**NATURAL SCIENCES**

**Earth Science Option, B.A. (120 Units)**

Valid for Catalog Years: 2018/2019 to 2019/2020

*Official planning guide approved by the College of Science & Math*

### General Education

<table>
<thead>
<tr>
<th>Units</th>
<th>Fall</th>
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#### Milestones

<table>
<thead>
<tr>
<th>A2 (3 Units) Written Communication</th>
<th>A1 (3 Units) Oral Communication</th>
<th>C2 (3-4 Units) Humanities</th>
<th>C1/C2 (3-4 Units) Arts or Humanities</th>
<th>D3 (3 Units) Social Science</th>
<th>E1 (3 Units) Lifelong Understanding &amp; Self Development</th>
<th>IC (3-4 Units) Arts &amp; Humanities</th>
<th>D1 (3 Units) American History</th>
<th>D2 (3 Units) American Government</th>
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| A3 (3 Units) Critical Thinking | C1 (3-4 Units) Arts | D1 (3 Units) American History | ID (3-4 Units) Social, Political, & Economic Institutions | |
|--------------------------------|---------------------|-------------------------------|----------------------------------------------------------||

#### Major

<table>
<thead>
<tr>
<th>GE Area B1 CHEM 1A (3 Units) Physical Sciences</th>
<th>BIOL 1B (3 Units) Life Sciences</th>
<th>BIOL 101 (4 Units) [Pre-Req: BIOL 1A, 1B; PSYCH 42 or MATH 101; MATH 70 or equivalent recommended]</th>
<th>EES 12 (3 Units) [Pre-Req: EES 1; CHEM 1A (may be taken concurrently)]</th>
<th>EES 30 (3 Units) [Pre-Req: EES 1, 2 (may be taken concurrently) OR instructor permission]</th>
<th>NSCI 106 (3 Units)</th>
<th>EES 112 (3 Units) [Pre-Req: GE Foundation &amp; Breadth Area B]</th>
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<tr>
<td>GE Area B2 BIOL 1A (4 Units)</td>
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<td>*Credit not allowed after completion of EES 2</td>
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For assistance or to schedule an advising appointment, please contact the CSM Advising and Resources Center at 559-278-4150, Science I 136

Department of Science & Mathematics Interdisciplinary Courses and Programs:
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**Major**

- GE Area B3
  - CHEM 1AL (2 Units)
    - Lab
    - [Pre-Req: CHEM 1A (may be taken concurrently)]
- CHEM 1B (3 Units)
  - [Pre-Req: CHEM 1A & 1AL (both passed with a C or better); CHEM 1BL (may be taken concurrently)]
- BIOL 1BL (1 Unit)
  - [Pre-Req: First-time enrollees must take BIOL 1B concurrently]
- PHYS 2A (4 Units)
  - [Pre-Req: DS 71, MATH 75, MATH 70, or department permission]
- EES 100 (2 Units)
  - [Pre-Req: EES 12 (concurrent enrollment recommended)]
- EES 101 (4 Units)
  - [Pre-Req: EES 30, 100; CHEM 1B (may be taken concurrently)]
- EES 102 (3 Units)
  - [Pre-Req: EES 30, 100]

- GE Area B4
  - MATH 75 (4 Units)
    - Quantitative Reasoning
    - [Pre-Req: CHEM 1B (may be taken concurrently)]
  - CHEM 1BL (2 Units)
    - [Pre-Req: MATH 4R or second-year high school algebra recommended]
- EES 1 (4 Units)
  - [Pre-Req: MATH 4R or second-year high school algebra recommended]
- EES 155 (3 Units)
  - [Pre-Req: EES 1, 112, or instructor permission]
- EES 110, 114, 117, 124; or GEOG 111
  - (3 Units)
  - [Pre-Req: EES 1, 112, or instructor permission]
- EES 105 (3 Units)
  - [Pre-Req: EES 1; EES 30 (may be taken concurrently)]
- GE Area IB
  - EES 168 (3 Units)
    - Physical Universe & Its Life Forms
    - [Pre-Req: GE Foundation & Breadth Area B]

**Additional Graduation Requirements**

- MATH 101 (4 Units)
  - [Pre-Req: MATH 70, 75, or 75A & B]
  - *No credit if taken after MATH 108 OR PSYCH 42 (4 Units)
- UDWS (0-4 Units)
  - *Upper Division Writing Exam OR "W" Course (must pass with a C or better)
- MI (3 Units)
  - Multicultural/International

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**FOOTNOTES:**

**Prerequisites/Corequisites:** Other restrictions may apply. Please see your course catalog for detailed prerequisite/corequisite requirements.

