Ministry of Higher Education and Scientific Research Scientific supervision and evaluation device Department of Quality Assurance and Academic Accreditation

# Academic Program Description 2020-2021

University: Mosul College/Institute: College of Petroleum & Mining Engineering Scientific Department: Petroleum Reservoir Date of filling out the file: 1/8/2022 signature: Name of Department Head: Dr.Yasser H.Kddo Name of the scientific assistant: Dr.Mohammed Ali Alrashedi

Check the file before Division of Quality Assurance and University Performance Name of the Director of the Division of Quality Assurance and University Performance: **Asmaa Mowaffak Hamed AlHasany** 

Authentication of the Dean Assistant Prof. Maan Hassan Al-majed

#### University of Mosul College of Petroleum and Mining Engineering Dept. of Petroleum Reservoir Engineering



### Academic Program Details (Curriculum)

### First Stage

						Firs	st Semester		
S	Second			First					
Sei	Semester		Semester			Credits	Subject Name	Code	ت
			D.	Pr.	Th.				
				3	2	3.5	Geology for engineers I	PRE 111	1
					2	2	Engineering mechanics I	PRE 112	2
					3	3	Mathematics I	PRE 113	3
					2	2	English I (Reading & Writing)	PRE 114	4
				2	2	3	Chemistry of Oil & Gas	PRE 115	5
				4	1	3	Engineering Drawing	PRE 116	6
				2	2	3	Electrical Technology	PRE 117	7
					1	1	Chemical Safety	PRE 125	8
			11 15		21.5	Sum.	Course		
				26		21.3	Sum.		

### First Stage

						Se	cond Semester		
Second Semester		First Semester			Cred its	Subject Name	Code	ت	
D.	Pr.	Th.							
	3	2				3.5	Geology for engineers II	PRE 118	1
		2				2	Engineering mechanics II	PRE 119	2
		3				3	Mathematics II	PRE 120	3
		2				2	English.II(Listening& Speaking)	PRE 121	4
		2				2	Human Rights & Democracy	PRE 122	5
		3				3	Principals of Petroleum Engineering	PRE 123	6
	2	1				3	Engineering drawing using AUTOCAD	PRE 124	7
		1				1	Chemical Security	PRE 126	8
	8	16				21.5	Sum.		
	24					21.3	Sum.		

### Second Stage

					Firs	t Semester		
S	Second		First					
Se	Semester		Semester			Subject Name	Code	ت
		D.	Pr.	Th.				
			3	2	3.5	Gravity&magnetic Prospecting	PRE 212	1
			3	2	3.5	Petroleum Geology	PRE 213	2
				3	3	Fundamentals of Petroleum Reservoir. Eng. I	PRE 214	3
			4	2	4	Computer Applications in Engineering (MATLAB)	PRE 215	4
				2	2	Numerical Analysis	PRE 216	5
				3	3	Engineering Statics	PRE 217	6
			10 24	14	19	Sum.	•	

### Second Stage

Second Semester													
Se	Second First												
Sen	Semester Semester		Credits	Subject Name	Code	ت							
D.	Pr.	Th.											
	2	2				3	Fluid mechanics	PEE211	1				
	2	2				3	Serving Engineering	PRE 218	2				
		3				3	Fundamentals of Petroleum	PRE 221	3				
							Reservoir. Eng. II	1 KE 221	3				
		3				3	Thermodynamics	PRE 222	4				
	2	2				3	Engineering Analysis	PRE 223	5				
		3				3	Strength of Materials	PRE 224	6				
	6	15				18	Sum.		•				
	21		10	Sulli.	Sum.								

### Third Stage

					First	Semester		
S	Second		First					
Sei	Semester		Semester			Subject Name	Code	ت
		D.	Pr.	Th.				
			3	2	3.5	Seismic Reflection 2,3,4D	PRE 311	1
						(Processing & interpretation)	FKE 511	1
			3	2	3.5	Well logging	PRE 312	2
				3	3	Drilling Engineering I	PRE 313	3
			3	2	3.5	Rock Mechanics	PRE 314	4
				3	3	Production Engineering I	PRE 315	5
			3	2	3.5	Applied petroleum reservoir engineering I	PRE 316	6
			12	14	20	Sum.		
			26	•	20	Sum.		

## Third Stage

						Second	l Semester		
Second		First							
Ser	Semester		Semester			Credits	Subject Name	Code	ت
D.	Pr.	Th.							
		3				3	Drilling Engineering II	PRE 317	1
	3	2				3.5	Applied petroleum reservoir engineering II	PRE 318	2
		3				3	Production Engineering II	PRE 319	3
		3				3	Natural gas technology	PRE 320	4
	3	2				3.5	Seismic interpretation	PRE 321	5
	2	2				3	Formation evaluation	PRE 322	6
	8	15				19	Sum.		
	23					17	Sum.		

						First	Semester		
Second Semester		First Semester			Credits	Subject Name	Code	ۍ،	
	Schlester		D.	Pr.	Th.	Cicuits	Subject Name	Cout	
					3	3	Enhanced oil recovery I	PRE 411	1
				3	2	3.5	reservoir characterization	PRE 412	2
				3	2	3.5	petroleum system modeling	PRE 419	3
				3	2	3.5	Advanced petroleum reservoir engineering	PRE 414	4
				2	2	3	Core Analysis	PRE 415	5
				3	1	5	Engineering Project		6
				11 23	12	21.5	Sum.		

### Fourth Stage

	Second Semester													
Second		First			Cradita									
Ser	neste	r	Se	emest	er	Credits	Subject Name	Code	<u>ت</u>					
D.	Pr.	Th.												
		3				3	Enhanced oil recovery II	PRE 417	1					
	2	2				3	Reservoir Simulation	PRE 418	2					
		2				2	Petroleum Economic	PRE 413	3					
	3	2				3.5	Well testing	PRE 420	4					
	2	2				3	Petroleum reservoir	PRE 421	5					
							management	1 KL 421	3					
	7	11				14.5	Sum.							
18					14.5	Sum.								
	35						Total Sum.							

Summation Credits for all the stages:

50+45+49+58=202