

# THE COMPLETE GUIDE TO STARTING YOUR CAREER IN CYBERSECURITY



## SECURE YOUR FUTURE WITH A CAREER IN CYBERSECURITY



As you decide on the career path that's right for you, it's important to choose one that will provide a secure and reliable future. Choosing a career with a variety of career options sets you up for continued success and advancement.

In today's world, technology is all around us, from our mobile phones, to our cars, and even our appliances. Behind the scenes, there are computer systems, networks, and databases that work to ensure our technology is running smoothly.

Keeping this technology secure and free from cyberattacks is critical to every modern organization, and this has led to the growing field of cybersecurity!



# WHY CHOOSE A CAREER IN CYBERSECURITY

As our lives become more dependent on technology, it's essential that systems, networks, and databases are kept secure. Due to the changing technology and need for security, there's a continual need for cybersecurity professionals. Organizations of all types, including businesses, nonprofits, and governments, are hiring cybersecurity professionals to keep their systems secure.

With so many organizations hiring cybersecurity positions and the current shortage of trained cybersecurity professionals, those who enter this field enjoy a high level of job security, according to the 2019 Occupational Outlook Handbook from the U.S. Bureau of Labor Statistics.

For these reasons, choosing an exciting career in cybersecurity to help organizations protect their data and systems from cyberattacks and threats, is a smart career move that will pay off well into the future!

# NEED FOR CYBERSECURITY PROFESSIONALS

Cybercrime is projected to cost the world \$6 trillion annually by 2021, according to Cybersecurity Ventures' 2019 Annual Cybercrime Report. Cyberattacks are the fastest growing crime in the U.S. and all types of organizations are at risk, including small businesses, large corporations, governments, healthcare facilities, nonprofits, and many more.

This increase in cyberattacks and cybercrime has led to a huge demand for skilled cybersecurity professionals to protect against these threats. According to the 2019/2020 Official Annual Cybersecurity Jobs Report, there will be 3.5 million unfilled cybersecurity jobs globally by 2021. This means that right now is the perfect time to start your cybersecurity career!

**3.5  
MILLION**  
**UNFILLED  
CYBERSECURITY  
JOBS GLOBALLY  
BY 2021**



# CYBERSECURITY CAREER OPPORTUNITIES

As an increasing amount of organizations need vital cybersecurity professionals, they're all looking for someone just like you with the training, knowledge, skills, and tools to protect and defend against cyberattacks.

For entry-level cybersecurity professionals who want to get started in this growing field, there are many exciting career opportunities and a variety of industries hiring trained professionals.

## CAREER OPPORTUNITIES

- Junior Security Analyst
- Cyber Operation Specialist
- Data Recovery Specialist
- Incident Responder
- Malware Analyst
- Pen Tester
- Computer Support Analyst
- Help Desk Analyst

## INDUSTRIES HIRING

- Healthcare
- Government
- Education
- Oil and Gas
- Information Technology
- Retail
- Financial services
- Insurance

With so many industries hiring qualified cybersecurity professionals and the expanding number of entry-level cybersecurity career opportunities, this in-demand career field may be a perfect fit for you!



# WHAT IS CYBERSECURITY EXACTLY?

Now that you know why cybersecurity is such a great career choice, you may be wondering, what exactly is cybersecurity? What do cybersecurity professionals do?

Cybersecurity professionals are tasked with preventing systems, devices, and data from unauthorized access and attacks. Here are some of the things cybersecurity professionals do while on the job.

## ASSESS

Performing risk and threat assessments of current internal systems is the first step to effective cybersecurity. This process involves understanding the current state of an organization's systems, networks, and data, and then comparing that to cybersecurity industry best practices.

## PROTECT

Utilizing cybersecurity techniques to protect systems against attacks and unauthorized access is essential to keeping internal data and devices secure. Cybersecurity professionals implement network security, standards, and protocols to protect critical organizational systems.

