

# CIT, INFORMATION TECHNOLOGY CYBERSECURITY, BACHELOR OF APPLIED TECHNOLOGY



## Overview

The cybersecurity program is designed to equip students with essential hand-on technical skills, focusing on critical areas such as network security, security operations, penetration testing, and incident response. A distinctive feature of the program is the opportunity for students to gain real-world experience by working in a student-embedded Security Operations Center (SOC). This hands-on experience allows students to apply their knowledge in a practical setting, dealing with actual cybersecurity challenges.

- **Skill Development:** Emphasis is placed on mastering network security, security operations, penetration testing, and incident response.
- **Practical Training:** Students gain real-world experience working in the student-embedded SOC, using state-of-the-art security tools and technologies.
- **Certification Preparation:** The program guides students towards obtaining industry-recognized certifications such as CompTIA's Security+ and PenTest+, EC Council's CEH and CPENT, and prepares them for higher level certifications such as the ISACA CISA and ISC2 CISSP. These certifications are crucial for validating skills and enhancing job prospects in the competitive cybersecurity landscape.

By combining rigorous coursework with practical experience in the SOC and certification preparation, the program ensures that graduates are fully equipped to enter the cybersecurity workforce and excel in their careers.

## Career Opportunities

Graduates of the BAT in Cybersecurity are well-prepared for various high-demand roles across multiple sectors due to the universal need for data protection and threat mitigation. Potential career paths include:

- **Security Operations Center (SOC) Analysts:** Protect organizational information systems from cyber threats.
- **Network Security Engineers:** Design and secure network infrastructures.
- **Information Security Managers:** Oversee and implement organizational security strategies.
- **Penetration Testers:** Identify vulnerabilities before they can be exploited maliciously.

The program's comprehensive approach ensures that graduates can adapt to diverse roles, contributing significantly to safeguarding digital assets in industries such as finance, healthcare, and government.

## Emerging Trends in Cybersecurity

The cybersecurity field is rapidly evolving with trends such as the integration of artificial intelligence (AI) and machine learning (ML) into everyday business operations and security practices. These technologies enhance threat detection and response capabilities. Additionally, the rise of ransomware attacks and the proliferation of Internet of Things (IoT) devices present new challenges that cybersecurity professionals must address.

## Earning Potential

The cybersecurity field not only offers a wide range of career opportunities but also promises substantial earning potential, reflective of the critical nature of the work and the skills required to perform it. As the volume and sophistication of cyber threats continue to grow, so does the demand for skilled professionals capable of countering these threats. This heightened demand directly translates to competitive compensation packages for cybersecurity professionals. The program's emphasis on current technologies and practices, coupled with preparation for key industry certifications, positions graduates to command higher salaries. Earnings vary based on geographic location, experience, and the specific sector of employment, but the trajectory for career growth and salary advancement in cybersecurity is among the most favorable of all IT disciplines.

## Campus

South Campus