Computational Mathematical Sciences, BS

Do you have a passion for math, but also love technology? This degree 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 problems in science and engineering 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)

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:

Mathematics, MA

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/](https://mystudyabroad.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 students many career options. The degree positions students for careers in computer technology, business, medical research, teaching and education, engineering and more. Some students 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>9.3%</td>
<td>$88,510</td>
</tr>
<tr>
<td>Clinical Trial Manager</td>
<td>9.9%</td>
<td>$118,970</td>
</tr>
<tr>
<td>Computer Database Architect</td>
<td>9.3%</td>
<td>$88,510</td>
</tr>
<tr>
<td>Computer Network Analyst</td>
<td>6.5%</td>
<td>$104,650</td>
</tr>
<tr>
<td>Computer Scientist</td>
<td>19.2%</td>
<td>$114,520</td>
</tr>
<tr>
<td>Data Management Specialist</td>
<td>9.3%</td>
<td>$88,510</td>
</tr>
<tr>
<td>Information Security Analyst</td>
<td>28.5%</td>
<td>$95,510</td>
</tr>
<tr>
<td>Intelligence Officer</td>
<td>4.5%</td>
<td>$79,970</td>
</tr>
<tr>
<td>Mathematician</td>
<td>29.7%</td>
<td>$103,010</td>
</tr>
<tr>
<td>Statistician</td>
<td>33.8%</td>
<td>$84,060</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).
Contact Information

Schedule an advisor appointment
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