



MathScience Innovation Center

Discoverers

March 3, 10, and 17, 2018

9:00 a.m. to 2:00 p.m.



2 Locations! 3 Weekends!

Calling all 4th and 5th graders!

Come explore in-depth STEM subjects for 3 Saturdays and discover how science, technology, engineering, and math fit into the world around you. Each 3 week course includes inquiry-based, hands-on, minds-on problem solving! Courses often have guest speakers, field trips, and/or 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 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" and explore the world of cryptography. You will use special equipment, including microscopes, GPS, and metal detectors to follow clues and unearth the Secret of the Center. Includes off-campus field trip.

Engineering for the Future

The Space Shuttle is officially retired. So what does future space exploration look like? Using a design-and-build framework, you will use objects designed specifically for space travel to make air-powered rockets and Martian rovers. This class has everything a young engineer needs to help explore "the Great Beyond" in the 21st century!

Exploring the James

See the James River through a whole new lens! Field trips in and around the river allow you to seek and find a variety of critters living in and around the ecosystem of the longest river in a single state. Test the water quality from different spots, then see how water is cleaned in an effort to protect the river. Create your own mini ecosystem to bring it all together. Mud and wetness included!

LEGO: Building to Explore

Did you know you can not only build with LEGOs, but you can program them?! Learn how to use the different LEGO blocks to build machines and vehicles and then program your creations to make noise, kick, chomp, and a host of other awesome builds. Working in teams, construct, test, and problem solve as you become a LEGO master!

Slippery Slimy Odd Pets

Discover the joy and adventure that aquatic pets can bring as you explore the world of fish, toads, turtles, and other slithering slimies. Investigate their habitats and learn how they survive through field investigations, experiements, special guests, and an off-campus field trip. Using what you have learned, you will create an artificial habitat for your very own aquatic pet that will go home with you!

Snap, Crackle, Pop!

What would it be like to work in a real chemistry lab, experimenting 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 to amaze your family and friends, like making "goo", ice cream, and root beer. The wonders of chemistry will unfold before your eyes and mouth!

The Sky's the Limit

Have you ever thought about being a meteorologist and seeing yourself on television? Step into the Weather Emergency Operation Center and explore the unpredictable science of weather. Build instruments and conduct exciting experiements to better understand and make predictions about daily weather conditions. As a junior meteorologist, use what you learn to create your own broadcast!

Manchester Campus Classes

Coding with Creativity

Are you curious about the world of coding and animation? Would you like to create an interactive world that can be controlled by everyday objects? Using creativity and Scratch® programming, design and code your very own interactive game. The game play doesn't have to stop when you leave the class, because you will take your programs with you!

Power of Pokémon

Who is more powerful...Diagla 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 charcter, design your own TCG game, and take a field trip to compete in a Pokémon tournament. Pokémon game experience required.

More information at www.myMSiC.org, see reverse side for program details & registration details.

Discoverers 4-5 Program Details

Students in grades 4 and 5 currently enrolled in the MSiC consortium* public school divisions are eligible to participate at either location (**Chesterfield, Colonial Heights, Hanover, Henrico, King William, Petersburg, Powhatan, and Richmond*).

Dates: 3 consecutive Saturdays, **March 3, 10, and 17, 2018**. Students are expected to attend every Saturday.

Time: **9:00 AM to 2:00 PM**

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

Students will have a 25 minute lunch break. Students must bring their own lunch. Snack/drink machines are available.

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. Please note: buses travel to the MathScience Innovation Center unless noted as a Manchester Middle School route.

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 Street Richmond, VA 23223.
- Completed and updated student profile received by **February 9, 2018** will receive priority, though continuously accepted until February 28, 2018. Registration confirmation and specific course info will be sent by email prior to the opening date.

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 all ages during summer. For more information, please contact the MathScience Innovation Center at (804) 343-6525.

Bus Pick-Up Locations

Chesterfield

Career & Technical Ctr (on Hull St, front of school)
Hopkins Elementary
Matoaca High
Midlothian Middle
Providence Middle
Reams Rd Elementary
Robious Middle
Swift Creek Middle
Thomas Dale High

Colonial Heights

Colonial Heights High

King William

King William High

Petersburg

A.P. Hill Elementary
Blandford Academy
J.E.B. Stuart Elementary

Powhatan

Pocahontas Middle

Henrico

Brookland Middle
Colonial Trl Elementary
Fairfield Middle
Hungary Creek Middle
John Rolfe Middle
Moody Middle
Pocahontas Middle
Quioccasin Middle
Tuckahoe Middle
Wilder Middle

Richmond

Albert Hill Middle
Binford Middle
Boushall Middle
Elkhardt-Thompson Middle
Franklin Military
Henderson Middle
Lucille Brown Middle
Martin Luther King Middle

TO MANCHESTER MIDDLE CAMPUS
Chesterfield
Midlothian High Bird High

Online registration available at www.myMSiC.org

Registration Form: Discoverers 4-5

March 3, 10, & 17, 2018

Student First Name: _____ Last Name: _____ Male/Female _____

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

Student Allergies: _____ Activity Restrictions/Special Needs: _____

School Bus Pick-up (if applicable): _____

First Choice: Course Name: _____

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

We will adhere to the MSiC Network Use Policy
Policy available at: <http://mymsic.org/pdf/networkpolicy.pdf> Yes No