

Science, Technology, Engineering, and Mathematics Career and Academic Pathways (CAPs)

Program Map: Associate in Science Degree for Transfer for Geology

Total number of units: 64-68 units Top Code/Academic Plan: 1914.00 Updated on February 20, 2022

| Semester 1 | Course Code | Course | Units | Notes | Advising Notes |
|----------------------|----------------|--------------------------------------|-------|--|--|
| Program/GE Course | GEOLOGY 004 | Physical Geology and Laboratory | 4 | Take this course with both lecture and lab, or GEOLOGY 001 & 006. This course has sections that are part of the Honors Program. Check the current catalog for the section number(s). To apply for admission to the Honors Program, please visit the ELAC Counseling Center. For additional information about the Honors Program, please visit the ELAC Honors Program website or contact Dr. Bermudez at bermudn@elac.edu. | |
| Program Course | MATH 261 | Calculus I | 5 | For students who place out of the prerequisites for MATH 261 and CHEM 101, an additional 2 elective units may be needed to reach 60 minimum | |
| GE Course | ENGLISH 101 | College Reading and Composition I | 3 | This course has sections that are part of the Honors Program. Check the current catalog for the section number(s). To apply for admission to the Honors Program, please visit the ELAC Counseling Center. For additional information about the Honors Program, please visit the ELAC Honors Program website or contact Dr. Bermudez at bermudn@elac.edu . | This course may have sections that include a low cost (LCT) or no cost textbook (ZTC). Check the current catalog for the section number(s). You can search for classes in the ELAC and LACCD Schedule of Classes under "Class Search Type" as "Zero Textbook Cost" or "Low-Cost Textbook Classes." |
| GE Course | IGETC 3A | Arts | 3 | | |

Total Units 15

| Semester 2 | Course Code | Course | Units | Notes | Advising Notes |
|----------------------|-----------------------|---|-------|---|---------------------------------|
| Program/GE Course | GEOLOGY 002 | Earth History | 3 | Only available in Spring of Even years (milestone). | Typically offered in primetime. |
| Program/GE Course | GEOLOGY 007 | Earth History Laboratory | 1 | Only available in Spring of Even years (milestone). GEOLOGY 002 is a corequisite for this course. | Typically offered in primetime. |
| Program Course | MATH 262 | Calculus II | 5 | | |
| GE Course | ENGLISH 102 or 103 | Critical Thinking - English Composition | 3 | Satisfies IGETC 1B. | |
| GE Course | IGETC 3B | Humanities | 3 | Recommend PHILOS 001 or 006. | |

Total Units 15

| Intersession | Course Code | Course | Units | Notes | Advising Notes |
|----------------------|-------------|-----------------------------------|-------|---|--|
| Program/GE Course | CHEM 065 | Introductory General Chemistry | 4 | This course is a prerequisite for CHEM 101. This course has sections that are part of the Honors Program. Check the current catalog for the section number(s). To apply for admission to the Honors Program, please visit the ELAC Counseling Center. For additional information about the Honors Program, please visit the ELAC Honors Program website or contact Dr. Bermudez at bermudn@elac.edu . | This course may have sections that include a low cost (LCT) or no cost textbook (ZTC). Check the current catalog for the section number(s). You can search for classes in the ELAC and LACCD Schedule of Classes under "Class Search Type" as "Zero Textbook Cost" or "Low-Cost Textbook Classes." |

Total Units

| Semester 3 | Course Code | Course | Units | Notes | Advising Notes |
|----------------------|-------------|--|-------|--|----------------|
| Program/GE Course | CHEM 101 | General Chemistry | 5 | For students who place out of the prerequisites for MATH 261 and CHEM 101, an additional 2 elective units may be needed to reach 60 minimum. | |
| GE Course | IGETC 5B | Biological Science (Recommended Bio 6) | 3-5 | The department suggests this course, but additional course options are available. Students should meet with a counselor. | |
| GE Course | IGETC 4 | Social and Behavioral Sciences | 3 | The department suggests this course, but additional course options are available. Students should meet with a counselor. | |
| GE Course | COMM 101 | Public Speaking | 3 | | |

