

**Bachelor of Science in GEOSCIENCES  
ENVIRONMENTAL GEOLOGY Concentration**

**Composite minor**

2017-2018

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. Prerequisites shown in ( ).

<p>FIRST YEAR <i>Fall -15 hours</i></p> <p>_____ <b>GEOL 1303 Physical Geology</b></p> <p>_____ <b>GEOL 1101 Physical Geology Lab</b></p> <p>_____ <u><i>MATH 1451 Calculus I</i></u> (MPE code 7 or higher, SATM 660, MATH 1321- B, MATH 1550-C;</p> <p>_____ <u><i>CHEM 1307 Principles of Chemistry</i></u> (CHEM Placement exam score of 60% or higher)</p> <p>_____ <u><i>CHEM 1107 Principles of Chemistry lab</i></u> (CHEM Placement exam score of 60% or higher)</p> <p>_____ ENG 1301 Essentials of Col. Rhetoric</p>	<p><i>Spring-15 hours</i></p> <p>_____ <b>GEOL 2401 Historical Geology + Lab</b> (GEOL 1303 +1101)</p> <p>_____ <u><i>CHEM 1308 Principles of Chemistry II (minor)</i></u> (CHEM 1307+1107; C or better)</p> <p>_____ <u><i>CHEM 1108 Prin. of Chemistry II lab</i></u> (CHEM 1307+1107; C or better)</p> <p>_____ <u><i>MATH 1452 Calculus II</i></u> (MATH 1451)</p> <p>_____ ENG 1302 Advanced of Col. Rhetoric</p>
<p>SECOND YEAR <i>Fall-14 hours</i></p> <p>_____ <b>GEOL 3401 Minerology and Petrology(2.5 GPA)#</b> (GEOL 1303+1101, 2401, CHEM 1307+1107, 1308 +1108)</p> <p>_____ <b>GPH 3300 Geophysics (2.5 GPA)#</b> (GEOL 1303 +1101, MATH 1451 C or better)</p> <p>_____ <b>GEOL 3323 Environmental Geology</b> (GEOL 1303 +1101)</p> <p>_____ <u><i>MATH 2450 Calculus III</i></u> (MATH 1452)</p> <p># cumulative GPA all credits all colleges</p>	<p><i>Spring- 16 hours</i></p> <p>_____ <b>GEOL 4320 Optical Mineralogy</b> (GEOL 3401 C- or better)</p> <p>_____ <b>GCH 3303 Introduction Geochemistry</b> (Math 1452, CHEM 1308 +1108, GEOL 3401 C- or better)</p> <p>_____ <u><i>GIST 3300 Geographic Info Sci (Minor)</i></u></p> <p>_____ <u><i>CHEM 3305 Organic Chemistry</i></u> CHEM 1308</p> <p>_____ <u><i>PHYS 1408 Principles of Physics I</i></u> (MATH 1451)</p>
<p>THIRD YEAR <i>Fall-14 hours</i></p> <p>_____ <b>GEOL 4325 Sed/Strat</b> GEOL 2401, GEOL 3401, GEOL 4320 c- or better)</p> <p>_____ <b>GEOL 3402 (CL) Structure</b> (GEOL 3401 PHYS 1403 or 1408 c- or better),</p> <p>_____ Social and Behavioral Sciences Elective*MULTI</p> <p>_____ POLS 1301 American Govt Org</p> <p>_____ PFW 11xx</p>	<p><i>Spring- 16 hours</i></p> <p>_____ <b>GEOL 4101 Undergraduate seminar</b> (Junior or Senior Standing)</p> <p>_____ <b>GEOL 4370 Hydrogeology</b> (GEOL 3323 GEOL 4325)</p> <p>_____ Minor 3 hrs</p> <p>_____ <u><i>MATH 3342 (Minor)</i></u> ( MATH 2450)</p> <p>_____ Creative Arts Elective</p> <p>_____ Foreign Language _____ 2301 (F. Language 1507 or 1502 or CLEP test)</p>
<p>FOURTH YEAR <i>Fall- 16 hours</i></p> <p>_____ <b>GEOL 3301 Geomorphology</b> (GEOL 1303 +1101)</p> <p>_____ <u><i>PSS 2432 Structure and Function of Soil (Minor)</i></u> (CHEM 1307+1107)</p> <p>_____ HIST 2300 US History Pre 1877</p> <p>_____ POLS 2306 American Public Policy</p> <p>_____ Oral Com Elective</p>	<p><i>Spring- 14 hours</i></p> <p>_____ <b>GEOL4312 Undergrad Research (CL)</b></p> <p>_____ <b>GEOL 4201 Sed Field Methods</b> (GEOL 4325, GEOL 3402)</p> <p>_____ HIST 2301 US History Post 1877</p> <p>_____ ENG LIT 2000-level (not ENG 2311, 2371)</p> <p>_____ Minor 3 hrs jr/sr</p>

\***Minors** must be in Math, Science, Engineering or a Composite of these fields. Minors outside A&S need not exceed 30 hr outside A&S including core classes.

**Recommended Composite Environmental Minor:**

GIST 3300, MATH 3342, PSS 2432, CHEM 3305  
(all required adjunct) Plus 6 hours from this list:

PHYS 2401 Principles of Physics II  
GPH 4323 Potential Field Methods (S)  
GCH 4405 Inorganic Geochem (F '18)  
PSS 4330 Environmental Soil Chemistry (S '19)  
GEOL 4300 (Stable or Radiogenic Isotope Geochemistry)  
CONE 2302 Surveying  
GIST 4303 Advanced GIS  
GIST 4302 Spatial Data Analysis  
NRM 4314 Watershed Planning

Civil Engineering Minor: Hydrology focus PHYS 2401 CE 2301, 3305, 3303, 3354, 3372, 4363