Applied Computing, BS

ASACOBS

Learn fundamental computer science and achieve advanced technical expertise while also understanding how these important skills operate in the real world. You engage in interdisciplinary connections at ASU's West campus to apply your knowledge through internships and research, preparing for a career in computing, especially cybersecurity, databases or networks.

Program Description

Students in the BS program in applied computing learn a computer science foundation and then explore the established knowledge and emerging developments in the high-demand areas of database systems, computer networks and cybersecurity. The program also provides the opportunity to investigate interdisciplinary connections, including the combination of computing with its real-world application in other disciplines through concurrent degrees and minors. Hands-on class projects, internships, industry partnerships and authentic and impactful research conducted with faculty provide numerous opportunities for students to apply their knowledge before they graduate. Students use their programming expertise, systems knowledge and critical-thinking skills to effectively problem-solve and articulate their experience through presentations, scientific posters and professional papers.

With the depth of knowledge and experience in databases, networks and cybersecurity, graduates have a strong foundation in systems with established interconnections among these fields, preparing them for graduate study and careers that include cybersecurity analysts, database architects and network engineers.

This major is eligible for the Western Undergraduate Exchange program at the following location: West campus. Students from Western states who select this major and campus may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. Students should click the link for more information and eligibility requirements of the WUE program.

At a Glance
Required Courses (Major Map)

2019 - 2020 Major Map
Major Map (Archives)

Accelerated Program Options

This program allows students to obtain both a bachelor's and master's degree in as little as five years. It is offered as an accelerated bachelor's and master's degree with:

Global Management, MGM

Acceptance to the graduate program requires a separate application. During their junior year, eligible students will be advised by their academic departments to apply.

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

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

Graduates are prepared to integrate technology with human activities, respond to global changes, solve problems and create and manage the technological production of information and creative products. Core information technology industries are among the fastest growing sectors in the U.S. economy. Graduates find employment opportunities with corporations and businesses, nonprofit and government agencies, digital arts media industries and in the academic world.

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 Network Technician</td>
<td>8.3%</td>
<td>$62,340</td>
</tr>
<tr>
<td>Computer Programmer</td>
<td></td>
<td>$82,240</td>
</tr>
<tr>
<td>Computer Systems Analyst</td>
<td>9.1%</td>
<td>$88,270</td>
</tr>
<tr>
<td>Professional Field</td>
<td>Growth Rate</td>
<td>Median Salary</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Database Administrator (DBA)</td>
<td>11.5%</td>
<td>$87,020</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>
<tr>
<td>Software Developer</td>
<td>11.1%</td>
<td>$107,600</td>
</tr>
<tr>
<td>Software Engineer</td>
<td>30.7%</td>
<td>$101,790</td>
</tr>
<tr>
<td>Web Developer</td>
<td>15.0%</td>
<td>$67,990</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).

Solar Bright Outlook  Green Occupation

**Contact Information**

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