

What is Cybersecurity?

Cybersecurity is a set of techniques used to protect the integrity of networks, programs and data from attack (cyberthreats), damage or unauthorized access. Cyberthreats take many forms:

- Application attacks
- Malware
- Ransomware
- Phishing
- Exploit kits

Cyber enemies have learned to launch sophisticated automated attacks and as a result, keeping up with cybersecurity operation can be challenging.

Lake Howell's Cybersecurity program is designed to teach students the foundation of cyber defense and prepare a new generation of people to help protect against future cyber threats.



ELIGIBILITY

As a Program of Emphasis, the Cybersecurity program is open to:

- Students zoned for Lake Howell High School
- Out of zone students on an approved Program of Emphasis transfer
 - Limited to incoming 9th grade students

For specific eligibility and application information, please visit the Student Assignment and Program Access website:
www.seminoleschoolchoices.us

TRANSPORTATION

- Transportation is provided to eligible in-zone students living more than two miles from the school.
- Transportation is not provided for out-of-zone Program of Emphasis students.
- Approved out-of-zone transfer students may apply for transportation through the Ticket to Ride program (bit.ly/SCPSTicketToRide). Through this program it is possible that a student may be granted access to pre-existing bus routes (pending space availability). This program does not create bus stops or bus routes and is not guaranteed for the duration of the transfer.



FOR APPLICATION INFORMATION

400 E. Lake Mary Blvd.
Sanford, FL 32773
407-320-0329
www.seminoleschoolchoices.us



FOR PROGRAM INFORMATION

4200 Dike Road
Winter Park, FL 32792
407-746-9050
www.lakehowell.scps.k12.fl.us

Lake Howell High School



CYBERSECURITY

AT LAKE HOWELL HIGH SCHOOL

Program of Emphasis



About the Program

Lake Howell's Cybersecurity Program introduces and prepares students for careers in computer science and cyber defense in multiple industries. This program includes industry certification and teaches foundational knowledge and skills including:

- Computer and network security
- Security vulnerabilities
- Attack mechanisms and techniques
- Intrusion detection and prevention
- Cryptographic systems
- System hardening
- Risk identification
- Incidence response
- Key management
- Access control and recovery

Student Experience

Students experience real-world problem solving through simulations and lessons, crafted to engage students in this high-demand and high-wage career.

Students participate in field trips like visiting the Information Services (IS) department for Seminole County Public Schools where students learn about servers, networking, hardware and the cybersecurity of SCPS. Students also receive hands-on training and learn about opportunities for potential future internships with the district.



The Cybersecurity program provides you with essential skills that help expand your knowledge. Students are also given opportunities to experience the present world and explore possibilities of the future.



Devianni C.
LHHS Student



CyberPatriot

Lake Howell High School participates in CyberPatriot, the National Youth Cyber Education Program.

This extracurricular activity provides cybersecurity students with the opportunity to compete nationally. Teams of students are put in the position of newly hired IT professionals tasked with finding cybersecurity vulnerabilities within the images and hardening the system while maintaining critical services.



In the cybersecurity classroom, you will see students deconstructing and rebuilding computers, installing operating systems, and configuring computers. Students hear from guest speakers and have opportunities to compete in the CyberPatriots club after school.

In addition, students have opportunities to take industry certification exams like CompTIA A+ and Network+. Overall, the students are inspired to understand the incredible importance of good digital citizenship through systems security.

Why Cybersecurity?

"Cyber crime will more than triple the number of unfilled cybersecurity jobs, which is predicated to reach 3.5 million by 2021." (CSO Online.com)

"Cyber crime damage costs to hit \$6 trillion annually by 2021. It all begins and ends with cyber crime." (CSO Online.com)

"Cyber crime is the greatest threat to every company in the world." -Ginni Rometty, IBM's chairman, president and CEO