

# 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.

<p>FIRST YEAR <i>Fall-13 hours</i></p> <p>_____ <b>GEOL 1303 Physical Geology</b></p> <p>_____ <b>GEOL 1101 Physical Geology Lab</b></p> <p>_____ MATH 1451 Calculus I (MPE code 7 or higher, SATM 660, MATH 1321- B, MATH 1550-C)</p> <p>_____ CHEM 1307 Principles of Chemistry I CHEM Placement Exam score of 60% or higher</p> <p>_____ CHEM 1107 Principles of Chemistry lab CHEM Placement Score of 60% or higher</p> <p>_____ Personal Fitness and Wellness + + PFW only required for students under 25 years of age</p>	<p><i>Spring-15 hours</i></p> <p>_____ <b>GEOL 2401 Historical Geology + Lab</b> (GEOL 1303 +1101, C or better)</p> <p>_____ CHEM 1308 Principles of Chemistry II (CHEM 1307+1107; C or better)</p> <p>_____ CHEM 1108 Principles of Chemistry II lab (CHEM 1307+1107; C or better)</p> <p>_____ MATH 1452 Calculus II (MATH 1451)</p> <p>_____ ENGL 1301 Essentials of Col. Rhetoric</p>
<p>SECOND YEAR <i>Fall-15 hours</i></p> <p>_____ <b>GEOL 3401 Mineralogy (CL)</b>      <b>2.5 CUM*GPA</b> (GEOL 1303 +1101, 2401, CHEM 1307 +1107, 1308 +1108)</p> <p>_____ <b>GPH 3300 Geophysics</b>      <b>2.5 CUM*GPA</b> (GEOL 1303 +1101, MATH 1451 C or better)</p> <p>_____ <b>GEOL 2101 Seminar (CL)</b> (GEOL 3401 co-req)</p> <p>_____ PHYS 1403 (or 1408) (MATH 1550 or 1320 +1321) (MATH 1451)</p> <p>_____ ENGL 1302 Advanced of Col. Rhetoric # cumulative GPA all credits all colleges</p>	<p><i>Spring-16 hours</i></p> <p>_____ <b>GCH 3303 Introduction to Geochemistry</b> (Math 1452, CHEM 1308 +1108, GEOL 3401 C- or better)</p> <p>_____ <b>GEOL 3321 Igneous +Metamorphic Petrology</b> (GEOL 3401 C- or better)</p> <p>_____ PHYS 1404 (or 2401) (PHYS 1403 or 1408) (MATH 1452)</p> <p>_____ POLS 1301 American Government Org</p> <p>_____ HIST 2300 US History Pre 1877</p>
<p>THIRD YEAR <i>Fall-13 hours</i></p> <p>_____ <b>GEOL 3402 Structural Geology (CL)</b> (GEOL 3401, 3321 PHYS 1403 or 1408 c- or better)</p> <p>_____ <b>GEOL 3325 Sedimentary Petrology</b> (GEOL 3321 C- or better)</p> <p>_____ <b>GEOL 3301 Geomorphology</b> (GEOL 3401 C or better starting in Fall 2019)</p> <p>_____ English Lit 2000-level</p>	<p><i>Spring- 14 hours</i></p> <p>_____ <b>GEOL 4321 Igneous and Meta Processes</b> (GCH 3303, GEOL 3321 C or better)</p> <p>_____ <b>GEOL 4201 Sedimentary Field Methods (CL)</b> (GEOL 3325, 3402, 4327 (may be co-req) C- or better)</p> <p>_____ <b>GEOL 4327 Depo Systems &amp; Stratigraphy</b> (GEOL 3325 C- or better)</p> <p>_____ HIST 2301 US History since 1877</p> <p>_____ Foreign Language _____ 2301</p>
<p>Summer I _____ GEOL 4301 Advanced Field Methods (GEOL 4201,,3402, 3321 C or better)</p>	
<p>FOURTH YEAR <i>Fall- 15 hours</i></p> <p>_____ <b>GEOL 4340 Advanced Historical CL</b> (GEOL 4327, 3402 C- or better)</p> <p>_____ Minor elective Jr/Sr</p> <p>_____ Social and Behavioral Sci Elective+ Multicultural</p> <p>_____ Oral Com Elective</p> <p>_____ Minor elective</p>	<p><i>Spring- 16 hours</i></p> <p>_____ <b>GEOSCIENCES elective 3 hr Jr/Sr</b></p> <p>_____ <b>GEOSCIENCES elective 3 hr Jr/Sr</b></p> <p>_____ Creative Arts Elective</p> <p>_____ Minor elective 4 hrs Jr/Sr</p> <p>_____ POLS 2306 Texas Politics and Topics</p>

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

#### **Major Elective (GEOS):**

Fall

- GEOL 3323 Environmental Geology
- GEOL 3450 Paleontology
- GEOL 4300 Petrophysics
- GEOL 4306 Intro to Petroleum Systems
- GEOL 4312 Undergraduate Research
- GCH 4405 Inorganic Geochemistry
- GCH 4308 Techniques/Applications Mineral Sciences (even)
- GPH 4321 Seismic Methods

Spring

- GEOL 3322 Oceanography
- GEOL 4310 Planetary Geology
- GEOL 4312 Undergraduate Research
- GEOL 4318 Geology of Texas
- GEOL 4331 Digital Imagery
- GEOL 4361 Advanced Structural Geology (even years)
- GEOL 4362 Tectonics (odd years)
- GEOL 4370 Hydrogeology
- GPH 4323 Potential Field Methods

