Elementary Education (Science, Technology, Engineering and Mathematics), BAE

Moment by moment, day by day and person by person, educators ignite minds and strengthen communities. Programs at Mary Lou Fulton Teachers College offer a blend of classroom instruction and professional experiences that prepare you to ask the right questions, navigate uncertainty and make a difference.

Program Description

The BAE program in elementary education with an emphasis on science, technology, engineering and mathematics has coursework designed for teachers looking to advance their skills in STEM disciplines and learn techniques to effectively engage K-12 learners in the 21st-century. The coursework addresses essentials for educators to equip the learners with the specialized knowledge needed in STEM topics to solve challenging problems and apply critical thinking skills. The STEM program offers students a firm grounding in the language, current research and best practices of science, technology, engineering and math accompanied by professional experiences.

The teacher certification program for elementary education with an emphasis in STEM is clinically embedded during both the junior and senior years. Mary Lou Fulton Teachers College students complete internships during their junior year and a full time, year-long apprenticeship, known as their senior year residency, in K-8 classrooms. Coursework is designed to support the development of instructional competencies, professional skills and content knowledge. Coursework is complemented by professional experiences, which provide interns and teacher candidates opportunities to apply and reflect upon their knowledge and skills in teaming and collaborative models. Mary Lou Fulton Teachers College faculty and highly qualified mentor teachers from partner school districts and charter schools work in collaboration to support professional growth aligned to each student's personal goals. Additionally, the professional experience pathway provides students an opportunity to work directly with children and make an immediate impact on student achievement. This intensive, hands-on professional experience model of teacher preparation creates highly sought-after graduates and is unmatched in Arizona.
Graduates are recommended for grades K-8 elementary teacher certification. Those desiring to teach in a public school must pass the appropriate Arizona educator exams (National Evaluation Series or Arizona Educator Proficiency Assessments) to be certified to teach in the state of Arizona.

At a Glance

- **College/School:** Mary Lou Fulton Teachers College
- **Location:** Polytechnic campus
- **Additional Program Fee:** No
- **Second Language Requirement:** No
- **First Required Math Course:** MAT 142 - College Mathematics
- **Math Intensity:** General

Required Courses (Major Map)

- 2020 - 2021 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://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 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

Graduates proficient in STEM fields are highly sought after by employers, and future classroom teachers can gain valuable field experience through study abroad. Students can learn alongside peers from other countries in research-intensive programs in Europe, Asia and South America that also include cultural exploration. Students stay on track academically by participating in a program over winter or spring break. https://mystudyabroad.asu.edu/

Career Opportunities

There is a demand for highly qualified elementary teachers in math or science in Arizona, according to recent research on teacher supply and demand. The job opportunities in a fast-growing state such as Arizona are numerous, and demand for math and science teachers will continue to grow.

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>College Program Director</td>
<td>10.1%</td>
<td>$92,360</td>
</tr>
<tr>
<td>Elementary Teacher</td>
<td>7.4%</td>
<td>$57,160</td>
</tr>
<tr>
<td>Fitness and Wellness Coordinator</td>
<td>10.6%</td>
<td>$81,630</td>
</tr>
<tr>
<td>Occupation</td>
<td>Increase</td>
<td>Salary</td>
</tr>
<tr>
<td>-----------------------------------</td>
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</tr>
<tr>
<td>Instructional Designer</td>
<td>10.5%</td>
<td>$63,750</td>
</tr>
<tr>
<td>Instructional Specialist</td>
<td>10.5%</td>
<td>$63,750</td>
</tr>
<tr>
<td>Middle School Teacher</td>
<td>7.5%</td>
<td>$57,720</td>
</tr>
<tr>
<td>Online Learning Coordinator</td>
<td>10.6%</td>
<td>$81,630</td>
</tr>
<tr>
<td>Preschool Director</td>
<td>10.8%</td>
<td>$46,890</td>
</tr>
<tr>
<td>School Principal</td>
<td>7.9%</td>
<td>$94,390</td>
</tr>
<tr>
<td>Tutor</td>
<td>9.9%</td>
<td>not available</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**

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