



THE UNIVERSITY OF ARIZONA
College of
Information Science

CYBER DEFENSE

Bachelor of Applied Science in Cyber Defense



2

ways to study:
on campus and online

#1

Bachelor's in Cybersecurity
Degree Programs
academicinfluence.com

\$88K

average salary for cybersecurity
graduates as cyber analysts*

DEFEND OUR CONNECTED WORLD.

Offered at the University of Arizona's main campus and online, the STEM-designated Bachelor of Applied Science in Cyber Defense prepares you to lead in a world shaped by technology, security and digital innovation.

Through a structured sequence of foundational and advanced coursework, you'll build expertise across systems, networks and security—developing skills in areas such as Linux and Windows security, cloud computing, cyber investigations and forensics, threat intelligence and active cyber defense. From scripting and networking fundamentals to offensive and defensive operations and a culminating capstone experience, the program prepares you for dynamic careers that protect, analyze and strengthen the world's complex digital environments.

The University of Arizona is a Center of Academic Excellence in Cybersecurity, and the BAS in Cyber Defense holds the **Cyber Defense (CAE-CD) designation** from the Department of Defense and National Security Agency for meeting rigorous standards for preparing students in deeply technical, operations-focused cybersecurity. The U of A is one of only a few universities holding all CAE designations.



What You'll Learn

- **Offensive and Defensive Operations:** Simulate attacks and build layered defenses to protect critical system
- **Malware and Forensics:** Analyze malicious software and investigate digital evidence from cyber incidents
- **Network and System Security:** Understand how networks and operating systems function—and how to secure them
- **Cyber Threat Intelligence:** Assess adversaries' tactics to help organizations defend against evolving threats
- **Law, Ethics and Policy:** Explore legal frameworks, ethical challenges and policy issues in cybersecurity
- **Problem Solving with Code:** Apply critical thinking and scripting to detect anomalies and solve complex cyber problems

* Average bachelor's degree in cybersecurity for cybersecurity analysts according to Zippia, January 2026.

CYBER DEFENSE COURSES

The BAS in Cyber Defense offers courses that equip you with the versatile skills you need to become a critical part of the nation's cyber defense.

CORE SUPPORTING COURSES INCLUDE:

- Networking for Cyber Operations
- Principles of Cyber Operations
- Scripting for Cyber Operations

CORE MAJOR COURSES INCLUDE:

- Active Cyber Defense
- Artificial Intelligence in Cyber Operations
- Cloud Computing
- Cyber Ethics
- Cyber Investigations and Forensics
- Cyber Threat Intelligence
- Industrial Controls System Security
- Legal and Privacy in Cyber Operations
- Linux Security Essentials
- Offensive Cyber Operations
- Regulations in Cyber Operations
- Windows Security Essentials
- Capstone in Cyber Operations

This is not a complete list of required or available courses, and course offerings may vary, so be sure to meet with your academic advisor to plan the path that works best for you.

INTERNSHIPS

Internships are optional in your InfoSci degree, but strongly encouraged. With support from our Career Center, students gain hands-on experience with organizations like Amazon, CyVerse, Intel, Mayo Clinic, Deloitte, Raytheon and Tucson Electric Power, turning classroom learning into career-ready skills.

LAUNCH YOUR CAREER IN CYBER DEFENSE

Information security analysts **job growth is projected to increase 33%** from 2023 to 2033, much faster than the average for all occupations, according to the US Bureau of Labor Statistics.

According to Zippia, the average salary for a Bachelor's in Cyber Defense graduate serving as a **cybersecurity analyst is \$88,400 per year**, while according to ZipRecruiter, the average salary for **cybersecurity in general is \$132,900 per year**.

BAS CD graduates are ready to excel in high-demand positions across industries, including:

- Cloud security specialist
- Cyber network defender
- Cyber threat intelligence analyst
- Cybersecurity analyst or engineer
- DevSecOps engineer
- Digital forensics analyst
- Incident responder
- Information security analyst
- Intrusion detection analyst
- Penetration tester
- Malware analyst
- Python programmer
- Security architect
- Social engineer
- Systems or network administrator
- Vulnerability researcher

Ready to defend our connected world?

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