## **SPRING 2017**

ELECTIVES CRS#	ELECTIVES CRS NAME: Approved by Dr. Soliman	HR S	ELECTIVES PRErequisite //CON-current enrollment
CHEE 3300	Materials Science and Engineering I		CHEE 2331, CHEM 1332, PHYS 1321 & credit for or concurrent enrollment in MATH 3321
CHEE 3333	Thermo II	3	CHEE 2332;
CHEM 3331	Fundamentals of Organic Chemistry I	3	CHEM 1332 (note- organic lecture will not apply toward degree until CHEM 3221- organic lab 1 is complete)
CHEM 3369	Analytical Chemistry		CHEM 3221 and CHEM 3331. MATH 1432 and PHYS 1312 also strongly recommended. May not app toward degree until CHEM 3119 (Lab component to Chem 3369) is successfully completed
CIVE 3331	Environmental Engineering	3	CHEM 1332,1112, CIVE 2330 and credit for or concurrent enrollment in MECE 2334
	Economics of Energy	3	ECON 2304 or 3332 or consent of instructor
ENRG 3310	Inroduction to Energy & Sustainability	3	Junior standing
INDE 3333	Engineering Economy I	3	INDE 2333 or MECE 3360
MATH 3363	Introduction to Partial Differential Equations		MATH 2433 and either MATH 3321 or MATH 3331.
MATH 4364	Introduction to Numerical Analysis	1	MATH 1432, 2331
MATH 4335	PARTIAL DIFFERENTIAL EQUATIONS I		MATH 3331 or consent of instructor.
MATH 4377	ADVANCED LINEAR ALGEBRA I		MATH 2331 and a minimum of three semester hours of 3000-level mathematics.
MATH 4378	ADVANCED LINEAR ALGEBRA II		MATH 4377
MECT 3341	Computer Aided Drafting I	3	MATH 1330 and COSC 1304 or equivalents(ENGI 1331-computing for engineers is equivalent)
PETR 5302	Reservoir Engineering II	3	PETR 3362.
PETR 5350	Natural Gas	3	PETR 3362.
PETR 5397	Completion & Stimulation		PETR 3315, 3318, 3362 and 3372
GEOSCIENCE CRS#	GEOSCIENCE CRS NAME: Approved by Dr.Soliman	HR S	ELECTIVES PRErequisite // and or CON-current enrollment
GEOL 4330	Introduction to Geophysics	3	GEOL 1330, MATH 2433 and PHYS 1322.
	SELECTED TOPICS:Petroleum Geology for		
GEOL 4397	Petroleum Engineers		PETR 2311, 2313
	* if planning on declaring a minor, be sure to get advising from both departments		*NOTE any other elective outside the approved list will need Dr. Soliman's permission prior to taking the class. It should pertain to petroleum engineering and be a jr/sr class. He requires a syllabus of the class to be emailed along with the request for approval for any petroleum student seeking review.