

**National Security Agency (NSA) 2019 GenCyber Program  
Central Ohio GenCyber Cybersecurity Workshop  
Project Summary**

**Total: \$51,093**  
**Project Period: 4/1/2019 to 3/31/2020**  
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The Program Director, the program coordinator, faculty members from the college's Computer Science program, and college staff will host the **Central Ohio GenCyber Cybersecurity Workshop, from July 15-19, 2019, for 40 participating high school students**. College faculty will serve as the instructors under the guidance of the Program Director and Lead Instructor. Workshop activities will be organized into two cohorts of 20 students, one cohort at the Beginner learning level and one at the Accelerated Beginner level. Half (20) of the total student seats will be reserved for female participants, and focus recruitment areas are schools with high populations of economically disadvantaged students. For participant recruitment and program promotion, Columbus State will leverage existing strong partnerships with organizations that focus on increasing participation in the technology sector, such as Women in IT, Girls Who Code, Cool Tech Girls, and Girls Code-IT.

The Workshop will serve as an awareness and advocacy driver for encouraging new students to consider a pathway in cybersecurity. The camp will introduce Cybersecurity concepts to students aligned with the *GenCyber Cybersecurity Concepts*. Collaborative classroom activities will engage students throughout the week, with the camp culminating in a hands-on breakout room activity that applies their learning and reinforces camp curriculum. The students will learn about cybersecurity and benefit from working with college faculty and industry mentors.

Industry guest speakers will visit the classroom. Their topics will support, demonstrate, and provide credibility for the day's lesson plan. Potential speakers include representatives from Alliance Data, Amazon Web Services, Cardinal Health, Nationwide Insurance, the Columbus Collaboratory, and the Girls Who Code program in Ohio. According to past participant feedback, these sessions are some of the most popular with the students, especially female students who can meet role models within the industry.

Based on past experience, organization of the cohorts established by skill level will also facilitate learning. Students who are more advanced can disengage when the class discussion or questions are already familiar to them. At the same time, CSCC faculty recognize the importance of peer-to-peer teaching, which they observe in the college classroom. For this reason, some activities will bring all 40 students together for common learning and give students the opportunity to meet and learn from each other.

The **overall goals** of the Central Ohio GenCyber Cybersecurity Workshop are to increase awareness and interest in cybersecurity careers as well as encourage diversity in the cybersecurity workforce of central Ohio. Additionally, the program will set students on a pathway towards college and career readiness in cybersecurity fields.

## Draft Agenda for the Central Ohio GenCyber Cybersecurity Workshop

Columbus State Center for Workforce Development	Monday	Tuesday	Wednesday	Thursday	Friday
	Central Ohio GenCyber Cybersecurity Workshop				
Morning	<i>What is Cybersecurity?</i>	<i>Ethics and Online Safety; Online Behavior and Cyber Bullying</i>	<i>Raspberry Pi and Linux Programming</i>	<i>Online Sim Healthcare</i>	<i>Skills Recap and Breakout Room Prep</i>
	<i>Cybersecurity Concepts</i>	<i>Cyber Careers Round Robin</i>		<i>Internet of Things/Secure Your Life</i>	<i>Break</i>
	<i>Break</i>	<i>Break</i>	<i>Break</i>	<i>Break</i>	<i>Breakout Room</i>
	<i>Establishing Norms for Camp</i>	<i>Cybersecurity Scavenger Hunt</i>	<i>Basic Scripting</i>	<i>TLS &amp; Man in the Middle</i>	
	<i>Lunch and Learn</i>	<i>Lunch and Learn</i>	<i>Lunch and Learn</i>	<i>Lunch and Learn</i>	<i>Lunch and Learn</i>
Afternoon	<i>Campus Tour of IT Operations</i>	<i>Introduction to Raspberry Pi</i>	<i>Networking 101</i>	<i>Crypto-Private Key Encryption</i>	<i>Parent and Family Presentations</i>
	<i>Cybersecurity Education Programs</i>	<i>Raspberry Pi Building Lab</i>	<i>Drone Hacking Lab</i>		<i>Student Poster Session (Break)</i>
	<i>Break</i>	<i>Break</i>	<i>Break</i>	<i>Break</i>	<i>Keynote and Closing Ceremony</i>
	<i>Ozobots and Programming</i>	<i>Password Cracking</i>	<i>Raspberry Pi Lab 2: Safe Browsing, Malware, Trackers</i>	<i>Ozobot Competition</i>	