## A.A.S. Degree in Networking and Cybersecurity

Computer Science is a hands-on, challenging, and in-demand field that impacts the world in countless ways. Computer scientists play a key role in developing technology and systems for many industries. Healthcare, business, finance, manufacturing and social media are among some of these industries.

To keep up with the expanding IT world, employers look to hire job candidates who excel in an ever-changing technical environment. Students graduate from this degree program equipped with in-demand knowledge in networking and cybersecurity. In the Networking & Cybersecurity program students learn what they'll need to perform specific tasks that meet industry-recognized standards. Some of these tasks include skills associated with network administration and cybersecurity, computer networks and data communications, and information and data security.

With your FLCC education, you'll be ready to get right to work. Grads go on to land positions as (sample career areas):

- Application Developers
- Database Administrators
- Help Desk Technicians
- Network Administrators

Network Technicians

Programmers

Website Security

Data Security

<u>Curriculum Requirements</u>: As a student in the Networking and Cybersecurity program, you are required to complete 63-64 college credit hours with an FLCC Transcript grade point average of no lower than C (2.0). For this degree program, you must successfully complete the following (under College Courses).

Year 1: 9 <sup>th</sup> Grade	High School Courses	College Courses
Focus: academic success in all courses, review	ELA 9	Computing Science Portal: CSC 103 **
requirements towards high school diploma,	Global Studies I	Core Excel: CSC 135 **
professional skill development, interest survey and	Living Environment *	
exploration in P-TECH pathways and chose	Algebra I *	
pathway by year's-end, introductory college	Foreign Language ^	
courses, industry speakers.	Physical Education 9	
	Study Skills (Professional and Thinking Skills)	

Year 2: 10 <sup>th</sup> Grade	High School Courses	College Courses
Focus: academic success in all courses, review and	ELA 10	Computer Imaging: ART 115 **
audit transcript towards high school diploma,	Global Studies II *	Health: HPE 212 **
professional skill development, further exploration	Earth Science *	Intro to Programming and Computing Lvl 1: CSC 115 **
of career options, industry partners participate in	Geometry *	
projects and offer tours, begin full year of college	Physical Education 10	
courses.		

This is an overview of this pathway and can differ from student to student depending on what high school credits and courses a student may complete in 8<sup>th</sup> grade and how each student completes planned P-TECH courses (both high school and college).

Year 3: 11 <sup>th</sup> Grade	High School Courses	College Courses
Focus: academic success in all courses, review and	ELA 11	Introductory Statistics I: MAT 121 **
audit transcript towards high school diploma,	U.S. History and Government *	Introductory Statistics II: MAT 122 **
professional skill development, further	Applied Science or Chemistry * #	Intro to Programming and Computing Lvl 2: CSC 115 **
exploration of career options, visit industries,	Physical Education 11	Emerging Technologies: TECH 116 **
industry partners participate in projects and offer		
tours, begin cover letter & resume development,		
interview training, research and plan for work-		
based learning experiences.		

Year 4: 12 <sup>th</sup> Grade	High School Courses	College Courses
Focus: complete academic requirements towards	ELA 12A (if do not meet ENG 101 pre-req)	Composition I: ENG 101 **
high school diploma, review and audit college	ELA 12B (if do not meet ENG 101 pre-req)	Composition II: ENG 103 (113) **
transcript, refine cover letter & resume, continue		American Government: POL 100 **
interview training, engage in work-based		Principles of Macroeconomics: ECO 210 **
experiences, register for full-time enrollment at		Physical Education- Walk and Jog: HPE 121 **
Finger Lakes Community College		Physical Education- Lifetime Fitness: HPE 125 **
		A+ Hardware and OS Technologies: CSC 271 **
		Principles of Information Security: CSC 270 **
		Human Communication: COM 100 **

Year 5: 13 <sup>th</sup> Grade (first full year at FLCC)	High School Courses	College Courses
Focus: full-time enrollment in Finger Lakes		Fundamentals of Information Systems: CSC 142 ~
Community College, meet with P-TECH liaison,		Networking Technologies: CSC 260 ~
update cover letter & resume, continue interview		Routing and Switching: CSC 261 ~
training, internship and career searches, engage in		Command Line Network Admin: CSC 248 ~
work-based experiences and internships		Level 2 CSC Elective ~
		Gen Ed SUNY course in History or Civilization ~

Year 6: 14 <sup>th</sup> Grade (second full year at FLCC)	High School Courses	College Courses
Focus: full-time enrollment in Finger Lakes		Linux: CSC 272 ~
Community College, meet with P-TECH liaison,		Systems Administration: CSC231 ~
finalize cover letter & resume, complete work-		Ethical Hacking: CSC 273 ~
based experiences and internships, complete		Computer Forensics and Investigations: CSC 274 ~
A.A.S. degree and graduate, apply for jobs and		Computer Sciences Internship: CSC 250 ~
prepare for interviews, if choose: apply for		
enrollment in a four-year college program		

<sup>\*</sup> Course leading to NYS Regents Examination; Required for Regents Diploma/Graduation (4+1)

# Depends on which course is available for that school year

Additional information on the A.A.S. degree in Networking and Cybersecurity can be found at the Finger Lakes Community College website: Networking and Cybersecurity

- <u>Program Overview</u>
- Curriculum Requirements
- <u>Course Descriptions</u>
- Sample Schedule

College Courses and A.A.S. degree requirements are established by FLCC and may be updated at their discretion

<sup>\*\*</sup> Dual-credit course: counts toward both high school and college credits

<sup>^</sup> Required for high school diploma, usually completed for credit by end of 8<sup>th</sup> grade

<sup>~</sup> FLCC college courses completed in years 5 & 6 and order of completion determined by student and FLCC advisor