

Virginia Career and Technical Education: Cybersecurity Careers

Virginia Department of Education, Office of Career, Technical, and Adult Education



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With every new digital device, connected car, and mobile wallet, the risks are increasing and the need for cybersecurity professionals is now greater than ever. Yet, there is a significant shortage of qualified candidates prepared to fill these roles – an estimated 500,000 to 1 million jobs remain unfilled in the U.S. alone. This gap is expected to grow to a staggering 1.5 million by 2020.

*Symatec article
"Cyber Career Connection"*

"81% of internet crimes involving children that resulted in a face-to-face meeting, involved social media."
Journal of Adolescent Health 27, 2010

"Wi-fi enabled vehicles are at risk of being hacked allowing a third party to take control of brakes, disable the engine, or even track the vehicle's location."
Unknown

"I think everybody in this country should learn how to program a computer because it teaches you how to think."
Steve Jobs

**Emerging
Cyber Careers:**
Computer Crime Investigator
Disaster Recovery Analyst
Forensics Expert
Intrusion Detection Specialist
Virus Technician
Security Analyst
Network Security Engineer
Cryptographer
Cryptanalyst
Security Systems Developer
Chief Information Security Officer

CURRENT OCCUPATIONS	Employed in Virginia, May 2014	Median Annual Wage, May 2014	Predominant Level of Education
Aerospace Engineering and Operations Technicians	280	\$63,370	Some college/Associate's degree
Information Security Analysts	10,270	\$100,340	Bachelor's or more
Medical Records and Health Information Technicians	3,810	\$35,720	Some college/Associate's degree
Software Developers, Applications	36,840	\$102,550	Bachelor's or more
Paralegals and Legal Assistants	8,580	\$49,070	Some college/Associate's degree
Network and Computer Systems Administrators	19,760	\$87,280	Bachelor's or more & work experience
Electricians	16,750	\$46,380	HS & Training/certification
Computer User Support Specialists	20,540	\$51,460	Bachelor's or more
Security and Fire Alarm Systems Installers	2,640	\$43,710	HS & Training/certification
Environmental Engineering Technicians	460	\$43,020	Some college/Associate's degree

Source: Data on current Virginia employment and median wage come from Bureau of Labor Statistics May 2014 data, available at www.bls.gov/emp/#data
 National employment estimates (2014) and projections (2024), as well as example job titles, come from Bureau of Labor Statistics Occupational Projections Data, released on December 8, 2015,
 and available at www.bls.gov/emp/#data