Total Units 14 to 16

| Semester 4 | Course Code | Course | Units | Notes | Advising Notes |
|----------------------|-------------------|--------------------------------------|-------|--|----------------|
| Program/GE Course | CHEM 102 | General Chemistry | 5 | | |
| GE Course | IGETC 4 | Social and Behavioral Sciences | 3 | The department suggests this course, but additional course options are available. Students should meet with a counselor. | |
| GE Course | IGETC 4 | Social and Behavioral Sciences | 3 | The department suggests this course, but additional course options are available. Students should meet with a counselor. | |
| GE Course | IGETC 3A or 3B | Arts and Humanities | 3-5 | | |

Total Units 14 to 16

| Intersession | Course Code | Course | Units | Notes | Advising Notes |
|--------------|-------------|--------|-------|---|----------------|
| GE Course | ELECTIVE | | 2 | Only required for students who may need more units to reach 60 units total. | |

Total Units 2

Degree Path and Requirements:

Associate of Science in Geology for Transfer Degree. Students are required to complete a minimum of 60 required semester units of CSU transferable coursework with a minimum GPA of 2.0, including a minimum of 30 units in the major with a grade of "C" or better. Certified completion of the Intersegmental General Education Transfer Curriculum (IGETC) Pattern is also required.

This map is a suggested term-by-term sequence of courses to complete the program in a recommended time frame. This is an efficient and recommended plan, but actual plans may vary by individual student need. This map cannot replace a meeting with <u>counselors</u>.

Department Advising Notes:

Students intending to transfer to a UC should consult transfer agreements with specific campuses through Assist.org. Students interested in participating in the Geology Club should contact Professor Adsit (adsitrj@elac.edu).

Program Description

The Associate of Science in Geology for Transfer degree is designed to meet the minimum requirements for transfer to a California State University (CSU) Bachelor of Science Degree program in the Geological Sciences. The Transfer degree assures a competitive advantage for transfer opportunities at California State Universities. The degree provides students with a foundational set of preparatory courses designed to maximize their transfer success as they pursue a degree in Geology or a related field. The major provides students with an overarching view of the origin and evolution of the Earth and inhabitants in the context of dynamic internal and external processes driving environmental change. Students learn to recognize the importance and impacts of resource exploitation. Students gain an expanded sense of self and existence through their inquiries into deep time and gain a growing sense of understanding of the nature of the world through supportive STEM coursework requirements. The required courses help students hone skills in spatial thinking, quantitative analysis, landscape interpretation, and field research.

Career and Transfer Opportunities

Geoscientists prepare for a variety of occupations that generally require a Bachelors or Masters degree for entry-level employment. Typical fields of employment include Environmental, Geotechnical, Hydrology, Mining and Petroleum Exploration. Their broad-based education typically allows them to find employment in wide range of science related fields. Most have extensive training with geo-spatial data and gain competence with a variety of technical tools and computer programs before graduation. For an extensive list of job opportunities and descriptions visit: https://www.edd.ca.gov/, click on the Jobs icon, select Occupation Profile, and enter "geologist" in the search field. Advancement may entail sufficient experience to qualify for licensing through state exams. Median wages in these fields are about \$50/hr, but most at that wage level have professional licenses, which require job experience and examination.

Visit the <u>Transfer Center</u> for transfer information, which varies based on transfer college. Make an appointment with a <u>counselor</u>. Students can visit <u>Career and Job Services</u> for career counseling and further exploration.

Youtube Videos

Careers in Geology

Program Map

A suggested sequence of classes to complete a degree, certificate, or program of study. Students should consult an academic counselor for variations to this plan based on part-time or full-time status, transfer plans, pre-requisites needed, etc.

Prerequisite Course

A specific course that must be completed before advancing to the next course.

Check the online catalog at elac.edu for the latest and most accurate information.

Contact

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