



Bachelor of Science in Petroleum Engineering Model Study Plan (2022-2023 Cohort onwards)

For Students Admitted to the University from the Fall Semester

	Semester	Course Code	Course Title	CH	Course type	Semester	Course Code	Course Title	CH	
5			Calculus I for Engineering		Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)		MATH1120/135	Calculus II for Engineering		College Requirement
es.	4	PHYS105	General Physics I		College Requirement	2	PHYS110	General Physics II		College Requirement
~	1	PHYS135	General Physics Lab I		College Requirement	Ζ.	PHYS140	General Physics Lab II		College Requirement
		CHEM111	General Chemistry I		Gen Ed Course (Cluster 3: Area 1: Natural Sciences)		GESU121	Sustainability		Gen Ed Course (Cluster 3: Area 2: Sustainability)
	(Fall)	CHEM175	Chemistry Lab I for Engineering		College Requirement	(Spring)	GENG220	Engineering Thermodynamics		College Requirement
	(i uii)	ESPU107	Introduction to Academic English For Engineering	3	Gen Ed Course (Cluster 1: Area 2: English Communication)	(361118)		Islamic Culture/Biography of the Prophet "Sira"		Gen Ed Course (Cluster 2: Area 4: Islamic Culture)
							GEOL100	Physical Geology	3	Specialization
				24					19	
La contra c		CHME390	Engineering and Strength of Materials		Specialization		GENG215	Engineering Ethics		College Requirement
e,	2	CHEM282	Organic Chemistry for Non-Majors		Specialization	4	PETE308	Drilling Engineering I		Specialization
~	5	CHME330	Chemical Engineering Fluid Mechanics		Specialization	-	PETE305	Reservoir Rock & Fluid Properties		Specialization
		PETE290	Introduction to Petroleum Engineering		Specialization	(Continer)	G8E222	Fundamentals of Innovation and Entrepreneurship		Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)
	(Fall)		Linear Algebra for Engineering		College Requirement	(Spring)	GENG230	Computer Programming		College Requirement
		STAT210	Probability and Statistics		College Requirement		MATH2210/270	Differential Equations for Engineering	3	College Requirement
				16					17	
La contra		PETE315	Reservoir Rock & Fluid Properties lab		Specialization	6 (Spring)	PETE422	Reservoir Simulation		Specialization
e:	_	PETE413	Applied Reservoir Geology		Specialization		Elective	Student choice		Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)
~	5	PETE320	Reservoir Mechanics		Specialization		GENG315	Engineering Economics		Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
			Drilling Engineering II		Specialization		PETE520	Fluid Flow in Porous Media Lab		Specialization
	(Fall)		Well Logging		Specialization		GBT112	Fourth Industrial Revolution		Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)
	(i uii)	Bective	Student choice	3	Major Bective		Elective	Student choice		Major Elective
							PETE362	Data Analysis in Petroleum Engineering	1	Specialization
				16					17	
H					Specialization		PETES42			Specialization
ů,	7		Well Testing		Specialization	8	PETE590	Capstone Engineering Design Project		Specialization
~		PETES85	Design and Critical Thinking in Petroleum Engineering		Gen Ed Course (Cluster 1: Area 4: Critical Thinking)	0		Student choice		Major Elective
	(Fall)	PETES19	Secondary Recovery Methods		Specialization	(Contine)	PETE512	Petroleum Production Operations		Specialization
	(Fall)	PETE409	Natural Gas Engineering		Specialization	(Spring)	HSS105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirates Society)
		Elective	Student choice	3	Major Elective					
				18					15	
Year 5	9 (Fall)	PETE495	Industrial Training	15	Internihip					

Bachelor of Science in Petroleum Engineering Model Study Plan (2022-2023 Cohort onwards)

For Students Admitted to the University from the Spring Semester Total Degree Credit hours: 147

