Applications & Infrastructure Security Program (Cybersecurity)

What is cybersecurity?

Every day we hear about major companies and retail operations getting "hacked," and the list keeps growing. Now you can be part of the solution to these cyber crimes by joining the rapidly growing field of cybersecurity. You will learn to protect computers, networks, programs, and data from unintended or unauthorized access, change, or destruction.

Enrolling in Merritt College's Applications and Infrastructure Security Program can lead you on a career path toward working in software (Applications) or hardware (Infrastructure). Each program is designed to be completed in two years with students earning a certificate or degree and the knowledge to pass national certification tests.

Who developed the program?

The program was designed by members of CISE (Consortium of Information System Executives) and Silicon Valley security experts who work with specially chosen colleges to provide high-tech learning opportunities for students. As part of the program, industry professionals team-teach alongside Merritt College faculty in a hybrid format using a combination of classroom instruction and virtual lab assignments with online NETLAB+.

Will I get hands-on experience?

Yes! The last three semesters of the curriculum include information security internship opportunities at workplaces throughout the Bay Area. By taking courses based on industry best practices, students will be able to assist in the design, development, and installation of information security systems and services; help to prevent, detect, and respond to security threats and attacks; participate in research, analysis, and review of security product; and provide services to protect against security threats.

What are the job opportunities?

According to the U.S. Bureau of Labor Statistics, the rate of growth for jobs in information security is projected at 37% through 2022. That's much faster than the average for all other occupations. Job opportunities for cybersecuity specialists can be found in both the public and private sectors. Potential employers include government agencies, military contractors, IT service companies, professional services firms, financial institutions, and cybersecurity consulting firms.

How do I get started?

To apply and register, go to www.peralta.edu. For further information, contact Anita M. Black, Program Director, at ablack@peralta.edu or Courtney Brown at courtneybrown@peralta.edu and/or go to www.merritt.edu/wp/securityprogram.

What Students Are Saying About Merritt's Cybersecurity Program

"This program provides a comfortable introduction to a career in cybersecurity even if you don't have a background in it. It's a safe environment to earn a certificate or degree."
—Farid Howard

"This is a great foundation to develop my career as a security professional. I really like that the instructors work in the industry and are passionate about what they do."
—Marcus Jackson

"I've done different kinds of work but nothing felt like a long-term career until now. I've learned so much already, and I'm excited and ready to put everything into this and give it a go."
—Ismael Ahmad

"This is a great opportunity for us to make a difference in the world with the security problems we are facing in this century. I am confident I will get a job in this industry as professionals are needed in these roles."
—Abdelwasie Mohammed

"I learned enough in two semesters to join my class team in winning a national Cybersecurity competition. I credit our success to the fast-paced program and our experienced instructors from top security companies in Silicon Valley."
—Andy Bittner

Applications Security Program

First Year - Fall Term	Units
CIS 5 Intro to Computer Science	5
or	or
CIS 6 Intro to Computer Programming	6
CIS 71 Intro to Info Systems Security	3
Total Units	**8-9**

Spring Term	
CIS 55 Hacker Techniques, Exploits, and Incident Handling	3
CIS 60 Computer Forensics	3
Total Units	**6**

Summer Term	
COPED 469 Work Experience	1
Total Units	**1**

Second Year - Fall Term	
CIS 56 Secure Coding in Java and .Net	3
CIS 59 Applications in Info Security	3
COPED 469 Work Experience	1
Total Units	**7**

Spring Term	
CIS 57 Web Application PEN Testing	3
CIS 54 Security Strategic Planning, Policy, and Leadership	3
COPED 469 Work Experience	1
Total Units	**7**

Classes may be taken out of sequence with permission from a faculty member.

Infrastructure Security Program

First Year - Fall Term	Units
CIS 5 Intro to Computer Science	5
or	or
CIS 6 Intro to Computer Programming	6
CIS 72 Systems & Network Admin.	3
Total Units	**8-9**

Spring Term	
CIS 55 Hacker Techniques, Exploits, and Incident Handling	3
CIS 60 Computer Forensics	3
Total Units	**6**

Summer Term	
COPED 469 Work Experience	1
Total Units	**1**

Second Year - Fall Term	
CIS 53 Intrusion Detection In-Depth	3
CIS 52 Cloud Security Fundamentals	3
COPED 469 Work Experience	1
Total Units	**7**

Spring Term	
CIS 58 Hacker Guard: Security Baseline Training for IT	3
CIS 54 IT Security Strategic Planning, Policy and Leadership	3
COPED 469 Work Experience	1
Total Units	**7**

Classes may be taken out of sequence with permission from a faculty member.
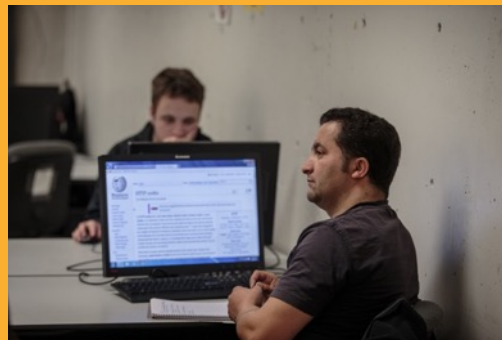
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Cybersecurity

- **Applications**
- **Infrastructure**

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www.merritt.edu/wp/securityprogram

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