Bachelor of Science in GEOSCIENCES
GEOLOGY Concentration
Composite Minor in Geosciences
2020-2021 Catalog

Students must maintain a 2.5 TTU GPA to remain in the BS in Geosciences.

A grade of C- or better must be earned to meet prerequisite requirements and to apply to major, minor or adjunct.

### FIRST YEAR Fall - 13 hours
- **GEOL 1303** Physical Geology
- **GEOL 1101** Physical Geology Lab
- **MATH 1451** Calculus I
  - (MPE code 7 or higher, SATM 660, MATH 1321- B, MATH 1550-C)
- **CHEM 1307** Principles of Chemistry I
  - CHEM Placement Exam score of 60% or higher
- **CHEM 1107** Principles of Chemistry lab
  - CHEM Placement Score of 60% or higher
- **Personal Fitness and Wellness +**
  + PFW only required for students under 25 years of age

### Spring - 15 hours
- **GEOL 2401** Historical Geology + Lab
  - (GEOL 1303 +1101, C or better)
- **CHEM 1308** Principles of Chemistry II
  - (CHEM 1307+1107; C or better)
- **CHEM 1108** Principles of Chemistry II lab
  - (CHEM 1307+1107; C or better)
- **MATH 1452** Calculus II
  - (MATH 1451)
- **ENGL 1301** Essentials of Col. Rhetoric

### SECOND YEAR Fall - 15 hours
- **GEOL 3401** Mineralogy (CL)
- **GPH 3300** Geophysics
  - (GEOL 1303 +1101, MATH 1451 C or better)
- **GEOL 2101** Seminar (CL)
  - (GEOL 3401 co-req)
- **PHYS 1403** (or 1408)
  - (MATH 1550 or 1320 +1321) (MATH 1451)
- **ENGL 1302** Advanced of Col. Rhetoric

### Spring - 16 hours
- **GCH 3303** Introduction to Geochemistry
  - (Math 1452, CHEM 1308 +1108, GEOL 3401 C- or better)
- **GEOL 3321** Igneous +Metamorphic Petrology
  - (GEOL 3401 C- or better)
- **PHYS 1404** (or 2401)
  - (PHYS 1403 or 1408) (MATH 1452)
- **POLS 1301** American Government Org
- **HIST 2300** US History Pre 1877

### THIRD YEAR Fall -13 hours
- **GEOL 3402** Structural Geology (CL)
  - (GEOL 3401, 3121 PHYS 1403 or 1408 c- or better)
- **GEOL 3325** Sedimentary Petrology
  - (GEOL 3321 C- or better)
- **GEOL 3301** Geomorphology
  - (GEOL 3401 C or better starting in Fall 2019)
  - English Lit 2000-level

### Spring - 14 hours
- **GEOL 4321** Igneous and Meta Processes
  - (GCH 3303, GEOL 3321 C or better)
- **GEOL 4201** Sedimentary Field Methods (CL)
  - (GEOL 3325, 3402, 4327 (may be co-req) C- or better)
- **GEOL 4327** Depo Systems & Stratigraphy
  - (GEOL 3325 C- or better)
- **HIST 2301** US History since 1877
- **Foreign Language ______ 2301**

### Summer I ______ GEOL 4301 Advanced Field Methods
  - (GEOL 4201,,3402, 3321 C or better)

### FOURTH YEAR Fall- 15 hours
- **GEOL 4340** Advanced Historical CL
  - (GEOL 4327, 3402 C- or better)
  - Minor elective Jr/Sr
  - Social and Behavioral Sci Elective+ Multicultural
  - Oral Com Elective
  - Minor elective

### Spring- 16 hours
- **GEOSCIENCES elective 3 hr Jr/Sr**
- **GEOSCIENCES elective 3 hr Jr/Sr**
  - Creative Arts Elective
  - Minor elective 4 hrs Jr/Sr
  - **POLS 2306** Texas Politics and Topics

Minors must be in a field of Math, Science, Engineering or a Composite of these fields.

**Major Elective (GEOS):**

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<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>GEOL 3323</td>
<td>GEOL 3322 Oceanography</td>
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<td>GEOL 3450</td>
<td>GEOL 4310 Planetary Geology</td>
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<td>GEOL 4300</td>
<td>GEOL 4312 Undergraduate Research</td>
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<td>GEOL 4306</td>
<td>GEOL 4318 Geology of Texas</td>
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<td>GEOL 4312</td>
<td>GEOL 4331 Digital Imagery</td>
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<td>GCH 4405</td>
<td>GEOL 4361 Advanced Structural Geology (even years)</td>
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<td>GCH 4308</td>
<td>GEOL 4362 Tectonics (odd years)</td>
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<tr>
<td>GPH 4321</td>
<td>GEOL 4370 Hydrogeology</td>
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<td>GPH 4323 Potential Field Methods</td>
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