Applied Computing (Cybersecurity), BS

ASACOCBS

The concentration in cybersecurity adds additional real-world skills to ASU’s BS in applied computing. Students in the cybersecurity concentration become grounded in computer science and add risk assessment, analytics and information security to their skill sets. They hone critical-thinking and problem-solving skills by applying their cyber knowledge in industry and research settings.

Program Description

The cybersecurity concentration is designed to prepare students for a continuing and progressive career in cybersecurity. Our innovative cybersecurity concentration builds upon the BS program in applied computing. Students acquire the technical knowledge to secure networks and applications; an understanding of cybersecurity governance models and risk-management fundamentals; methods of communicating complex risk issues; and solutions for the challenges of implementing cybersecurity controls within various organizational models. Leadership, critical thinking and effective communication also are emphasized.

Students gain experience with real-world cybersecurity organizations, protecting digital assets against compromise or theft. Graduates of the applied computing program with a concentration in cybersecurity are well prepared for graduate study as well as entry-level employment with businesses, nonprofits, government agencies and academic institutions.

At a Glance

- **College/School:** New College of Interdisciplinary Arts and Sciences
- **Location:** West campus
- **Additional Program Fee:** No
- **Second Language Requirement:** No
• First Required Math Course: MAT 210 - Brief Calculus.
• Math Intensity: Substantial

Required Courses (Major Map)

2018 - 2019 Major Map
Major Map (Archives)

Admission Requirements

General University Admission Requirements:

All students are required to meet general university admission requirements.
Freshman | Transfer | International | Readmission

Change of Major Requirements

A current ASU student has no additional requirements for changing majors. Students should refer to https://students.asu.edu/changingmajors for information about how to change a major to this program.

Global Opportunities

Global Experience

With over 250 programs in more than 65 countries (ranging from one week to one year), study abroad is possible for all ASU students wishing to gain global skills and knowledge in preparation for a 21st century career. Students earn ASU credit for completed courses, while staying on track for graduation, and may apply financial aid and scholarships toward program costs. https://mystudyabroad.asu.edu/.

Career Opportunities

This is an ideal degree for students interested in careers in cybersecurity. Opportunities are available both in the private sector and within governmental agencies (e.g., the FBI, Homeland Security, the National Security Agency and the Department of Defense). Cybersecurity-focused positions include:
• chief information security officer
• cyber risk analyst
• information security engineer
• network security engineer
• security operations center analyst

Career examples include but are not limited to those shown in the following list. Advanced degrees or certifications may be required for academic or clinical positions.

<table>
<thead>
<tr>
<th>Career</th>
<th>*Growth</th>
<th>*Median Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Network Administrator</td>
<td>6.1%</td>
<td>$81,100</td>
</tr>
<tr>
<td>Computer Science Professor</td>
<td>8.1%</td>
<td>$78,630</td>
</tr>
<tr>
<td>Computer Scientist</td>
<td>19.2%</td>
<td>$114,520</td>
</tr>
<tr>
<td>Computer Systems Analyst</td>
<td>9.1%</td>
<td>$88,270</td>
</tr>
<tr>
<td>Information Security Analyst</td>
<td>28.5%</td>
<td>$95,510</td>
</tr>
<tr>
<td>Information Technology Manager (IT Manager)</td>
<td>12.0%</td>
<td>$139,220</td>
</tr>
</tbody>
</table>

* Data obtained from the Occupational Information Network (O*NET) under sponsorship of the U.S. Department of Labor/Employment and Training Administration (USDOL/ETA).

☀ Bright Outlook 🌿 Green Occupation

Contact Information

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