

Everyday STEM Saturday
Cyber Safe: Build a Secure Smart Device

Class Summary:

Everyday STEM Saturday is a hands-on enrichment program that introduces middle schoolers to computer science, cybersecurity, robotics, engineering, and career exploration in a single engaging weekend session. At the October session, students will build and program their own Smart Security Device and take the device home to continue exploring. They leave with a working prototype, a taste of the engineering design process, and a clearer view of STEM careers.

Topics

- Program, protect, test and defend your smart device against common security problems.
- Cybersecurity awareness, digital responsibility, and computational thinking.
- The engineering design process, including executive function and mental performance skills.

Learning Outcomes:

- Introduction to cybersecurity along with an understanding of authentication and access control.
- Experience using IF/THEN logic.
- Applying the engineering design process to a real project and identify STEM careers in physical computing, cybersecurity, robotics and engineering.

Prerequisites:

- There are no prerequisites for this class. No prior coding experience needed: all micro boards, computers, and materials are provided.

About your presenter:

Carla Ferrette-Clark is a retired United States Air Force Technical Sergeant with 20 years of service and a Career & Technical Education educator at Military Magnet Academy. She brings extensive experience in computer science, cybersecurity, robotics, STEM education, and career development, and has coached robotics and cybersecurity teams while connecting students with industry and higher-education partners. Her teaching philosophy centers on giving students opportunities to build, solve, communicate, and see themselves as future STEM professionals. Connect with Carla on [LinkedIn](#).

Vitals:

Cost:	\$50.00	Difficulty:	Beginner (Ages 11-14)
Class time:	9:00am-12:00pm	Computer:	Provided
Class length:	3 hours	Scholarships:	Upon Request
Class size:	10 students		

Location: 4 Conroy Street, Suite A, Charleston, SC 29403 | Parking: Charleston Tech Center Garage