Se	emester	Course Code	Course Title	СН	Course type	Semester	Course Code	Course Title	CH	Course type
			Calculus I for Engineering		Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)		MATH1120/135	Calculus II for Engineering		College Requirement
	4	PHYS105	General Physics I		College Requirement	2	PHYS110	General Physics II		College Requirement
	1	PHYS135	General Physics Lab I		College Requirement	2	PHYS140	General Physics Lab II		College Requirement
a		CHEM111	General Chemistry I		Gen Ed Course (Cluster 3: Area 1: Natural Sciences)		GESU121	Sustainability		Gen Ed Course (Cluster 3: Area 2: Sustainability)
🦉 (Sn	oring)	ESPU107	Introduction to Academic English For Engineering		Gen Ed Course (Cluster 1: Area 2: English Communication)	(Fall)	ISLM100/ISLM101	Islamic Culture/Biography of the Prophet "Sira"		Gen Ed Course (Cluster 2: Area 4: Islamic Culture)
(56	JIII 6/	CHEM175	Chemistry Lab I for Engineering	1	College Requirement	(i aii)	GEOL100	Physical Geology		Specialization
							GENG220	Engineering Thermodynamics	3	College Requirement
				44					19	
		CHME390	Engineering and Strength of Materials	3	Specialization		GENG215	Engineering Ethics	2	College Requirement
7	2	PETE290	Introduction to Petroleum Engineering	1	Specialization	1	GENG315	Engineering Economics		Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
	5	MATH2220/145	Linear Algebra for Engineering	3	College Requirement	-	PETE305	Reservoir Rock & Fluid Properties		Specialization
H (c	• •	CHME330	Chemical Engineering Fluid Mechanics		Specialization	(= 11)	GBE222	Fundamentals of Innovation and Entrepreneurship		Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)
= (Sp	oring)		Probability and Statistics		College Requirement	(Fall)	MATH2210/270	Differential Equations for Engineering	3	College Requirement
A . 1.	0,	CHEM282	Organic Chemistry for Non-Majors		Specialization	1 . 1	GENG230	Computer Programming	3	College Requirement
				16					17	
		PETE315	Reservoir Rock & Fluid Properties lab		Specialization	c	PETE403	Well Logging		Specialization
	-		Drilling Engineering I		Specialization		PETE413	Applied Reservoir Geology		Specialization
°	5		Reservoir Mechanics		Specialization	6	PETE419	Well Performance		Specialization
re.			Data Analysis in Petroleum Engineering		Specialization	(Fall)	PETE407	Drilling Engineering II		Specialization
🦉 (Sn	oring)		Fourth Industrial Revolution		Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)		PETE409	Natural Gas Engineering		Specialization
(56	JIII 6/		Student choice		Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)		Elective	Student choice	3	Major Bective
		Bective	Student choice		Major Elective					
				18					17	
	7		Petroleum Property Evaluation		Specialization	0	PETES07			Specialization
a.	/		Reservoir Simulation		Specialization	8	PETE590	Capstone Engineering Design Project		Specialization
0			Design and Critical Thinking in Petroleum Engineering		Gen Ed Course (Cluster 1: Area 4: Critical Thinking)		Elective	Student choice		Major Bective
l (Sn	oring)	PETES12	Petroleum Production Operations	3	Specialization	(Fall)	PETE519	Secondary Recovery Methods		Specialization
(56	JIII 6/	Elective	Student choice	3	Major Elective	(i aii)	PETE520	Fluid Flow in Porous Media Lab		Specialization
				_			HSS105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirates Society)
				15					10	
	0									
	9			T I						
an a		PETE495	Industrial Training	15	Internship					
۳ (Sn	oring)									
124	n ing)			T I						

Bachelor of Science in Petroleum Engineering Model Study Plan (2023-2024 Cohort onwards)

