Earth and Space Exploration, BS

Earth and space exploration majors are learning about our planet, solar system and universe by combining science, engineering and education. Students are building space-flight hardware; making astronomical observations; discovering new microbes; exploring volcanoes, oceans and glaciers; investigating earth-climate interactions and setting the stage for a new era of exploration.

Program Description

The BS program in earth and space exploration offers students an integrated education across earth sciences, planetary sciences, astrophysics and engineering. The degree program incorporates a learning community that includes science and engineering students, a yearlong collaborative capstone senior exploration project and strong quantitative preparation.

This strong foundation in geosciences, astrophysics and exploration engineering prepares students for key roles in:

- earth resources and exploration
- environmental and geologic engineering
- space research and industry
- water and environmental use policy

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 265 - Calculus for Engineers I
or MAT 270 Calculus with Analytic Geometry I

- **Math Intensity**: Substantial

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**Required Courses (Major Map)**

2018 - 2019 Major Map
Major Map (Archives)

**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://students.asu.edu/changingmajors](https://students.asu.edu/changingmajors) for information about how to change a major to this program.

**Transfer Options**

ASU is committed to helping you thrive by offering tools that allow you to personalize your transfer path to ASU. Students may use the [Transfer Map search](https://students.asu.edu/changingmajors) 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. Learn more about these programs by visiting the [Admissions site](https://students.asu.edu/changingmajors).

**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
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

The earth and space exploration major addresses critical future shortfalls in the national and regional training of the next generation of geoscientists and aerospace engineers. Arizona has an expanding space industry with major new investments and is prepared to engage new technologies to monitor and understand environmental issues in Arizona, the Southwest and throughout the world. Students who major in earth and space exploration will have the tools, knowledge and understanding to address key problems of a global nature, whether they are working in the private or public sector.

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>Aerospace Engineer</td>
<td>6.1%</td>
<td>$113,030</td>
</tr>
<tr>
<td>Astronomer</td>
<td>10.0%</td>
<td>$100,590</td>
</tr>
<tr>
<td>Education Professor</td>
<td>10.3%</td>
<td>$64,020</td>
</tr>
<tr>
<td>Electrical Engineering Professor</td>
<td>14.6%</td>
<td>$98,360</td>
</tr>
<tr>
<td>Engineering Manager</td>
<td>5.5%</td>
<td>$137,720</td>
</tr>
<tr>
<td>Geologist</td>
<td>14.0%</td>
<td>$89,850</td>
</tr>
<tr>
<td>Geology Professor</td>
<td>9.5%</td>
<td>$87,380</td>
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<tr>
<td>Health Sciences Manager</td>
<td>9.9%</td>
<td>$118,970</td>
</tr>
<tr>
<td>High School Teacher</td>
<td>7.5%</td>
<td>$59,170</td>
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<tr>
<td>Hydrogeologist</td>
<td>9.9%</td>
<td>$118,970</td>
</tr>
<tr>
<td>Hydrologist</td>
<td>9.9%</td>
<td>$79,990</td>
</tr>
<tr>
<td>Middle School Teacher</td>
<td>7.5%</td>
<td>$57,720</td>
</tr>
<tr>
<td>Physics Professor</td>
<td>10.0%</td>
<td>$87,340</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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