### Science of Earth Systems Major

**Biology (8 credits)**
- BIOMG 1350 Introductory Biology: Cell and Developmental Biology or BIOG 1440 Introductory Biology: Comparative Physiology to fulfill the biology course requirement for the major.
- Additional biology course may be used toward Advisor-Approved Course in Math, Statistics, Computer Science, or Natural Science (with permission from advisor), or towards the student's Advisor-Approved Electives or Outside Major Electives.

**Biochemistry (3/4 credits)**
- SES majors concentrating in Biogeochemistry could count biochemistry towards concentration course requirement (w advisor).
- Students concentrating in other concentrations could count a course in biochemistry as an Advisor-Approved Elective or Outside Major Elective.

**Upper-level Biology (3/4 credits)**
- Could count as Outside Major Elective or Advisor-Approved Elective.

**General Chemistry (8 credits)**
- CHEM 2090- Engineering Common Curriculum
- CHEM 2080- Major Requirement

**Organic Chemistry (8 credits)**
- SES majors could count courses as Outside Major Electives or Advisor-Approved Electives.

**English (6 credits)**
- Engineering Core Requirement

**Math**
- MATH 1910- Engineering Common Curriculum
- A statistics course may be used towards Advisor-Approved Course in Math, Statistics, Computer Science, or Natural Science (with permission from advisor), or towards the Advisor-Approved Elective or Outside Major Electives.

**General Physics (8 credits)**
- Could fulfill this requirement with taking PHYS 1112, 2213, 2214. SES majors who take PHYS 2214 are exempted from a second semester of chemistry (typically CHEM 2080 or CHEM 1570), though students interested in pre-health will need to complete additional chemistry.

**Social Science**
- Liberal Studies Requirement

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**Science of Earth Systems Major (SES)**

**Requirements for Major Affiliation: Science of Earth Systems**

At least C- in all completed Major required courses. GPA 2.0 in all math, science, and engineering courses. Good academic standing in the college.

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**Note:** Liberal Studies Distribution and Physical Education requirements are not represented on this chart.