

MOORPARK COLLEGE B.S. Applied Cybersecurity and Network Operations



CAREER PATHWAY

Job Placement/Promotion

Certificates/Degrees

COMPLETION

Career Education Pathways/Apprenticeships

PROGRESS

High School/Adult Education/Dual Enrollment

ENTRY

Contract Education/Adult Education

ACCESS



PROGRAM OVERVIEW



WHAT

Addressing a growing unmet need in the Information Communications Industry that leads to a high wage career.



HOW

4 year 120 unit program aligned with the National Center of Excellence which can be completed in Ventura County.



WHY

Equity & Student Centered

To provide an affordable pathway for students who would otherwise not be able to attend a 4-year degree program at a CSU or UC campus.

PROGRAM OVERVIEW

Students complete 86 Major Units, plus 34 General Education Units for a total of 120 units.

Students will have a strong understanding in applying Cybersecurity principles and best practices, while completing courses aligned with professional certification from Microsoft, AWS, CompTIA, Cisco, VMware, etc. Students will have intermediate to advanced skills for workforce entry into Cybersecurity-related careers.

PROGRAM LEARNING OUTCOMES

- Develop complex critical-thinking, problem-solving, analytical, and communication skills and promote teamwork and a strong work ethic through hands-on application of cybersecurity principles.
- Assess and protect critical infrastructure and systems that are either On-Premise or Cloud-based by applying Cybersecurity operational best practices and methodologies.
- Develop and deploy resilient cyber defense operations for real-time detection, analysis, and mitigation of threats to core operational technology components and systems.
- Understand the application of basic cryptographic techniques to protect data in computer and communication environments.
- Conduct incident response that conforms to accepted professional standards. (NICE, NCyTE, and NSA).
- Analyze and navigate policy and legal, ethical, and compliance aspects of information security.
- Analyze data to develop adaptive information security plans, programs, and risk management processes.

Upper Division Coursework: Upper-Division – 51 Major Units + 9 GE

Year 3

Semester 1

4U – ACNO M301 - Advanced Cisco II

3U – ACNO M302A – Microsoft Hybrid Server I

3U – ACNO M304 – Virtualization Technology

3U – ACNO M305 – AWS Cloud Foundations

3U – ENGL M49 – Technical Writing

Semester 2

3U – ACNO M306 Azure Cloud Administrator

3U – ACNO M307 AWS Cloud Architecture

3U – ACNO M302B Microsoft Hybrid Server II

3U – ACNO M308 Firewall Security

3U – Bus M Project Management

Upper Division Coursework: Upper-Division – 51 Major Units + 9 GE

Year 4

Semester 1

3U – ACNO M401 Cloud Databases

3U – ACNO M402 Certified Ethical Hacker

3U – ACNO M403 CyberOps

2U – ACNO M404 Identity Protection Security

3U – Phil M402 Cloud and Cybersecurity Ethics

Semester 2

2U – ACNO – M405 Azure Cloud Security

3U – ACNO – M406 Comptia Advanced Security

Practitioner

3U – ACNO – M407 AWS Cloud Security

3U – ACNO M408 Device & Network Forensics

3U – ACNO M409 CISA Risk Management

1U – ACNO – M80 Internship



PARTNERS

- CSU Northridge
- CSU Channel Islands
- The City of Moorpark
- Assembly Woman Jacqui Irwin
- Ventura County Naval Base
- 5 Community Colleges

- Alcatel Technologies
- Applied Cybersecurity Workforce Coalition
- Oversight IT Consulting
- STS Industry
- Virtual Testing