



Island Creek Computer & Coding Club

www.stemexcel.org/islandcreek



Class size: 14-20 students. This course is sponsored by the Island Creek PTA. No refunds or exchanges offered. Emergency contact info must be filled out during registration for each student who attends this course. If you have any questions, please contact Richard Aviles, islandcreekptapresident@gmail.com

FALL 2019 | Electronics with Minecraft Redstone:



MONDAYS, 3:30pm-4:30pm • Oct 7-Dec 9, 2019 (no class on Oct 14, Nov 4), 8 WEEKS • Tuition: \$130 • 8 meetings, 1 hour per meeting • Grades 3rd-6th • Classroom TBD

STEM exCEL's Electronics with Minecraft Redstone allows students to explore electronics in a virtual world with essentially infinite resources. Using Minecraft's Redstone blocks, which act as wires on a breadboard, students can build constructs representing electrical circuits and simple computer projects that are built in the real world. This course is a great precursor to understand real circuitry, electronics and electrical theory. This course allows students to gain an understanding of how computers are processing commands as they move on to other computer science studies, and take home their Redstone creations at the end of the course.

FALL 2019 | Introduction to CS & Coding:



MONDAYS, 3:30pm-4:30pm • Oct 7-Dec 9, 2019 (no class on Oct 14, Nov 4), 8 WEEKS • Tuition: \$130 • 8 meetings, 1 hour per meeting • Grades 1st-4th • Classroom TBD

Intro to CS & Coding teaches programming logic without the requirement of learning a new language, making it the perfect foundation for any other computer science or technology subject. Students start with hands-on activities that help them learn vital concepts in a tangible way, then use our easy drag-and-drop interface to put their new knowledge into play, to create programs, solve problems and even make games. With the help of our experienced instructors, students will learn functions, variables, conditionals and more in a fun environment. Students will leave the course with their final project, and a strong base for future technological learning.

FALL 2019 | Robotics:



WEDNESDAYS, 3:30pm-4:30pm • Oct 9-Dec 4, 2019 (no class on Nov 27), 8 WEEKS • Tuition: \$130 • 8 meetings, 1 hour per meeting • Grades 2nd-6th • Classroom TBD

STEM exCEL Robotics is designed for students looking to get started with robotics, and who are possibly interested in learning competitive robotics. In this course, students learn how to design, build, and program Lego Mindstorms EV3 robots by constructing and programming a robot. By applying engineering concepts as well as advanced sensor programming skills, students will perfect their design and programming to solve a variety of challenges. These engineering, design and programming concepts serve as a great stepping stone for students that have an interest in competing in robotics competitions such as First Lego League (FLL).

FALL 2019 | Introduction to Game Design:



WEDNESDAYS, 3:30pm-4:30pm • Oct 9-Dec 4, 2019 (no class on Nov 27), 8 WEEKS • Tuition: \$130 • 8 meetings, 1 hour per meeting • Grades 1st-4th • Classroom TBD

Intro to Game Design introduces the fundamentals and concepts of game design within a real game engine many indie development teams currently use. Students learn to design and build their own game from the ground up, while learning 2D game art and programming logic with the engine's integrated art software and easy-to-use events system, fit for beginners through advanced learners alike. Our instructors help students develop games individually, so students have the freedom to create at their pace while focusing on their creative interests. The final product is their own game that can be played on any computer, and the knowhow to continue their game development at home.

Registration is Open! Please go to www.stemexcel.org/islandcreek to register.

Contact us: 571-349-0048 • info@stemexcel.org • Visit us: www.stemexcel.org • This Information is neither sponsored nor endorsed by the Fairfax County School Board, the Superintendent, or this school.