Bachelor of Science in GEOSCIENCES  
GEOLOGY Concentration  
2017-2018 Catalog  

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  

**Spring-16 hours**  
- GCH 3303 Introduction to Geochemistry  
  (Math 1452, CHEM 1308 +1108, GEOL 3401 C- or better)  
- GEOL 4300 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 4011 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  Fall 11-13 hours**  
- 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  

**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  

*+ 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.