Biomedical Informatics, BS

ESBMIBS

Program Description

Biomedical informatics combines information technology, data science and knowledge for improvement in patient health care. The program educates undergraduate students in the informatics knowledge and skills that are so important in today's health care industry.

The program enables its graduates to improve the quality of patient health care and reduce the cost of it by consolidating patient health history and interventions across hospitals and clinics, providing the right information about patient health to clinicians, and reducing clinical errors and waste. Graduates are able to minimize the number of patient hospital visits by managing and monitoring a patient's clinical condition at home, and they are able to shorten hospital stays and improve the patient hospital experience by providing the patient with faster access to resources.

Graduates are able to evaluate a patient's condition; make an early detection of disease; support the clinician in making a better, more precise diagnosis and prognosis; plan a treatment for the patient's disease; and track disease progression.

At a Glance

- **College/School:** College of Health Solutions
- **Location:** Tempe campus
- **Additional Program Fee:** Yes
- **Second Language Requirement:** No
- **First Required Math Course:** MAT 251 - Calculus for Life Sciences
- **Math Intensity:** Moderate

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:

- Biomedical Informatics, 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.

**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](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](https://changingmajors.asu.edu/request) 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](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/

The College of Health Solutions recommends the following study abroad programs for students majoring in biomedical informatics: http://links.asu.edu/SAO.biomedical-informatics.

**Career Opportunities**

Graduates with a degree in the rapidly expanding field of biomedical informatics are prepared for careers in a wide range of health care settings. They are employed in positions such as biomedical analysts, medical information analysts, software analysts, electronic health records analysts, public health informatics scientists and research associates, among others. Some with interests in life sciences and technology may see this program as a unique way to combine the two. Others may find this degree the first step toward medical school or advanced medical research or to continued graduate-level study in biomedical informatics.

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><strong>Bioinformatics Scientist</strong></td>
<td>8.0%</td>
<td>$76,690</td>
</tr>
<tr>
<td><strong>Biostatistician</strong></td>
<td>33.8%</td>
<td>$84,060</td>
</tr>
<tr>
<td><strong>Clinical Data Manager</strong></td>
<td>33.8%</td>
<td>$84,060</td>
</tr>
<tr>
<td><strong>Computer Network Analyst</strong></td>
<td>6.5%</td>
<td>$104,650</td>
</tr>
<tr>
<td><strong>Computer Scientist</strong></td>
<td>19.2%</td>
<td>$114,520</td>
</tr>
<tr>
<td><strong>Computer Software Quality Engineer</strong></td>
<td>9.3%</td>
<td>$88,510</td>
</tr>
<tr>
<td><strong>Computer Systems Analyst</strong></td>
<td>9.1%</td>
<td>$88,270</td>
</tr>
<tr>
<td><strong>Data Analyst</strong></td>
<td>9.2%</td>
<td>$47,400</td>
</tr>
<tr>
<td><strong>Medical and Health Services Manager</strong></td>
<td>20.5%</td>
<td>$98,350</td>
</tr>
<tr>
<td><strong>Nursing Operations Manager</strong></td>
<td>9.1%</td>
<td>$88,270</td>
</tr>
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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

College of Health Solutions | COOR 2nd floor  
chs@asu.edu | 480-965-2374