## PROTECT

Using cybersecurity knowledge and tools to prevent attacks from hackers and intruders is vital to the success of modern organizations. Trained cybersecurity professionals use their knowledge of databases, networks, firewalls, and encryptions to prevent malicious threats and system attacks.

## DEFEND

Creating barriers around critical systems and sensitive information works to defend against intruders accessing personal and private information. With proper barriers and defense systems in place, data, systems, and devices are much safer from cyberattacks.

## RECOVER

Helping today's technology-driven organizations recover from data breaches and cyberattacks is essential for protecting information assets, systems, and devices after an attack has occurred. Effective cybersecurity recovery is critical and can help prevent future attacks.



# WHAT DO CYBERSECURITY EMPLOYERS NEED?

Ensuring the security of systems, devices, data, and networks is critical to the success of organizations in today’s technology-driven world. Businesses of all types need cybersecurity professionals with the right combination of degree, skills, experience, and certifications. These credentials show potential employers that you are qualified and job ready.

## Degree

According to the (ISC)<sup>2</sup> 2019 Cybersecurity Workforce Study, to qualify for most cybersecurity job opportunities, you need to have a degree, and this includes entry level positions, as well as those requiring experience. Cybersecurity is an essential aspect of the modern business world, and employers need to know that you are well-trained and knowledgeable in a variety of cybersecurity areas that are up to date with current industry standards. Earning a degree in cybersecurity shows potential employers that you have the knowledge and expertise they need.



## Skills

Keeping organizations and their systems, devices, and data secure requires a specific set of hands-on skills. Before applying for jobs, you need to learn and practice the tools and techniques for effective cybersecurity, such as risk management, risk mitigation, threat management, and intrusion detection. Employers need candidates who are ready to hit the ground running and use their hands-on skills to prevent, detect, and combat cybersecurity threats.





# WHAT DO CYBERSECURITY EMPLOYERS NEED?

## Experience

Since effective cybersecurity is so critical to the success of modern organizations, employers value real-world cybersecurity experience when making hiring decisions. Candidates who have hands-on experience with real cybersecurity risks, threats, and attack situations are better prepared to handle these scenarios when they happen on the job. Choosing a program that will give you this valuable experience while earning your degree will set you apart from other candidates when applying for jobs.

## Certifications

Earning and maintaining cybersecurity industry certifications\* shows employers that you have the specific knowledge and skills they need. Certifications are created by independent, third-party organizations with high quality standards. By earning these professional certifications, you're showing employers that you have met these high-quality standards. Many of today's cybersecurity employers require certifications, so choosing a program that enables you to earn them can increase your job opportunities after graduation.





# WVJC ONLINE'S CYBERSECURITY DEGREE PROGRAM

Now that you know exactly what cybersecurity employers need, you're ready to get started! We created our Cybersecurity associate degree program to give you just what you need to start your career in this exciting field!

## Fast Track Degree

To qualify for many cybersecurity career opportunities, it helps to have a degree, but where do you begin? WVJC Online's Cybersecurity associate degree program is designed specifically for people who want to start their career in cybersecurity at an entry level. Our program teaches the fundamental areas of cybersecurity, so even those with no technology background can succeed. By combining a degree, hands-on skills, real-world experience, and valuable certifications all into one program, you get exactly what you need to begin your career. Even better, you can get all this in only 18 months with our fast track degree program.

## Hands-On Skills

When you enroll in our Cybersecurity associate degree program, you develop skills and gain experience with career-focused classes designed to prepare you for a successful career. We've aligned our program with the needs and requirements of cybersecurity employers, providing you with the perfect jump-start to your career. Some of the hands-on skills you will learn include:

- Risk Management
- Cyber Incident Response
- Security Architecture and Tool Sets
- Threat Management
- Vulnerability Management
- Virtual Infrastructures





# WVJC ONLINE'S CYBERSECURITY DEGREE PROGRAM

## Real-World Experience

WVJC Online cybersecurity students also have the opportunity to practice the valuable skills they learn in an externship with real-world security situations. Externships take place in real work environments, so students can apply their training and begin building relationships with potential employers. Completing an externship gives students a head start in their cybersecurity career because they can get the experience that cybersecurity employers want while also completing their degree.

