Applied Computing, BS

ASACOBS

Prepare for a specialized career in computing by gaining fundamental computer science skills and technical expertise. Apply your knowledge through hands-on internships and research in a field that interests you.

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.

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% 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

- College/School: New College of Interdisciplinary Arts and Sciences
- Location: West WUE
• Additional Program Fee: Yes
• Second Language Requirement: No
• First Required Math Course: MAT 210 - Brief Calculus or MAT 251 Calculus for Life Sciences
• Math Intensity: Substantial

Required Courses (Major Map)

2023 - 2024 Major Map
Major Map (Archives)

Concurrent Program Options

Students pursuing concurrent degrees (also known as a "double major") earn two distinct degrees and receive two diplomas. Working with their academic advisors, students can create their own concurrent degree combination. Some combinations are not possible due to high levels of overlap in curriculum.

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 plus master's degree with:

Biological Data Science, MS
Global Management, MGM

Acceptance to the graduate program requires a separate application. Students typically receive approval to pursue the accelerated master's during the junior year of their bachelor's degree program. Interested students can learn about eligibility requirements and how to apply.

Admission Requirements

General University Admission Requirements:
All students are required to meet general university admission requirements.
First-year | Transfer | International | Readmission

Tuition Information

When it comes to paying for college, everyone's situation is different. Students can learn about ASU tuition and financial aid options to find out which will work best for them.

Change of Major Requirements

A current ASU student has no additional requirements for changing majors.
Students should visit the Change of Major form 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 MyPath2ASU® 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 they help students save time and money in their college journey.

Global Opportunities

Global Experience
Students learn to thrive in a global environment through the rich educational and interpersonal experiences inherent in study abroad. A resume enhanced by the valuable study abroad experience will impress prospective employers and it will also help the student stand out should they decide to pursue advanced study.

With more than 300 Global Education program opportunities available, students are able to tailor their experience to their unique interests and skill sets. Whether in a foreign country, in the U.S. or online, students build communication skills, learn to adapt and persevere, and are exposed to research and internships across the world, increasing their professional network.

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.

With a depth of knowledge and experience in information technology best practices, graduates have a strong foundation in systems with established interconnections among these fields that prepares them for graduate study and for careers that include cybersecurity analysts, database architects and network engineers.
Career example titles and salaries listed below are not necessarily entry level, and students should take into consideration how years of experience, geographical location, and required advanced degrees or certifications may affect pay scales.

<table>
<thead>
<tr>
<th>Career</th>
<th>*Growth</th>
<th>*Median Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Network Administrator</td>
<td>2.5%</td>
<td>$90,520</td>
</tr>
<tr>
<td>Computer Network Technician</td>
<td>7.0%</td>
<td>$68,050</td>
</tr>
<tr>
<td>Computer Programmer</td>
<td></td>
<td>$97,800</td>
</tr>
<tr>
<td>Computer Systems Analyst</td>
<td>9.6%</td>
<td>$102,240</td>
</tr>
<tr>
<td>Database Administrator (DBA)</td>
<td>7.0%</td>
<td>$99,890</td>
</tr>
<tr>
<td>Information Security Analyst</td>
<td>31.5%</td>
<td>$112,000</td>
</tr>
<tr>
<td>Information Technology Manager (IT Manager)</td>
<td>15.4%</td>
<td>$164,070</td>
</tr>
<tr>
<td>Security Consultant</td>
<td>4.1%</td>
<td>$75,990</td>
</tr>
<tr>
<td>Software Developer</td>
<td>25.7%</td>
<td>$127,260</td>
</tr>
<tr>
<td>Web Developer</td>
<td>17.0%</td>
<td>$78,580</td>
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* 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**

**Contact Information**

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