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. You can hone critical thinking and problem-solving skills by applying your 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.

The 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:** Yes
- **Second Language Requirement:** No
- **First Required Math Course:** MAT 210 - Brief Calculus
Required Courses (Major Map)

2020 - 2021 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://changingmajors.asu.edu/request for information about how to change a major to this program.

Transfer Options

ASU is committed to helping students thrive by offering tools that allow personalization of the transfer path to ASU. Students may use the Transfer Map search to outline a list of recommended courses to take prior to transfer.

ASU has transfer partnerships in Arizona and across the country to create a simplified transfer experience for students. These pathway programs include exclusive benefits, tools and resources, and help students save time and money in their college journey. Students may learn more about these programs by visiting the admission site: https://admission.asu.edu/transfer/pathway-programs.

Global Opportunities

Global Experience

Students enhance their resumes and gain valuable experience through studying abroad. With over 250 programs available, study abroad allows students to tailor their experience to their unique interests and
skillsets. Students focusing on cybersecurity are able to gain hands-on experience in programs ranging from a summer in Colombia to a semester in Ireland. In a competitive field, students stand out with heightened cultural competency, leadership and critical thinking skills achieved from studying abroad.

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><strong>Computer Network Administrator</strong></td>
<td>6.1%</td>
<td>$81,100</td>
</tr>
<tr>
<td><strong>Computer Science Professor</strong></td>
<td>8.1%</td>
<td>$78,630</td>
</tr>
<tr>
<td><strong>Computer Scientist 🌟</strong></td>
<td>19.2%</td>
<td>$114,520</td>
</tr>
<tr>
<td><strong>Computer Systems Analyst</strong></td>
<td>9.1%</td>
<td>$88,270</td>
</tr>
<tr>
<td><strong>Information Security Analyst 🌟</strong></td>
<td>28.5%</td>
<td>$95,510</td>
</tr>
<tr>
<td><strong>Information Technology Manager (IT Manager) 🌟</strong></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

School of Mathematical and Natural Sciences | FAB N100
MNSadvising@asu.edu | 602-543-3000