explore creatures from the past and take real fossils home. Find out about monsters then and now as we learn about these incredible, but often misunderstood creatures.

Odd Pets

Discover the mystery and adventure that odd pets bring as you explore the world of fish, frogs, spiders, reptiles, and other creepy crawlies. Study their habitats and learn their unique adaptations through hands-on investigations and field trips. At the end of class, take your very own odd pet home with you.

Snap, Crackle, Pop!

What would it be like to work in a real chemistry lab while you experiment with chemical reactions? Many of the chemistry experiments in this class will be done with items that you have in your kitchen so you can do them at home! You will amaze your friends when you make "goo," ice cream and root beer for them. Also learn how to develop mystery inks to write secret notes to your friends and family. The wonders of chemistry will unfold before your eyes and mouth!

Manchester Middle Campus Classes

Rocks, Crystals, and Gems

Explore and identify the properties of Virginia's rocks, minerals, and gems. Perform experiments with these unique natural resources and create your own crystal. Discover how these treasures are used in a variety of locations in the Richmond area. Field trips take you to rocks, fossils, and other mineral specimens at their origin so you can start your own special collection.

Power of Pokémon

Who is more powerful... Dialga or Palkia? If you have an answer, then The Power of Pokémon is the class for you! Learn the science behind naming, the math of leveling-up, and the strategy in game creation. You will battle in Pokémon TCG, create your own character, design your own TCG game, and take a field trip to compete in a Pokémon tournament. Pokémon game experience required.



Discoverers 4-5 Program Details

Students in grades 4 and 5 currently enrolled in the following public school divisions are eligible to participate; Chesterfield, Colonial Heights, Hanover, Henrico, King William, Petersburg, and Richmond.

Dates: 3 consecutive Saturdays, **February 23, March 2, and March 9, 2019.**
Snow date is March 23, 2019
Students are expected to attend every Saturday.

Time: 9:00 AM to 2:00 PM

Cost: \$45 for materials (due at time of registration)

Lunch: Students will have a 25 minute lunch break. Students must bring their own lunch as well as a snack and drink.

Bus transportation: Will be provided for students by most school divisions at designated locations. Check our website for the bus pick-up schedule, locations, and times.

How to Register

- By credit/debit card online at **www.myMSiC.org**
- By check/money order: mail in the registration form below with payment to: MathScience Innovation Center, Attn: Saturday/Summer Registration, 2401 Hartman St., Richmond, VA 23223.
- Registration will be continuously accepted until February 20, 2019

Check our website for other MSiC programs available for students K-12 throughout the year, including Little Innovators programs for K-3, Let's Innovate for grades 6-12, and Camp Innovation for rising 4th - 12th grade students during the summer. For more information please contact the MathScience Innovation Center at (804) 343-6525

Bus Pick-up Locations

Chesterfield

Career & Tech.
Center (Hull St.)
Hopkins ES
Matoaca HS
Midlothian MS
Providence MS
Reams Road MS
Robious MS
Swift Creek MS
Thomas Dale HS

To Manchester MS only

Midlothian HS
Bird HS

Colonial Heights

Colonial Heights HS

Henrico

Brookland MS
Colonial Trail ES
Fairfield MS
Hungary Creek MS
Moody MS
Pocahontas MS
Quioccasin MS
Rolfe MS
Tuckahoe MS
Wilder MS

King William

King William HS

Petersburg

Cool Spring ES
Blandford Academy
Pleasants Lane ES

Richmond

Albert Hill MS
Binford MS
Boushall MS
Elkhardt Thompson MS
Franklin Military
@Minnis Middle
Henderson MS
Lucille Brown MS
M.L.K Middle



Online registration available at www.mysic.org

Registration Form: Discoverers 4-5

Feb. 23, March 2, March 9, 2019

Student First Name: _____ Last Name: _____ Gender: _____

School Division: _____ School: _____ Grade (circle) 4 5

Student Allergies: _____ Activity Restrictions/Special Needs: _____

School Bus Pick-up (if applicable): _____

First Choice: Course Name: _____ Second Choice: Course Name: _____

Parent/Guardian First Name: _____ Last Name: _____

Parent Email: _____ Yes. Send notifications by email.

Phone: _____ Emergency Phone: _____

Home Address: _____

City: _____ State: _____ Zip _____

Permit student photos/video YES NO

MSiC records photographs and video of all campus events to promote our educational services. You or your child's image may appear in printed or online advertising. Student identity is not published.

We will adhere to the MSiC Network Use Policy

Policy available at: <https://mysic.org/pdf/networkpolicy.pdf> YES NO