For Students Admitted to the University from the Fall Semester

Total Degree Credit hours: 132	
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	Semester	Course Code	Course Title	CH Course type	Semester	Course Code	Course Title	СН	
		MATH130	Calculus I for Engineering	3 Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)		MATH135	Calculus II for Engineering		College Requirement
	4	PHYS105	General Physics I	3 College Requirement	2	PHYS110	General Physics II		College Requirement
	1	PHYS135	General Physics Lab I	1 College Requirement	2	PHYS140	General Physics Lab II		College Requirement
æ		CHEM111	General Chemistry I	3 Gen Ed Course (Cluster 3: Area 1: Natural Sciences)		GESU121	Sustainability		Gen Ed Course (Cluster 3: Area 2: Sustainability)
÷	(Fall)		Chemistry Lab I for Engineering	1 College Requirement	(Spring)	GENG220	Engineering Thermodynamics		College Requirement
	(i all)	ESPU107	Introduction to Academic English For Engineering	3 Gen Ed Course (Cluster 1: Area 2: English Communication)	(Spring)	STAT210	Probability and Statistics		College Requirement
		ISLM101	Biography of the Prophet "Sira"	3 Gen Ed Course (Cluster 2: Area 4: Islamic Culture)		GEOL100	Physical Geology	3	Specialization
				17				29	
		CHME390	Engineering and Strength of Materials	3 Specialization		GENG215	Engineering Ethics	2	College Requirement
\sim	2	CHEM282	Organic Chemistry for Non-Majors	3 Specialization	1	PETE308	Drilling Engineering I	3	Specialization
	5	CHME330	Chemical Engineering Fluid Mechanics	3 Specialization	4	PETE305	Reservoir Rock & Fluid Properties	3	Specialization
69	/- ···	PETE290	Introduction to Petroleum Engineering	1 Specialization	(GBE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)
λ.	(Fall)	MATH140	Linear Algebra I	3 College Requirement	(Spring)	GENG230	Computer Programming	3	College Requirement
	()	H5S105	Emirates Studies	3 Gen Ed Course (Cluster 2: Area 3: Emirates Society)	(MATH275	Ordinary Differential Equations	3	College Requirement
				16				17	
	Summer	PETE485	Intrenship I	1				_	
	Jummer								
		PETE315	Reservoir Rock & Fluid Properties lab	2 Specialization		PETE422	Reservoir Simulation	3	Specialization
~	_	PETE413	Applied Reservoir Geology	3 Specialization		Elective	Student choice		Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)
2	5	PETE320	Reservoir Mechanics	3 Specialization	6	GENG315	Engineering Economics		Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
e			Drilling Engineering II	3 Specialization	°	GBT112	Fourth Industrial Revolution		Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)
λ	(Fall)	PETE403	Well Logging	3 Specialization	(Spring)	Elective	Student choice	3	Major Elective
	(raii)	PETE419	Well Performance	3 Specialization	(Spring)	PETE362	Data Analysis in Petroleum Engineering	1	Specialization
				17				16	
	_	PETES07	Well Testing	3 Specialization		PETE542	Petroleum Property Evaluation	3	Specialization
4	7	PETES85	Design and Critical Thinking in Petroleum Engineering	3 Gen Ed Course (Cluster 1: Area 4: Critical Thinking)	8	PETE590	Capitone Engineering Design Project		Specialization
in the second se		PETES 19	Secondary Recovery Methods	3 Specialization	Ŭ,	Elective	Student choice		Major Elective
e,	(Eall)	PETE409	Natural Gas Engineering	3 Specialization	(Spring)	PETE512	Petroleum Production Operations		Specialization
<u>_</u>	(Fall)	Elective	Student choice	3 Major Bective	(Spring)	PETE520	Fluid Flow in Porous Media Lab		Specialization
				15				13	
	Cupanaar	DETEMOD	Intrenship II	1				-	
	Summer	PETENSO	incremanip ii	1					

Bachelor of Science in Petroleum Engineering Model Study Plan (2023-2024 Cohort onwards)

For Students Admitted to the University from the Spring Semester Total Degree Credit hours: 132