In addition to valuable externships, WVJC Online also offers career services, which helps students get started in their careers when they graduate. We have spent years building relationships with employers and take pride in helping our students get the job they want.

## Valuable Certifications

Many cybersecurity employers today require job candidates to have industry certifications because they show that you know how to do the job. Since we built our Cybersecurity associate degree program to meet the needs of employers, we have included preparing for valuable certifications and the opportunity to sit for them as part of our program. The professional cybersecurity industry certifications you will sit for include:

### NETWORK+ CERTIFICATION\*

- Design, configure, manage, and maintain computer network architecture and devices
- Implement network security, standards, and protocols
- Basic understanding of cloud computing best practices
- Critical security concepts that help networking professionals work with security practitioners

### SECURITY+ CERTIFICATION\*

- Worldwide standard for best practices in IT, cybersecurity networking, and operational integrity
- Latest trends and techniques in risk management, risk mitigation, threat management, and intrusion detection
- Department of Defense 8570 compliant

### CYBERSECURITY ANALYST+\*

- Prevent, detect, and combat cybersecurity threats
- Identify malware and advance persistent threats
- Perform data analysis, vulnerability, risk, and impact assessments
- Configure threat-detection tools
- Secure and protect applications and systems

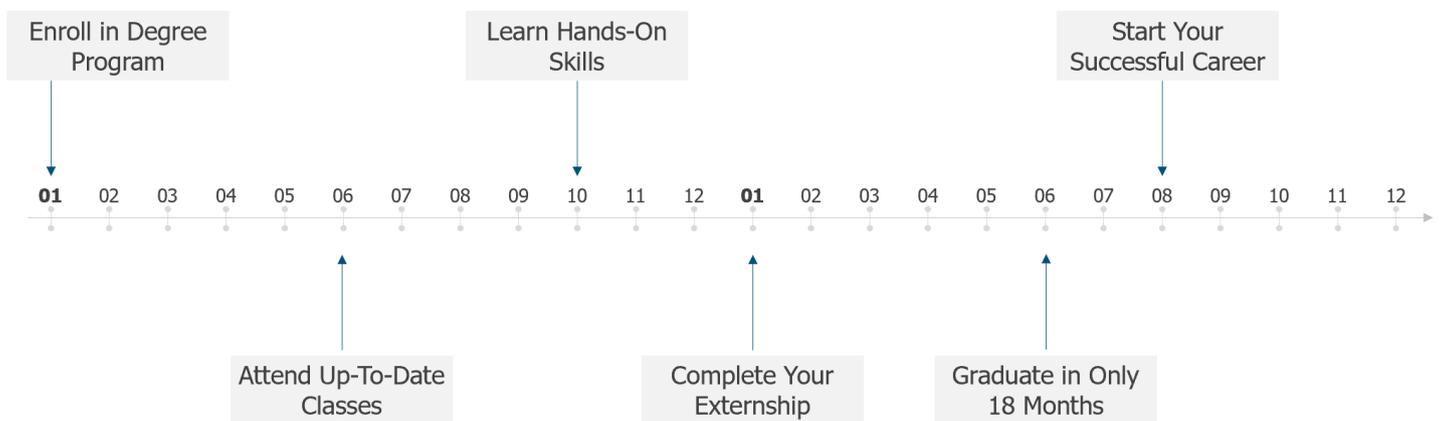
\*Certification is contingent on passing the corresponding industry certification exam.



# GET ON THE FAST TRACK TO YOUR CYBERSECURITY CAREER

You want to be in control of your life and start your new cybersecurity career as soon as possible, so we designed our Cybersecurity degree to help you do just that. Enrolling in our Cybersecurity program will put you on the fast track to your cybersecurity career because you complete your classes and graduate in only 18 months.

With our career-focused online classes teaching hands-on skills and cybersecurity best practices, you don't have to spend 4-6 years in college taking extra courses you don't even need. The classes in our Cybersecurity program were designed to give you exactly what you need to start your new career and excel in the exciting field of cybersecurity.





