

UC 12750 14S

# UNIVERSITY of HOUSTON

CULLEN COLLEGE of ENGINEERING

Petroleum Engineering

APPROVED APR 23 2014  
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## MEMORANDUM

Date: February 24, 2014

To: Undergraduate Curriculum Committee

From: Petroleum Engineering, Cullen College of Engineering

Contact Person: Dr. Thomas K Holley

Phone: 832/842-4847

Email: tkholley@central.uh.edu

RE: Petroleum Engineering Undergraduate Program Changes

Dean's Signature \_\_\_\_\_

Date 26 FEB 2014

This memorandum is to outline changes for the petroleum engineering program and seek review and approval from the Undergraduate Curriculum Committee.

- **Petroleum Engineering Major Degree Plan Changes**

1. PETR 5302, 5324, 5325 and 5392 will no longer be required.
2. PETR 5392 will move to the Petroleum Technical Electives List- pre-approved by Dr. Holley.
3. CHEE 2331 and 2332 will no longer be required.
4. Chemical Processes- CHEE 2331 will move to the Petroleum Technical Electives Approved List.
5. CHEE 2332- Thermodynamics will be replaced with ENGI 2334.
6. Addition of 2 new courses:  
PETR 4312- Capstone Sr. Project II and PETR 4301- Reservoir Characterization and Modeling (which is a new combined course- (content of former courses PETR 5324 & 5325).
7. Addition of GEOL 1130-Lab class required- which is associated with GEOL 1330 –LEC- already required.
8. One Introduction to Engineering class will be added as required (xxxx1100)
9. Course numbering changes are as follows:  
PETR 3313 changes to PETR 2313; PETR 5310 changes to PETR 3310;  
PETR 5372 changes to PETR 3372
10. The degree plan previously required 1 Petroleum Technical Elective. The proposed change requires 3 Petroleum Technical Electives selected from an approved list and 1 Geoscience Elective selected from an approved Geoscience list.

11. Reduction of the total hours in the degree plan from 127 to 126 credit hours.
12. Approved Petroleum Engineering Degree Plan Flowchart 2013 attached.
13. Proposed Petroleum Engineering Degree Plan Flowchart 2014 attached.
14. CBM03 forms are prepared accompanied by CBM supplemental forms explaining the changes.

- **Petroleum Engineering Minor Degree Plan Changes**

1. Increase the total hours in the minor degree plan to 16 credit hours.
2. Current Petroleum Engineering Minor Degree Plan 2013 attached.
3. Proposed Petroleum Engineering Minor Degree Plan 2014 attached.
4. Minor requirement justification is that the current minor course requirements are combined with graduate level course requirements. Separation of graduate and undergraduate level students is optimum for course level success.
5. Requirements for adding the Petroleum Engineering Minor:  
Students who choose to minor in petroleum engineering must complete 16 hours in Petroleum Engineering courses. Students must be admissible through the change of major requirements as listed on the college of engineering website to pursue the Petroleum Engineering minor.

Courses in the minor program are listed in the chart below. Enrollment is contingent upon official addition of the petroleum minor plan to the student's career and provided that prerequisites of each course are satisfied.

**GPA IN ALL MINOR COURSEWORK COMPLETED MUST BE AT LEAST 2.00**

<b>Course Requirements</b>	<b>Semester //Year</b>	<b>Grade</b>	
PETR 1100			
PETR 2311			
PETR 2313			
ANY THREE OF THE FOLLOWING FOUR COURSES			
PETR 3362			
PETR 3318			
PETR 3315			
PETR 3372			
<b>Total: 16 Hours Required</b>		<b>Total Hours:</b>	

Students must earn a 2.00 minimum cumulative grade point average on the courses attempted in the minor discipline at the University of Houston. No course may count toward the minor in which a grade of less than C- is earned.



