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

# **Academic Program Description** 2021-2022

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



#### Academic Program Details (Curriculum)

#### First Stage

						Firs	st Semester		
Second				First					
Semester		ſ	Se	emest	er	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			
				26		21.3	Sum.		

#### First Stage

						Sec	cond Semester			
	Second Semester		First Semester		Cred its	Subject Name	Code	[j		
D.	Pr.	Th.				113				
	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.	Cours		
	24					21.3	Suiii.			

#### **Second Stage**

						Firs	t Semester		
S	Second		]	First					
Se	Semester		Se	mest	er	Credits	Subject Name	Code	Ü
			D. Pr. Th.		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	PRE 214	3
							Reservoir. Eng. I		
				4	2	4	Computer Applications in	PRE 215	4
							Engineering (MATLAB)	1162 210	_
					2	2	Numerical Analysis	PRE 216	5
					3	3	Engineering Statics	PRE 217	6
				10	14	19	Sum		
			•	24		19	Sum.		

#### **Second Stage**

						Second	l Semester			
Second		First								
Ser	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	Sum.			

## Third Stage

						First	Semester		
Second		First							
Sei	Semester		Semester			Credits	Subject Name	Code	Ü
			D.	D. Pr. Th.					
				3	2	3.5	Seismic Reflection 2,3,4D	PRE 311	1
							(Processing & interpretation)	1 KE 311	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	1	20	Sum.		

### Third Stage

						Second	l Semester		
Se	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 23	15				19	Sum.		<u>.                                      </u>

#### **Fourth Stage**

						First	Semester		
Second Semester		First Semester			Credits	Subject Name	Code	Ü	
			D.	D. Pr. <b>Th.</b>					
					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 Semester		First Semester			Credits	Subject Name	Code	Ç	
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 management	PRE 421	5
	7	11				14.5	Sum.		
	18					17.5	Suili.		
	35						Total Sum.		·

Summation Credits for all the stages: