Columbus State University Grows with INE Security

CSU bridges the gap in demand for cybersecurity experts through technical cybersecurity courses powered by INE Security.

Overview of Columbus State University

Columbus State University (CSU) is a public university located in the southeastern United States, serving approximately 7,000 students annually.

The university offers a diverse range of 90 undergraduate and graduate programs, establishing a reputation for excellence in various fields. Among its notable attributes are a robust athletics program and a thriving international student community, especially within the computer science department. CSU provides comprehensive study abroad opportunities in Mexico and England and maintains a strategic cybersecurity coalition with the University of West Florida (UWF) in Pensacola, Florida.

COLUMBUS STATE UNIVERSITY

7000
Students

90
Undergraduate & Graduate programs

Background

CSU's dedication to providing cutting-edge education in cybersecurity is evident through its accreditation and industry-recognized certifications. This commitment distinguishes CSU from other institutions that lack such credentials in their cybersecurity programs. Recognizing the growing demand for skilled cybersecurity professionals in Georgia, CSU launched the NEXUS program in 2017. **This initiative was driven by the state's identified shortage of 15,000-30,000 IT and cybersecurity professionals.**

The Challenge

Before 2019, CSU's cybersecurity education primarily consisted of BA and MA-level courses that lacked hands-on labs and certification opportunities. This gap in practical training and certification posed significant challenges for students aspiring to enter the cybersecurity workforce, where hands-on skills and accredited certifications are crucial for career success.

The Solution

In 2019, CSU partnered with INE Security to integrate the Junior Penetration Tester (eJPT) certification into its curriculum. Extensive research highlighted the hands-on nature, robust application, and immediate feedback on assessments of INE Security's eJPT learning path. These features are essential in a high-pressure, time-constrained academic environment, making the eJPT certification an ideal addition to CSU's cybersecurity curriculum.

Implementation & Usage

CSU's cybersecurity lecturers spearheaded the integration of the eJPT certification program. Since its inception, **122 students have registered and completed the certification.**The program follows a progressive training model, starting with IT Fundamentals and CompTIA certifications, followed by eJPT, and culminating in the SEC+ certification.

The eJPT certification serves as a crucial precursor to the SEC+, ensuring that students acquire the foundational skills needed for advanced cybersecurity roles. The program structure allows students to attempt the certification immediately after completing the course, achieving a 90% pass rate on the first attempt. Students who do not pass initially receive immediate feedback and 10% successfully retake the exam on their second attempt.

Junior Penetration Tester (eJPT) Learning Objectives:

The Junior Penetration Tester (eJPT) Learning Path is designed to be the first milestone curriculum for someone with little to no experience in cybersecurity - simulating the skills utilized during a real-world engagement. Upskill and cross-skill your security teams to ensure base-level understanding across your organization.

Assessment Methodologies

- Locate endpoints on a network
- Identify open ports and services on a target
- Identify operating system of a target
- Extract company information from public sources
- Gather email addresses from public sources
- Gather technical information from public sources
- Identify vulnerabilities in services
- Evaluate information and criticality or impact of vulnerabilities

Host & Network Penetration Testing

- Identify and modify exploits
- Conduct exploitation with metasploit
- Demonstrate pivoting by adding a route and by port forwarding
- Conduct brute-force password attacks and hash cracking

Host & Network Auditing

- Compile information from files on target
- Enumerate network information from files on target
- Enumerate system information on target
- Gather user account information on target
- Transfer files to and from target
- Gather hash/password information from target

Web Application Penetration Testing

- Identify vulnerabilities in web applications
- Locate hidden file and directories
- Conduct brute-force login attack
- Conduct brute-force password attacks
- Conduct web application reconnaissance

Key Metrics

122

Enrollment & Completion

Since 2019, 122 students have enrolled and completed the eJPT certification through the CSU NEXUS Program.

87%

Emplyoment Rates

87% employment rate within one month of program completion.

100%

Pass Rates

100% pass rate, with most students passing on the first attempt.

Results

High Pass Rates

Out of 122 students, 100% passed the eJPT certification, with the majority succeeding on their first attempt. Only 24 students required a second attempt, showcasing the effectiveness of the hands-on training and immediate feedback provided by the program. Students who do not pass initially receive immediate feedback and 10% successfully retake the exam on their second attempt.

Employment Success

87% of graduates secure employment within one month of completing the program. Key industry partners such as Global Payments, Synovus, AFLAC, Tyler Technologies, and Lumen regularly hire CSU students. This high employment rate reflects CSU's strong industry connections and the program's success in preparing students for the workforce.

Professional Development

The program includes comprehensive professional development, including mock interviews with industry professionals. This preparation ensures that students are ready for successful careers in cybersecurity, enhancing their confidence and interview skills.

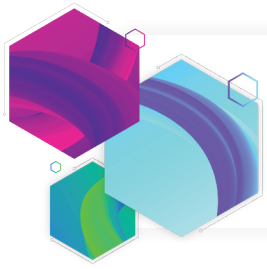
Academic Context and Supporting Studies

Research by the National Initiative for Cybersecurity Education (NICE) emphasizes the importance of hands-on experience and certifications in cybersecurity education. Studies have shown that practical skills and industry-recognized certifications significantly enhance employability and career advancement opportunities in the cybersecurity field (NICE, 2019).

Furthermore, a report by the Center for Cyber Safety and Education highlights that certified professionals are more likely to be hired and command higher salaries than their non-certified counterparts. This underscores the value of CSU's approach in integrating certifications like eJPT into their curriculum (Center for Cyber Safety and Education, 2020).

Conclusion

Columbus State University's partnership with INE Security has transformed its cybersecurity education. By integrating the eJPT certification, CSU has equipped students with the hands-on skills and certifications needed to excel in the industry. The program has not only improved pass rates and employment outcomes but also enhanced CSU's reputation as a leader in cybersecurity education. By addressing the practical training gap and leveraging strong industry partnerships, CSU continues to empower future cybersecurity professionals, meeting the growing demand for skilled talent in Georgia and beyond.



Learn how you can power your program with INE Security.

Schedule a meeting with our experts today.

References

1. National Initiative for Cybersecurity Education (NICE). (2019). *The Importance of Hands-On Experience in Cybersecurity Education.* Retrieved from NICE Website.
2. Center for Cyber Safety and Education. (2020). *Cybersecurity Certifications and Career Advancement.* Retrieved from Cyber Safety Website.

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As a result, we have built a training platform which includes a suite of Networking, Cyber Security, Data Science, and Cloud learning content giving you the opportunity to perfect your skills or practice some new ones on your journey to becoming a well-rounded professional.