Computational Mathematical Sciences, BS

LACMSBS

Do you have a passion for math but also love technology? This program combines math with new developments in science and technology, giving you foundational skills and tools to apply as you tackle some of today's most challenging problems in computation and information.

Program Description

This BS program in computational mathematical sciences is a fusion of mathematics, science and computing. Students in this program learn how to translate science and engineering problems into mathematical problems and solve them using computing algorithms. They develop strong problem-solving, analytical and programming skills as they work across diverse areas of science and mathematics.

At a Glance

- **College/School:** The College of Liberal Arts and Sciences
- **Location:** Tempe campus
- **Additional Program Fee:** Yes
- **Second Language Requirement:** No
- **First Required Math Course:** MAT 270 - Calculus w/Analytic Geometry I
- **Math Intensity:** Substantial

Required Courses (Major Map)

2021 - 2022 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:

Mathematics, MA

Acceptance to the graduate program requires a separate application. During their junior year, eligible students are 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://changemajor.apps.asu.edu 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 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 gain valuable experience through study abroad, experience that enhances their resumes. With over 250 programs available, study abroad allows students to tailor their experience to their unique interests and skill sets. They gain hands-on experience in programs anywhere in the world, such as a week in Brazil and a semester in Japan.

Graduates who possess the heightened cultural competency and leadership and critical thinking skills they acquired when studying abroad may stand out in a competitive field. https://goglobal.asu.edu/
Career Opportunities

In a recent study, mathematics, computer science, applied mathematics and statistics all ranked among the top 15 most valuable college majors in terms of salary and career prospects. The computational mathematical sciences program brings all these disciplines together.

A bachelor's degree in computational mathematical sciences is one of the most versatile math degrees, offering graduates many career options. This degree positions them for careers in computer technology, business, medical research, teaching and education, engineering and more. Some pursue graduate opportunities in areas such as biophysics, economics, medicine, statistics and law. Diverse areas of study such as cancer modeling, weather forecasting and financial modeling all involve computational mathematical sciences.

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>Business Intelligence Analyst ♣</td>
<td>not avail.</td>
<td></td>
</tr>
<tr>
<td>Clinical Trial Manager ♣</td>
<td>4.8%</td>
<td>$137,940</td>
</tr>
<tr>
<td>Computer Database Architect ♣</td>
<td>not avail.</td>
<td></td>
</tr>
<tr>
<td>Computer Network Analyst ♣</td>
<td>5.0%</td>
<td>$116,780</td>
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<tr>
<td>Computer Scientist ♣</td>
<td>15.4%</td>
<td>$126,830</td>
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<tr>
<td>Data Management Specialist ♣</td>
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<td></td>
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<tr>
<td>Information Security Analyst ♣</td>
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<td>$103,590</td>
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<tr>
<td>Intelligence Officer</td>
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<tr>
<td>Mathematician</td>
<td>3.0%</td>
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<tr>
<td>Statistician</td>
<td>34.6%</td>
<td>$92,270</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

Schedule an advisor appointment
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