

Bachelor of Science – Geosciences with Concentration in Petroleum Geotechnology Major (Four Year Plan)

YEAR 1

Semester 1		Semester 2	
Course Number	Credit Hours	Course Number	Credit Hours
P: : One of the following: (1) TSI ESSAY score of 4 and WRITING score of 340, (2) TSI ESSAY score of 5 and ABE WRITING diagnostic level 4, (3) TSI WRITING complete, OR (4) TSI WRITING exempt	3	ENG 1302 (Composition II) P: A grade of C or better in ENG 1301 or placement by examination	3
*GEOL 1305/1105 (Physical Geology w/ Lab) &	4	*GEOL 1306/1106 (Historical Geology w/ Lab) & P: GEOL 1305/1105	4
MATH 2411 (Calculus I for Natural Sciences)# & P: C or better in MATH 1404 or MATH 1505 or placement by exam taken at UHD (can be substituted with MATH 2401)	4	*PHYS 1307/1107 (General Physics I w/ Lab) P: Credit or enrollment in MATH 1302 or the equivalent (can be substituted with PHYS 2401/2101)	4
UHD 1303 (Freshman Seminar – Life and Physical Sciences) Transfer students see advisor for options	3	MATH 2412 (Calculus II for NS) P: C or better in MATH 2411 or MATH 2401 (can be substituted with MATH 2402)	4
Total Semester Hours	14	Total Semester Hours	15

YEAR 2

Semester 3		Semester 4	
Course Number	Credit Hours	Course Number	Credit Hours
*GEOL 3310/3110 (Mineralogy w/		*GEOL 3305/3105 (Petrology w/	
Lab)%	4	Lab) %	4
P: GEOL 1306/1106		P: GEOL 3310/3110	•
*GEOL 3312/3112 (Structural		CHEM 1307/1107 (General	
Geology w/ Lab) P: Math 2401 or MATH 2411, credit or enrollment in GEOL 3310/3110	4	Chemistry I w/ Lab) P: Credit or enrollment in MATH 1301, ENG 1301 (or 010 core complete), and one year of HS chemistry OR CHEM 1305/1105	4
*GEOL 3302/3102 (Sedimentology and Stratigraphy w/ Lab) P: credit or enrollment in GEOL 3310/3110	4	Approved Creative Arts course (p. 60) P: Refer to catalog	3
*PHYS 1308/1108 (General Physics II w/ Lab) P: PHYS 1307/1107 (can be substituted with PHYS 2402/2102)	4	Approved Language, Philosophy, and Culture course (p. 60) P: Refer to catalog	3
Total Semester Hours	16	Total Semester Hours	14

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YEAR 3

Semester 5		Semester 6	
Course Number	Credit Hours	Course Number	Credit Hours
GEOL 4306 Basin Analysis Seminar P: C or better in GEOL 3312/3112 and GEOL3302/3102	3	GEOL 3411 (Paleontology) P: GEOL 1306/1106	4
CHEM 1308/1108 (General		*GEOL 4303 (Geologic Field	
Chemistry II w/ Lab) P: Grade of C or better in CHEM 1307/1107	4	Methods) P: Credit or enrollment in GEOL 3305/3105 and C or better in GEOL 3312/3112 and GEOL 3302/3102	3
Concentration Elective course		CS 1311 (Intro to Python)	3
Choose from GEOL 3300, GEOL 3340, GEOL 3304/3104, GEOL 3313, CHEM/PHYS 3402 or TCOM 3302	3	P: MATH 1300 or placement by exam	
POLS 2306 (Texas Government) P: Enrollment in or completion of ENG 1301 or 010 core complete	3	POLS 2305 (Federal Government) P: Enrollment in or completion of ENG 1301 or 010 core complete	3
		GEOL 4304 (Field Geology) Summer ONLY P: GEOL 4303	3
Total Semester Hours	13	Total Semester Hours	16

YEAR 4

Semester 7		Semester 8	
Course Number	Credit Hours	Course Number	Credit Hours
GEOL 4302/4102 (Petroleum		Concentration Elective course	
Geology w/ Lab) P: GEOL 3312/3112 and GEOL 3302/3102	4	Choose from GEOL 3300, GEOL 3340, GEOL 3304/3104, GEOL 3313, CHEM/PHYS 3402 or TCOM 3302	4
Concentration Elective course		STAT 3311 (Statistical Analysis for	
Choose from GEOL 3300, GEOL 3340, GEOL 3304/3104, GEOL 3313, CHEM/PHYS 3402 or TCOM 3302	3	Natural Science) P: C or better in MATH 1404 or MATH 1505	3
Approved Oral Communication		Approved Social and Behavioral	3
course (p. 60)	3	Sciences course (p. 60)	3
P: Refer to catalog		P: Refer to catalog	
Approved Am. Hist. course (p. 60)	3	Approved American History course	
P: Enrollment in or completion of ENG 1301 or	_	(p. 60)	3
010 core complete		P: Enrollment in or completion of ENG 1301 or	
GEOL 4305 (Plate Tectonics)	3	Free Elective (if needed)	3
P: GEOL 3305/3105 and GEOL 3312/3112			
Total Semester Hours	16	Total Semester Hours	16

Total Credit Hours Required

120

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 $[\]mbox{\ensuremath{\bigstar}}$ Critical course required to stay on track within major and take subsequent courses

[#] Students are expected to place into ENG 1301 and MATH 2401 via CLEP or Bypass exams – placement tests determine which english or math course students should start with and additional courses may be necessary

 $[\]mbox{\ensuremath{\&}}$ Satisfies both common core and major requirement/prerequisite

[%] Satisfies both major requirement/prerequisite and integrated requirements course