

# GEOSYSTEMS ENGINEERING AND HYDROGEOLOGY

## 2018-2020 CATALOG

Suggested Arrangement of Courses for Eight-Semester Program

### FIRST YEAR

<u>Fall Semester</u>	<u>Semester Hours</u>	<u>Spring Semester</u>	<u>Semester Hours</u>
CH 301, <i>Principles of Chemistry I</i> . . . . .	3	CH 302, <i>Principles of Chemistry II</i> . . . . .	3
GEO 401/303, <i>Introduction to Geology</i> . . . . .	4/3	PGE 333T, <i>Engineering Communications</i> . . . . .	3
M 408C, <i>Differential and Integral Calculus</i> . . . . .	4	M 408D, <i>Sequences, Series, &amp; Multivariable Calculus</i> . . . . .	4
RHE 306, <i>Rhetoric and Composition</i> . . . . .	3	PHY 303K, <i>Engineering Physics I</i> . . . . .	3
UGS 302/303, <i>Undergraduate Studies Course</i> . . . . .	3	PHY 103M, <i>Laboratory for Physics 303K</i> . . . . .	1
		US History Elective . . . . .	3
TOTAL . . . . .	<b>16/17</b>	TOTAL . . . . .	<b>17</b>

### SECOND YEAR

<u>Fall Semester</u>	<u>Semester Hours</u>	<u>Spring Semester</u>	<u>Semester Hours</u>
GEO 416K, <i>Earth Materials</i> . . . . .	4	E M 306, <i>Statics</i> . . . . .	3
GEO 416M, <i>Sedimentary Rocks</i> . . . . .	4	PHY 303L, <i>Engineering Physics II</i> . . . . .	3
M 427K, <i>Advanced Calculus for Applications I</i> . . . . .	4	PHY 103N, <i>Laboratory for Physics II</i> . . . . .	1
PGE 326, <i>Thermodynamics and Phase Behavior</i> . . . . .	3	PGE 310, <i>Formation and Solution of Geosystems Engineering Problems</i> . . . . .	3
TOTAL . . . . .	<b>15</b>	PGE 427, <i>Properties of Petroleum Fluids</i> . . . . .	4
		Visual or Performing Arts Elective . . . . .	3
		TOTAL . . . . .	<b>17</b>

### THIRD YEAR

<u>Fall Semester</u>	<u>Semester Hours</u>	<u>Spring Semester</u>	<u>Semester Hours</u>
PGE 322K, <i>Transport Phenomena</i> . . . . .	3	GEO 420K, <i>Introduction to Field and Stratigraphic Methods</i> . . . . .	4
PGE 323K, <i>Reservoir Engineering Primary Recovery</i> . . . . .	3	PGE 323L, <i>Reservoir Engineering II- Secondary and Tertiary Recovery</i> . . . . .	3
PGE 424, <i>Petrophysics</i> . . . . .	4	C E 357, <i>Geotechnical Engineering</i> . . . . .	3
GEO 476K, <i>Groundwater Hydrology</i> . . . . .	4	PGE 358, <i>Principles of Formation Evaluation</i> . . . . .	3
E M 319, <i>Mechanics of Solids</i> . . . . .	3	GOV 310L, <i>American Government</i> . . . . .	3
TOTAL . . . . .	<b>17</b>	TOTAL . . . . .	<b>16</b>
TOTAL . . . . .	<b>17</b>		
<u>Summer Session:</u>			
GEO 376L, <i>Field Methods in Groundwater Hydrology</i> . . . . .	3		

### FOURTH YEAR

<u>Fall Semester</u>	<u>Semester Hours</u>	<u>Spring Semester</u>	<u>Semester Hours</u>
PGE 365, <i>Resource Economics and Valuation</i> . . . . .	3	PGE 373L, <i>Geosystems Engineering Design and Analysis</i> . . . . .	3
PGE Approved Technical Elective . . . . .	3	GEO Approved Technical Elective . . . . .	3
GEO 376S, <i>Physical Hydrology</i> . . . . .	3	Social Science Elective . . . . .	3
GEO 428, <i>Structural Geology</i> . . . . .	4	GOV 312L, <i>Issues &amp; Policies in American Gov</i> . . . . .	3
ENG 316L,M,N or P, <i>Masterworks of Literature</i> . . . . .	3	US History Elective . . . . .	3
TOTAL . . . . .	<b>16</b>	TOTAL . . . . .	<b>15</b>