Computational Mathematical Sciences, BS

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 when 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.

In addition to the guidelines in the Concurrent Program Options section below, students interested in pursuing concurrent or second baccalaureate degrees in The College of Liberal Arts and Sciences are advised to visit The College's website for more information and requirements.

https://thecollege.asu.edu/concurrent-and-second-baccalaureate-degrees

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)

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 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 MyPath2ASUTM 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. Students may learn more about these programs by visiting the admission site: https://admission.asu.edu/transfer/MyPath2ASU.
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/](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 and statistics. 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>Clinical Trial Manager</td>
<td>4.8%</td>
<td>$137,940</td>
</tr>
<tr>
<td>Computer Network Analyst</td>
<td>5.0%</td>
<td>$116,780</td>
</tr>
<tr>
<td>Computer Scientist</td>
<td>15.4%</td>
<td>$126,830</td>
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<tr>
<td>Information Security Analyst</td>
<td>31.2%</td>
<td>$103,590</td>
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<tr>
<td>Intelligence Officer</td>
<td>1.1%</td>
<td>$86,940</td>
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<tr>
<td>Mathematician</td>
<td>3.0%</td>
<td>$110,860</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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