

Bachelor of Science in GEOSCIENCES

GEOLOGY Concentration

2017-2018 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. Prerequisites shown in ().

FIRST YEAR Fall -14 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 exam score of 60% or higher) IS 1100 or LIBR 1100 or 1 hr elective 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) 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-14 hours GEOL 3401 Mineralogy and Petrology (2.5 GPA)# (GEOL 1303+1101, 2401, CHEM 1307+1107, 1308 +1108) GPH 3300 Geophysics (2.5 GPA)# (GEOL 1303 +1101, MATH 1451 C or better) PHYS 1403 (or 1408) (MATH 1550 or 1320 +1321) (MATH 1451) ENGL 1302 Advanced of Col. Rhetoric # cumulative GPA all credits all colleges	Spring-16 hours GCH 3303 Introduction to Geochemistry (Math 1452, CHEM 1308 +1108, GEOL 3401 C- or better) GEOL 4320 Optical Mineralogy (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 (GEOL 3401 PHYS 1403 or 1408 c- or better), GEOL 4325 Sedimentology & Stratigraphy GEOL 2401, GEOL 3401, GEOL 4320 c- or better) POLS 2306 American Public Policy English Lit 2000-level (NOT 2311 or 2371)	Spring- 15 hours GEOL 4321 Igneous and Meta Petrology (GCH 3303, GEOL 4320 C or better) GEOL 4201 Sedimentary Field Methods (GEOL 4325, 3402 C- or better) GEOL 4101 Undergraduate Seminar Minor elective (Junior or Senior Standing) HIST 2301 US History since 1877 Foreign Language _____ 2301 (F. Language 1507 or 1502 or CLEP test)
Summer I _____ GEOL 4301 Advanced Field Methods (GEOL 3402, 4325, 4321, 4201: all with a C or better)	
FORTH YEAR Fall- 15 hours GEOS Elective Jr/Sr GEOS Elective Jr/Sr Minor elective Jr/Sr Social and Behavioral Sci Elective+ Multicultural Oral Com Elective	Spring- 12 hours GEOL 4312 Undergraduate Research (Senior Standing) GEOS Elective Jr/Sr Creative Arts Elective Minor elective Jr/Sr

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

Common minors: Geophysics, GIST, Composite, Math, Chemistry, Physics, Civil Engineering.

Major Elective (GEOS):

Fall

GEOL 3301 Geomorphology
 GEOL 3323 Environmental Geology
 GEOL 3450 Paleontology (even years)
 GEOL 4306 Intro to Petroleum Systems
 GEOL 4300 Petrophysics
 GEOL 4351 Image Spectroscopy
 GCH 4405 Inorganic Geochemistry
 GPH 4321 Seismic Methods

+ PFW only required for students under 25 year of age

GPA is cumulative with includes all college credits at all institutions.

Starting with the 2017-2018 catalog GPA 2.50 for internal transfers.

Spring

GCH 4308 Techniques/Applications Mineral Sciences
 GEOL 3322 Oceanography
 GEOL 3328 Energy Resources
 GEOL 4310 Planetary Geology
 GEOL 4318 Geology of Texas
 GEOL 4331 Digital Imagery
 GEOL 4361 Advanced Structural Geology (odd years)
 GEOL 4370 Hydrogeology
 GPH 4322 Solid Earth Geophysics