Microbiology (Medical Microbiology), BS
LAMICMBS

Is your goal medical school or another health-related career? Then you'll want to study bioethics, cell biology and immunology --- all applicable to the changing world of medicine --- and develop critical thinking skills and competencies important in the biomedical sciences. Our medical microbiology program prepares you for advanced education in a variety of health careers.

Program Description

The medical microbiology concentration serves students in the BS in microbiology degree program who aim to pursue careers in health professions, medical microbiology or biomedical research.

The curriculum aligns with the scientific competencies recommended for premedical students in a report of the American Medical Colleges and the Howard Hughes Medical Institute Committee and are also reflected in the 2015 changes to the MCAT. Coursework includes many of the courses in the microbiology major, including chemistry, biochemistry, math and physics, with some microbiology courses replaced by cell biology, animal physiology and courses that relate to human biology and society to emphasize core concepts, competencies and critical intellectual skills necessary to succeed in medical school or biomedical research. The concentration includes coursework that students need to prepare for the MCAT or medical school admission.

This program is available as an accelerated degree program. Students can visit this website to learn more about accelerated degree programs:
https://sols.asu.edu/degree-programs/accelerated-bachelor-master-science.

Due to the high volume of overlap in curriculum, students enrolled in this degree are not permitted to declare a concurrent degree combination with any other program within the School of Life Sciences. Students should speak with their academic advisor for any further questions.

At a Glance
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:

- Biology, MS
- Global Management, MGM
- Microbiology, MS

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.app.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 when studying 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. Students pursuing a medical microbiology concentration are able to expand their knowledge of how human biology is impacted by a variety of societies and cultures, and they challenge themselves to adapt and persevere in a new and exciting culture. https://goglobal.asu.edu/

The College of Liberal Arts and Sciences recommends the following study abroad programs for students majoring in medical microbiology:
https://mystudyabroad.asu.edu/students/major/sls/microbiology-medical-microbiology.

Career Opportunities

Graduates of the bachelor's degree program in microbiology with a concentration in medical microbiology have fulfilled the majority of prerequisite requirements and mastered many of the competencies valued by graduate programs in medical, dental and optometry fields and by programs which prepare students to be physician assistants or physical therapists.

They have knowledge of foundational concepts in biological sciences, chemistry, physics and statistics as well as the ability to understand and apply core microbiology concepts. Additionally, they have a practical understanding of the process of science, preparing them for a career in research. They are prepared to enter research in a number of areas including but not limited to cellular biology, immunology, bacteriology and virology.

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>Cytotechnologist</td>
<td></td>
<td>not available</td>
</tr>
<tr>
<td>Dentist</td>
<td>2.8%</td>
<td>$158,940</td>
</tr>
<tr>
<td>Histology Technologist</td>
<td></td>
<td>not available</td>
</tr>
<tr>
<td>Occupation</td>
<td>Growth Rate</td>
<td>Salary</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>Laboratory Technologist</td>
<td></td>
<td>not available</td>
</tr>
<tr>
<td>Medical Doctor (MD)</td>
<td></td>
<td>#</td>
</tr>
<tr>
<td>Microbiologist</td>
<td>3.1%</td>
<td>$84,400</td>
</tr>
<tr>
<td>Optometrists</td>
<td>4.3%</td>
<td>$118,050</td>
</tr>
<tr>
<td>Orthopedic Surgeon</td>
<td></td>
<td>not available</td>
</tr>
<tr>
<td>Pharmacist</td>
<td></td>
<td>$128,710</td>
</tr>
<tr>
<td>Physician Assistant (PA)</td>
<td>31.3%</td>
<td>$115,390</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**

School of Life Sciences | LSA 189  
sols.advising@asu.edu | 480-727-6277