**Electives (2 units):** Units in this area may be used toward a double major or minor. Students must earn a minimum of 120 units total to graduate. The number of required elective units may vary, depending on the amount of units earned from major and GE courses.

**Upper Division Writing Skills requirement (UDWS):** All undergraduate students must demonstrate competency in writing skills by passing the Upper Division Writing Exam (UDWE) or by obtaining a C or better in an approved upper division writing course, identified by the letter "W."

**Substitutions:** If substitutions/exceptions/waivers are made for any major courses that also meet GE and/or the Multicultural/International graduation requirement, the student is responsible for completing additional courses to satisfy the respective areas (GE and/or MI). This also includes the upperdivision writing requirement.
### NATURAL SCIENCES
Earth Science Option, B.A. (120 Units)

Valid for Catalog Years: 2009/2010 to 2017/2018

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#### General Education

- **A2 (3 Units)**
  - Written Communication
  - Must pass with a C or better; ENGL 10 recommended
- **A1 (3 Units)**
  - Oral Communication
  - Must pass with a C or better
- **C2 (3-4 Units)**
  - Humanities
- **D3 (3 Units)**
  - Social Science
- **E1 (3 Units)**
  - Lifelong Understanding & Self Development
- **C1 (3-4 Units)**
  - Arts or Humanities
- **D1 (3 Units)**
  - American History
- **D2 (3 Units)**
  - American Politics

#### Major

**GE Area B1**
- **CHEM 1A (3 Units)**
  - Physical Sciences
  - Pre-Req: High school chemistry. May be taken concurrently: GE B4; CHEM 1AL
  - Not open to students with credit in CHEM 1B

**GE Area B2**
- **Biol 1A (4 Units)**
  - Life Sciences

**GE Area B3**
- **CHEM 1B (3 Units)**
  - Pre-Req: CHEM 1A & 1AL (both passed with a C or better); CHEM 1BL (may be taken concurrently)
- **Biol 1BL (1 Unit)**
  - Pre-Req: First-time enrollees must take BIOL 1BL concurrently
- **Phys 2A (4 Units)**
  - Pre-Req: DS 71, MATH 75, MATH 70, or department permission
- **EES 100 (2 Units)**
  - Pre-Req: EES 12 (concurrent enrollment recommended)
- **EES 101 (4 Units)**
  - Pre-Req: EES 30, 100; CHEM 1B (may be taken concurrently)
- **PSCI 21 (4 Units)**
  - Pre-Req: Second-year high school algebra recommended
- **EES 102 (3 Units)**
  - Pre-Req: EES 30, 100

**CHEM 1AL (2 Units)**
- Lab
  - Pre-Req: CHEM 1A (may be taken concurrently)

**BIOL 1B (3 Units)**
- Pre-Req: BIOL 1A; first-time enrollees must take BIOL 1BL concurrently

**BIOL 101 (4 Units)**
- Pre-Req: BIOL 1A, 1B; PSYCH 42 or MATH 101; MATH 70 or equivalent recommended

**EES 12 (3 Units)**
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- Pre-Req: EES 1, 2 (may be taken concurrently)

**EES 100 (2 Units)**
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**EES 101 (4 Units)**
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**EES 102 (3 Units)**
- Pre-Req: EES 30, 100

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<td>PHYS 2B (4 Units) [Pre-Req: PHYS 2A]</td>
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### Electives

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<th>UDWS (0-4 Units) *Upper Division Writing Exam OR &quot;W&quot; Course (must pass with a C or better)</th>
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