Biological Sciences (Biomedical Sciences), E

LABSCMBS

The biomedical sciences concentration provides a strong foundation in basic sciences with coursework in genetics, cell biology, physiology, medicine and society. We emphasize core concepts, competencies and critical-thinking skills needed to succeed in medical school or biomedical research. You're invited to participate in exciting and diverse research opportunities with award-winning faculty.

Program Description

The biomedical sciences concentration serves students in the biological sciences BS degree program who wish to pursue careers in medicine, other health professions or biomedical research in an academic, clinical or industry settings. The curriculum aligns with the broad scientific competencies recommended for premed students in a report of the American Medical Colleges and the Howard Hughes Medical Committee and reflected in the 2015 changes to the MCAT.

Coursework draws from the school's concentration in genetics, cell and developmental biology and the concentration in neurobiology, physiology and behavior, with the addition of courses in biology and in medicine and society. The concentration focuses on the chemistry, biochemistry, math and physics coursework that is necessary to prepare students for the MCAT or medical school admissions. The concentration emphasizes core concepts, competencies and critical intellectual skills necessary to succeed in medical school or biomedical research.

This program is available as an accelerated degree program:
https://sols.asu.edu/degree-programs/accelerated-bachelor-master-science.

At a Glance

- **College/School:** College of Liberal Arts and Sciences
- **Location:** Tempe campus
- **Additional Program Fee:** Yes
• **Second Language Requirement**: No
• **First Required Math Course**: MAT 251 - Calculus for Life Sciences.
  or MAT 270 Calculus with Analytic Geometry I

• **Math Intensity**: Moderate

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**Required Courses (Major Map)**

2018 - 2019 Major Map
Major Map (Archives)

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**Accelerated Degrees**

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:

  Biology, MS  
  Molecular and Cellular Biology, MS

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

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**Admission Requirements**

**General University Admission Requirements:**

All students are required to meet general university admission requirements.

Freshman | Transfer | International | Readmission

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**Change of Major Requirements**

A current ASU student has no additional requirements for changing majors. Students should refer to [https://students.asu.edu/changingmajors](https://students.asu.edu/changingmajors) for information about how to change a major to this program.

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**Transfer Agreements**
ASU has partnered with colleges and universities in Arizona, California, Illinois and Washington to provide transfer curriculum pathways. Students should select their current institution to see if there is a partnership agreement between the institution and ASU for this degree program. Students who do not see their state or institution listed should check back as ASU is always working on creating new partnerships.

Transfer from a Maricopa Community College in Arizona
Select a college
- Chandler-Gilbert Community College
- Estrella Mountain Community College
- GateWay Community College
- Glendale Community College
- Mesa Community College
- Paradise Valley Community College
- Phoenix College
- Rio Salado College
- Scottsdale Community College
- South Mountain Community College

Transfer from an Arizona Community College
Select a college
- Arizona Western College
- Central Arizona College
- Cochise College
- Coconino Community College
- Dine College
- Eastern Arizona College
- Gila Community College
- Mohave Community College
- Northland Pioneer College
- Pima Community College
- Tohono O’odham Community College
- Yavapai College

Transfer from another state
Select a state
- California
- Illinois
- Washington
- Another state

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

Upon completion of the biological sciences degree with a concentration in biomedical sciences, students are well-equipped to enter into careers as research scientists or as scientists in the health professions. Students will have met the majority of prerequisite requirements and mastered many of the competencies valued by graduate programs in medical, dental and optometry fields or in programs which prepare students to be physician assistants or physical therapists. Additionally, graduates of this program will have an understanding of the process of science preparing them for a career in research. They will have knowledge of foundational concepts in biological sciences, chemistry, physics and statistics, as well as the ability to understand and apply core biomedical concepts. This will prepare students to enter into biology research in a vast number of areas, some of which include genetics, genomics, evolution, physiology and immunology.

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>Biological Scientist (General)</td>
<td>8.0%</td>
<td>$76,690</td>
</tr>
<tr>
<td>Biostatistician</td>
<td>33.8%</td>
<td>$84,060</td>
</tr>
<tr>
<td>Clinical Trial Manager</td>
<td>9.9%</td>
<td>$118,970</td>
</tr>
<tr>
<td>Dentist</td>
<td>19.4%</td>
<td>$151,440</td>
</tr>
<tr>
<td>Epidemiologist</td>
<td>8.8%</td>
<td>$69,660</td>
</tr>
<tr>
<td>Family Physician</td>
<td>14.3%</td>
<td>$198,740</td>
</tr>
<tr>
<td>Healthcare Professor</td>
<td>25.9%</td>
<td>$97,870</td>
</tr>
<tr>
<td>Laboratory Technologist</td>
<td>11.5%</td>
<td>not available</td>
</tr>
<tr>
<td>Medical Scientist</td>
<td>13.4%</td>
<td>$82,090</td>
</tr>
<tr>
<td>Molecular Biologist</td>
<td>8.0%</td>
<td>$76,690</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>5.6%</td>
<td>$124,170</td>
</tr>
<tr>
<td>Physician Assistant (PA)</td>
<td>37.3%</td>
<td>$104,860</td>
</tr>
<tr>
<td>Surgeon</td>
<td>14.4%</td>
<td>#</td>
</tr>
<tr>
<td>Surgeon (General)</td>
<td>11.4%</td>
<td>#</td>
</tr>
</tbody>
</table>
Bright Outlook  Green Occupation

Contact Information

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