# WHY CHOOSE WVJC ONLINE'S CYBERSECURITY DEGREE

It's important to choose the right college and cybersecurity program that provides you with the degree, skills, experience, support, and certification opportunities needed to start your career.

## WVJC Online Benefits

At WVJC Online, we are committed to empowering students to reach their full potential by providing the training, skills, and knowledge to start a successful and rewarding career. WVJC Online is the right choice for you because we offer:

- A WE CARE Approach
- 24/7 Tech Support
- Academic Support
- Interactive Cybersecurity Labs
- Cybersecurity Externships
- Career Services
- Financial Aid for Those Who Qualify

Throughout your journey to start a new career in cybersecurity, we will fully support and help you in every way, because your success is our success.

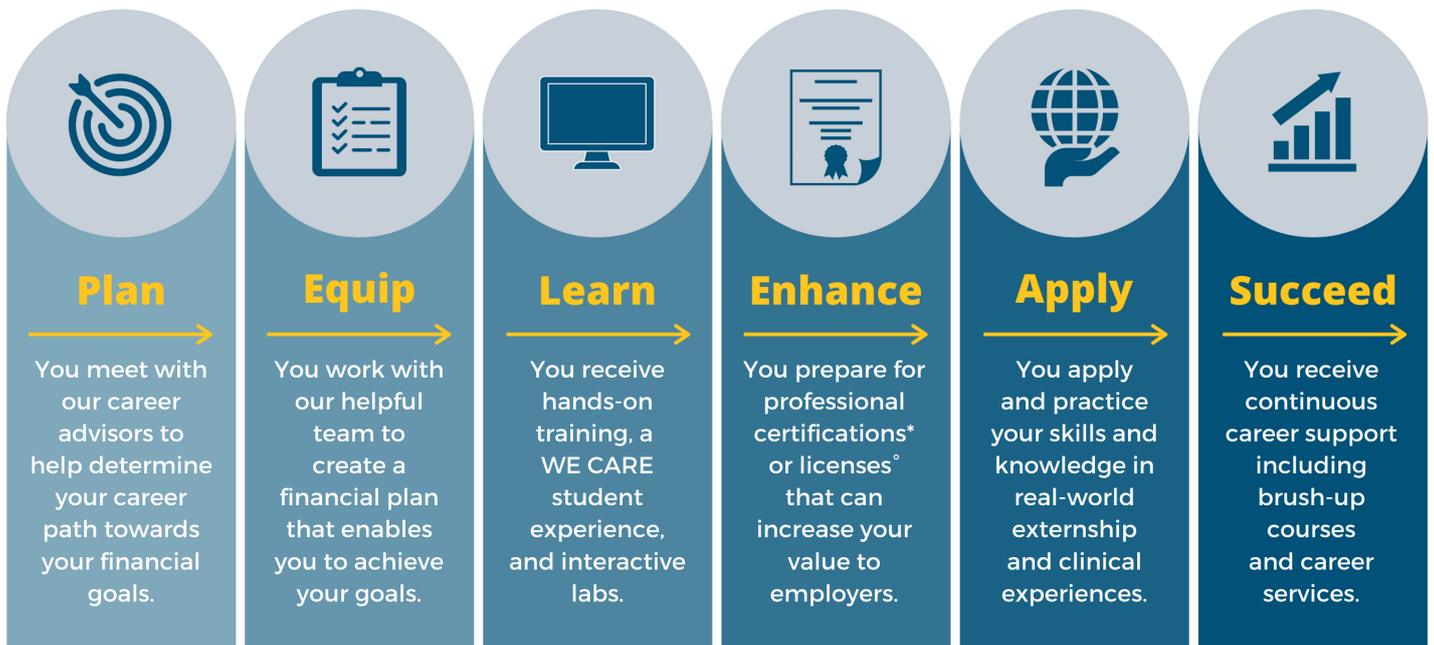




# WHY CHOOSE WVJC ONLINE'S CYBERSECURITY DEGREE

## Our Proven Process

At WVJC, we have over 100 years of experience in helping our students get on the fast track to career success. Our purpose is to empower change by creating opportunity, and we take pride in helping students reach their full potential and achieve their career goals.