# SUMMARY

## UNDERGRADUATE DEGREE PLAN - Fall 2013

NAME: \_\_\_\_\_

UH ID# \_\_\_\_\_

	UH CORE CURRICULUM	MATH	PHYSICS	CHEMISTRY	ENGINEERING	TRM HRS
<b>FIRST YEAR</b>						
<b>FALL=FA 1</b>	ENG 1303	MATH 1431-CAL 1	GEOL 1330	FUND OF CHEM CHEM 1331	CHEM 1111-LAB	PETR 1100 INTRO TO PETR ENGR
<b>SPRING=SPR 1</b>	ENG 1304	MATH 1432-CAL 2	UNIVERSITY PHYS 1321	FUND OF CHEM CHEM 1332	CHEM 1112-LAB	CHEE 1331 -plus Lab Computing for ENGR
<b>SECOND YEAR</b>						
<b>FALL=FA 2</b>	VIS/PERF ARTS	MATH 2433-CAL 3	UNIVERSITY PHYS 1322		PETR 2311-PETROPHYSICS-plus Lab	
<b>SPRING=SPR 2</b>	HIST 1377	MATH 3321-ENGR MATH		CHEE 2331-PROCESSES	PETR 3313-RESVR FLUIDS-plus Lab	INDE 2333-STATISTICS
<b>THIRD YEAR</b>						
<b>FALL=FA 3</b>		ENGI 2304-TECH COM	MECE 3400-MECHANICS 1	CHEE 2332-THERMO	PETR 3362-RESV ENGR 1	PETR 3315-WELL LOG
<b>SPRING=SPR 3</b>	POLS 1336	PETR ELECTIVE		CHEE 3363-FLUID	PETR 3321-PRES TRAN TST	PETR 3318 - DRILLING plus Lab
<b>FOURTH YEAR</b>						
<b>FALL=FA4</b>	POLS 1337	SOC/BEVH SCI	PETR 5392-PE PROJ MANAG	PETR 5324-RESVR THEORY	PETR 5310-PE PROD ECON	PETR 5350-NAT GAS
<b>SPRING =SPR 4</b>	HUMANITY	PETR 4311-CAPSTONE LAB PROJECT		PETR 5302-RESVR ENGR 2	PETR 5325-INTG RESVR CHAR	PETR 5372-PROD OPER
<b>ADVISOR:</b>						
<b>DATE:</b>						
						<b>TOTAL 127</b>

# SUMMARY

# PETROLEUM ENGINEERING FLOWCHART DEGREE PLAN FALL 2014—PROPOSED

UH CORE CURRICULUM	MATH	PHYSICS	CHEMISTRY	ENGINEERING	TRM HRS
<b>FIRST YEAR</b>					
<b>FALL FA 1</b>	ENG 1303	Physical GEOL 1330 GEOL 1130 LAB	FUND OF CHEM - CHEM 1331-LEC	CHEM 1111- LAB	XXXX 1100 INTRO TO ENGR
<b>SPRING=SPR 1</b>	ENG 1304	PHYS 1321 - University Physics	FUND OF CHEM - CHEM 1332-LEC	CHEM 1112- LAB	CHEE 1331 -Computing for ENGR- has Lab
<b>SECOND YEAR</b>					
<b>FALL=FA 2</b>	HIST 1377	PHYS 1322 - University Physics		INDE 2333 STATISTICS	PETR 2311- PETROPHYSICS – has Lab
<b>SPRING=SPR 2</b>	HIST 1378	SOC/BEVH SCI		ENGI 2334 THERMO	PETR 2313 - RESVR FLUIDS-has Lab
<b>THIRD YEAR</b>					
<b>FALL=FA 3</b>	ENGI 2304 - TECH COM	MECE 3400 - MECHANICS 1	PETR 3315 -WELL LOG	PETR 3362 - RESV ENGR 1	PETR 3372 - PETR PROD
<b>SPRING =SPR 3</b>	POLS 1336	CHEE 3363 - FLUID MECHANICS	PETR 3318 -- DRILLING - has Lab	PETR 3321 - PRES TRAN TST	PETR 3310 - PETR PROD ECON
<b>FOURTH YEAR</b>					
<b>FALL=FA 4</b>	POLS 1337	PETROLEUM TECHNICAL ELECTIVE #1-SEE APPRV LIST	PETR 4301- RESRV CHAR & MODEL		PETR 4311- CAPSTONE SR PROJECT I
<b>SPRING =SPR 4</b>	HUMANITY	PETROLEUM TECHNICAL ELECTIVE #2-SEE APPRV LIST	GEO SCIENCE ELECTIVE- SEE APPRVD LIST		PETR 4312- CAPSTONE - SR PROJECT II
					<b>TOTAL</b> 126





