



# NJCU COLLEGE OF PROFESSIONAL STUDIES BACHELOR OF SCIENCE IN CYBER SECURITY

The Bachelor of Science in Cyber Security program provides students with the necessary knowledge, skills and professional training via the courses taught, as well as training through the state-of-the-art Cyber Security lab and Cyber Security club. The program offers a balance between the theoretical and deep technical skills of cyber security. The program prepares our graduates to face the futuristic security-related challenges emerging from our internet-connected world, the rapid adoption of mobile devices and the ever-increasing role of software applications in our daily life.

## Career Opportunities in Cyber Security

The field of cyber security is one of the fastest-growing career paths, with many opportunities for workers to start and advance their careers. A B.S. in Cyber Security prepares you for the following positions:

### Entry-Level

- Cybersecurity Specialist
- Cyber Crime Analyst
- Incident Analyst/Responder

### Mid-Level

- Cybersecurity Analyst
- Cybersecurity Consultant
- Penetration & Vulnerability Tester

### Advanced-Level

- Cybersecurity Manager
- Cybersecurity Engineer
- Cybersecurity Architect

## Federally Designated in Cyber Security and Intelligence

NJCU is one of the few universities in the nation to have federal designations in both cyber security and intelligence. We've been named as a National Center of Academic Excellence in Cyber Defense Education (CAE-CDE) by the National Security Agency (NSA) and Department of Homeland Security (DHS), as well as a federally-designated Intelligence Community Center for Academic Excellence (IC CAE) through a grant award from the Office of the Director of National Intelligence.



## Home of the Center for Cyber Security

The New Jersey City University Center for Cyber Security is an interdisciplinary center for education, training and research. The center aims to provide current and future professionals with the knowledge and skills necessary to compete and excel within the cyber security community. Our students' foundation is built through their degree program, certificates and research opportunities.

### NJCU Department of Professional Security Studies

New Jersey City University  
2039 John F. Kennedy Boulevard  
Jersey City, NJ 07305  
201-200-2275  
cybersecurity@njcu.edu

[njcu.edu/pss](http://njcu.edu/pss)



## Cyber Security Curriculum

Our curriculum for the Bachelor of Science in Cyber Security blends contemporary knowledge with advanced research concepts to deliver a cutting-edge program mapped with the NSA/DHS guidelines and knowledge units.

120 credits required: 15 Pre-requisite courses, 27 Core courses, 21 Track courses, 12 Electives, and 45 General education. Courses are offered in NJCU's main campus in Jersey City, online, as well as on the campuses of Middlesex County College, Fort Monmouth, and Bergen Community College.

### Prerequisites

(take **all** of these courses and get a C or higher in each)

CS 101	Fundamentals of Computer Science
CS 206	Concepts of Operating Systems
CS 407	Introduction to Linux Administration
SECU 210	Introduction to Intelligence
SECU 222	Computer Security I

### Core Courses

(take **all** of these courses and get a C or higher in each)

CS 252	Computer Programming
CS 410	Telecom and Networks
SECU 221	Contemporary International Security
SECU 224	Ethics in National Security
SECU 309	Introduction to Computer & Network Security
SECU 322	Computer Security II
SECU 345	Computer Forensics I
SECU 430	Computer Hacking Forensic Investigator
SECU 460	Security & Privacy of Information and Information Systems

### Security Studies Track Courses

(take **all** of these courses and get a C or higher in each)

SECU 422	Computer Security III
SECU 339	Cyber Incident Handling
SECU 400	Cybersecurity & Event Management
SECU 323	Risk Management
SECU 340	Ethical Hacking
SECU 415	Intrusion Detection & Prevention Systems
SECU 154	Careers in Professional Security Studies

### Electives

(take **at least four** of these courses and get a C or higher in each)

SECU 151	Security Systems and Design
SECU 152	Loss Prevention
SECU 153	Occupational Safety and Health
SECU 155	Introduction to International Security
SECU 214	Crime Scene Investigation
SECU 215	Behavioral Analysis & Criminal Profiling
SECU 220	Current Security Problems
SECU 280	Security Organization & Administration
SECU 310	Forensic Investigations
SECU 311	Bloodstain Pattern Analysis
SECU 315	Big Data in U.S. National Security
SECU 321	Seminar in National Security
SECU 465	Resource Management in Security
SECU 398	Research in Professional Security Studies
SECU 1305	Special Topics: Intelligence Analysis and National Security
SECU 3305	Special Topics: Executive Communications for National Security
SECU 2305	Special Topics: National Security Policy
SECU 4305	Special Topics: Domestic Terrorism
SECU 5305	Special Topics: Extremist Groups
SECU 6305	Special Topics: Critical Thinking
SECU 7305	Special Topics: Security Fraud

Course descriptions are available online in the University's course catalog at: [catalog.njcu.edu/undergraduate/courses/secu](http://catalog.njcu.edu/undergraduate/courses/secu)