



## COOL CAREERS IN CYBERSECURITY PROGRAMS

### BECOME AN INSTRUCTOR

Instruct a Cool Careers in Cybersecurity Summer Camp in Your Community

Cool Careers in Cybersecurity Summer Camps allow students to explore gaming, modeling and simulation development, and robotics, within the context of **exciting careers in fields such as digital forensics, cybersecurity and cryptography** which connect science, technology, engineering and math (STEM) to real world tools and problems. Students learn about programming/computational logic, coding-decoding/cryptography, system vulnerabilities, digital forensics, and careers in cybersecurity, as well as learning more about the security clearance process and identity management strategies. Students engage in hands-on activities while learning about digital literacy (technology fluency and applications, team building, collaboration tools, problem based critical thinking). Attendees:

- Create games and simulations using software packages such as MicroWorlds, Excel, Scratch, Alice, StarLogo, GoogleSketchUp
- Explore programming using Java, Python and Raptor
- Build and program robots
- Experiment with Cryptography, Steganography and Digital Forensics
- Explore careers that use technology such as digital forensics, cryptography, and cybersecurity
- Develop an awareness of Cyberethics, Cybersafety and Cybersecurity

Cool Careers in Cybersecurity Summer Camp is a turnkey cybersecurity awareness program, meaning anyone affiliated with a community organization including faculty members, school administrators, community leaders, and teachers can start a program!

#### HOW IT WORKS

Each summer camp must have a qualified and dedicated instructor to implement the Cool Careers in Cybersecurity content. The instructor should have a working knowledge with computers. Instructors are trained by C34G staff. Typically, C34G instructors are educators with a background in a STEM related field, technology/media specialists, tech ed and computer science teachers, software developers, programmers, computer science majors, retired engineers or computer scientists. We also recommend one-two teaching assistants depending on the number of attendees.

#### FUNDING

Funding to host a summer camp is dependent on the host site. Some organizations (Girl Scouts, 4H, STEM efforts at school) fold this into their STEM initiatives. Others have paid instructors and other expenses through grants or have charged attendees a small fee to cover the cost of the instructor.



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#### INSTRUCTOR RESPONSIBILITIES

- Instructors must attend a Cool Careers in Cybersecurity training in advance of the event (online options available).
- Instructors are responsible for 5-10 days of instruction per camp and ~4 hours of prep time per week. This does not include travel time to and from the program hosting site.
- Instructors host regular program sessions typically either one or two weeks in length. The schedule will need to be organized with the site location POC.
- Instructors travel to club site to host sessions.
- Instructors work with Cool Careers in Cybersecurity staff to organize content, hands-on activities, guest speakers, and field trips.
- Instructors fulfill communication and reporting requirements in accordance to Cool Careers Program requirements

#### INSTRUCTOR QUALIFICATIONS

To qualify to teach a Cool Careers in Cybersecurity Summer Camp, instructors must have a demonstrated interest and experience in STEM related fields. We provide proprietary curriculum, and can give either web based or face-to-face training with respect to its content and instructional best practices. The ideal instructor has experience teaching a STEM course, and an interest in computers, cyber security, robotics, and content based learning.