PENINSULA COLLEGE

AAS Degree

Cybersecurity & Computer Forensics

Year One (Sample schedule)

Quarter One (Fall)

- ☐ CSIA 110 Intro to Cybersecurity & Cybercrime 5
- ☐ C SC 100 Introduction to Computer Science.....5
- ☐ AMATH 121 Applied Math 5

Quarter Two (Winter)

- ☐ IT 107 Intro to Networking 5
- ☐ CSIA 185 Risks Control and Encryption 5
- ☐ CSIA 280 Intro to Computer Forensics and Tools.....5

Quarter Three (Spring)

- ☐ IT 114 Database Design and Implementation.....5
- ☐ CSIA 190 Securing the Modern Enterprise.....5
- ☐ SOCSI Contemporary Global Issues 5

Year Two (Sample schedule)

Quarter Four (Fall)

- ☐ CSIA 195 Ethical Hacking.....5
- ☐ IT 225 Windows Domains OR IT 260 Unix/Linux Systems Administration (Winter quarter).....5
- ☐ ENGL& 101 English Composition I.....5

Quarter Five (Winter)

- ☐ PSYC& 100 General Psychology 5
- ☐ CSIA 290 Cybersecurity Capstone (Competition class) 5
- ☐ CJ 121 Criminal Evidence 5

Quarter Six (Spring)

- ☐ Media 206 Database Driven Websites 5
- ☐ AOS 170 Business Communications.....5
- ☐ Advisor Approved Elective.....5

Total Credits Required 90

Specifics

Length of Program

Courses with prerequisites, and the placement level of the student, may extend the Length of Program listed on this page.

Which Quarter Can I begin?

The typical student schedule is based on entering the program during the fall quarter, however some programs allow students to enter in the winter or spring as well. Since not all do, please confirm with an advisor whether this program must be started during a specific quarter or not.

Details

Completion Award: AAS Degree
Length of Program: 6 Quarters
Program Code: CISCCAPT

Program Coordinator (contact with questions)

Eric Waterkotte (360) 417-6270
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Apply online: http://pencol.edu/GetStarted

Notes

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AAS Degree

Cybersecurity & Computer Forensics

Program Description

Increased cybersecurity threats and new homeland security policies have produced a growing national demand for cybersecurity professionals with knowledge of cybersecurity, ethical hacking, intrusion testing, vulnerability assessment, and computer forensics. In addition, the growth of universal and mobile computing require new approaches to information security and the protection of information systems from unauthorized access, modification, or destruction. The Cybersecurity and Computer Forensics program prepares students for entry level employment in cybersecurity and computer forensics careers including cyber incident and response, vulnerability detection and assessment analyst, computer forensic analyst, and computer forensics investigator. Foundation courses introduce students to the legal, ethical, and theoretical issues in cybersecurity and computer forensics technology. Core courses expand student depth and skills in ethical hacking, criminal justice, evidentiary analysis, and the development of a forensically sound environment. Capstone courses provide practicum experience and opportunity to participate in the Collegiate Cyber Defense Competition (CCDC). Successful completion of this program leads to an Associate of Applied Science degree Cybersecurity and Computer Forensics. Students are required to have access to computer, internet, and browser. This degree can be completed online.

(Students who plan to transfer to Western Washington University's BS in Computer and Information Systems Security program must complete MATH& 141 Pre Calculus I, MATH& 142 Pre Calculus II and MATH& 151 Calculus: Analytic Geometry. Please note these Math classes cannot be completed online.)

Program Goals

- The program encourages students to explore the legal, ethical, and global impact of cybercrime on private, public, and personal computing infrastructures.
- The courses are based on the CNSSI standards established by the U.S. National Security Agency (NSA) for training information systems security professionals.
- The program provides up to date curriculum that adapts to the rapidly changing field of cybersecurity and computer forensics.
- The Peninsula College Cybersecurity and Computer Forensics program is significantly more cost effective than most private and public schools.

Student Learning Outcomes

When this program is completed, the student will be able to:

- Demonstrate an understanding of the core concepts, tools, and methods used to secure computer systems.
- Identify and present indicators that a cybersecurity incident has occurred.
- Apply criminal justice methods to cybersecurity and computer forensic investigations.
- Plan, implement, and evaluate penetration testing and ethical hacking of computer systems.
- Identify, analyze, and mitigate threats to internal computer systems.
- Collect, process, analyze, and present computer forensic evidence.
- Work in teams to analyze and resolve cybersecurity issues.
- Apply critical thinking skills to risk analysis of computer systems.

Career Opportunities

There is a high demand for talented people with cybersecurity skills; and an increasing number of employers are seeking workers with knowledge of Computer forensics tool. Graduates may find positions with a variety of critical infrastructure companies and organizations in the public and private sectors. Some employers may require employee background checks.

Potential Positions and Earning

Potential positions include: Cybersecurity specialist, information security analyst, incident responder, system and network penetration tester, security monitoring and event analysis, and computer forensic analyst.

For current employment and wage estimates, please visit and search for the relevant occupational term:
www.bls.gov/oes

Assessment

Students entering this program should have good familiarity with computer software and hardware in the Windows or MAC environment. Students are required to place into the English and math/applied math courses required for this program. Learn more about placement options by visiting the Assessment and Placement website: http://www.pencol.edu/placement-testing

Approximate Additional Costs

Books, supplies and miscellaneous fees
(per quarter)..... $200.00 - $250.00