\*Certification is contingent on passing the corresponding industry certification exam.

<sup>o</sup>Licensure is contingent on passing the corresponding industry license exam.



# WHY CHOOSE WVJC ONLINE'S CYBERSECURITY DEGREE

## Cybersecurity Advisory Board

To ensure our Cybersecurity program meets the needs and requirements of today's employers, we've assembled a Cybersecurity Advisory Board of experts with many years of wide-ranging experience in the profession. These industry professionals who actively work in the cybersecurity field provide program guidance, ensuring that WVJC Online's Cybersecurity program is up to date with industry standards and best practices.



**Brandon Hicks**

Cybersecurity Program Director, WVJC Online

Brandon L. Hicks is the Director of the Cybersecurity Program at WVJC Online. Brandon holds a Bachelor of Science in Information Systems with a concentration in Cybersecurity Management from Strayer University. He previously designed and implemented data and voice technologies for the transportation and healthcare industries.



**Craig Behr**

Senior Vice President, Citynet

Craig is the Senior Vice President at Citynet and leads the security practice for Citynet's Managed Services, among other responsibilities. Craig is a Technical Solutions Specialist with professional interest in enterprise networking, internet and network security, and risk management of information systems.



**Curtis Simms**

Information Security Leader, BJC HealthCare

Curtis is an Information Security Leader at BJC HealthCare. He provides security leadership for threat intelligence, vulnerability management, penetration testing, incident management, and response. Curtis is a Veteran of the Persian Gulf War and has over 30 years of IT and cybersecurity experience.



**Isaac Lambert**

Principal Cyber Process Manager, Capital One

Isaac is the Principal Cyber Process Manager at Capital One and was previously employed at NASA's Independent Verification and Validation Program as a Cybersecurity Assurance Specialist. There he developed new capabilities in cyberspace and intelligence, while building relationships with government and industry partners.



**Robert Beveridge**

Sr. Cybersecurity Engineer, Carnegie Mellon University

Robert is a Sr. Cybersecurity Engineer at the Software Engineering Institute located at Carnegie Mellon University in Pittsburgh, PA. He manages a team that develops cybersecurity training and conducts research for the Department of Defense. Mr. Beveridge is an accomplished speaker, speaking at training conferences as far as Tokyo, Japan.



**Rob Dixon**

Director of Information Systems Security, Advantage Technology

Rob is the Director of Information Systems Security at Advantage Technology where he is responsible for leading the Information Security Services team on behalf of their customers. Rob has nearly 20 years of industry experience in information security and, in 2010, won the Risk Management Initiatives award for the state of West Virginia.



# WHY CHOOSE WVJC ONLINE'S CYBERSECURITY DEGREE

## WVJC Student Reviews

We love helping our students start exciting, new careers and we truly care about your success. Check out what some WVJC Online students have to say about their experience!

“ WVJC was an excellent choice for me. Earning my degree online while still being able to be at home to care for my family was fantastic! ”  
Heather, WVJC Online Student

“ I absolutely recommend WVJC Online! I felt like my education needs were as important to them as they were to me! ”  
Miranda, WVJC Online Student

“ I have had an amazing experience. The staff are hands-on, and they stay in touch. Instructors make themselves available when needed. ”  
Lori, WVJC Online Student

## GET STARTED TODAY

Start your journey to a successful and fulfilling cybersecurity career with WVJC Online in just three steps. Visit [wvjc.edu](http://wvjc.edu) or call 877-25ONLINE to get started now!

**PLAN**  
Meet with an Admissions Advisor to plan your path to a successful career

**ENROLL**  
Enroll in WVJC Online's entry level Cybersecurity associate degree

**START**  
Start school and get on the fast track to a successful, fulfilling cybersecurity career