Semester	Course Code	Course Title	CH Course type	Semester	Course Code	Course Title	CH Course type
		Calculus I for Engineering	3 Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)		MATH135	Calculus II for Engineering	3 College Requirement
	PHYS105	General Physics I	3 College Requirement	2	PHYS110	General Physics II	3 College Requirement
1	PHYS135	General Physics Lab I	1 College Requirement	2	PHYS140	General Physics Lab II	1 College Requirement
a da	CHEM111	General Chemistry I	3 Gen Ed Course (Cluster 3: Area 1: Natural Sciences)		GESU121	Sustainability	3 Gen Ed Course (Cluster 3: Area 2: Sustainability)
(Spring)	ESPU107	Introduction to Academic English For Engineering	3 Gen Ed Course (Cluster 1: Area 2: English Communication)	(Fall)	STAT210	Probability and Statistics	3 Gen Ed Course (Cluster 2: Area 4: Islamic Culture)
(Shine)	CHEM175	Chemistry Lab I for Engineering	1 College Requirement	(i aii)	GEOL100	Physical Geology	3 Specialization
	ISLM101	Biography of the Prophet "Sira"	3 College Requirement		GENG220	Engineering Thermodynamics	3 College Requirement
			17				19
	CHME390	Engineering and Strength of Materials	3 Specialization		GENG215	Engineering Ethics	2 College Requirement
2	PETE290	Introduction to Petroleum Engineering	1 Specialization	4	GENG315	Engineering Economics	3 Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
5	MATH140	Linear Algebra I	3 College Requirement	4	PETE305	Reservoir Rock & Fluid Properties	3 Specialization
S	CHME330	Chemical Engineering Fluid Mechanics	3 Specialization	/- ···	GBE222	Fundamentals of Innovation and Entrepreneurship	3 Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)
Spring)	H5S105	Emirates Studies	3 Gen Ed Course (Cluster 2: Area 3: Emirates Society)	(Fall)	MATH275	Ordinary Differential Equations	3 College Requirement
(CHEM282	Organic Chemistry for Non-Majors	3 Specialization	()	GENG230	Computer Programming	3 College Requirement
			16				17
	PETE315	Reservoir Rock & Fluid Properties lab	2 Specialization		PETE403	Well Logging	3 Specialization
о E	PETE308	Drilling Engineering I	3 Specialization	6	PETE413	Applied Reservoir Geology	3 Specialization
5	PETE320	Reservoir Mechanics	3 Specialization	(Fall)	PETE419	Well Performance	3 Specialization
S	PETE362	Data Analysis in Petroleum Engineering	1 Specialization		PETE407	Drilling Engineering II	3 Specialization
Spring)	GEIT112	Fourth Industrial Revolution	3 Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)		PETE409	Natural Gas Engineering	3 Specialization
(Bective	Student choice	3 Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)		Elective	Student choice	3 Major Elective
			15				18
Summer	PETE485	Intrenship I	1 Internship				
Juillillei							
	PETES42	Petroleum Property Evaluation	3 Specialization		PETE507	Well Testing	3 Specialization
a 7	PETE422	Reservoir Simulation	3 Specialization	8	PETES90	Capitone Engineering Design Project	3 Specialization
· /	PETES85	Design and Critical Thinking in Petroleum Engineering	3 Gen Ed Course (Cluster 1: Area 4: Critical Thinking)	0	Elective	Student choice	3 Major Bective
		Petroleum Production Operations	3 Gen to Course (Cluster 1: Area 4: Critical Thinking) 3 Specialization	(= 11)	PETE519	Secondary Recovery Methods	3 Major Elective 3 Specialization
(Spring)		Student choice	3 Specialization 3 Major Bective	(Fall)	PETES19 PETES20	Secondary Recovery Methods Fluid Flow in Porous Media Lab	3 Specialization 1 Specialization
1.	LINE LINE	Associate Choice	a major sectore	()	FLIL.20	I I I I I I I I I I I I I I I I I I I	A apecianianum
Summer	PETE490	Intrenship II	1 Internship				
Summer							

كلية الهندسة College of Engineering

جامعة الإمارات العربية المتحدة United Arab Emirates University

Bachelor of Science in Petroleum Engineering Model Study Plan (2025-2026 Cohort onwards)

For Students Admitted to the University from the Fall Semester Total Degree Credit hours: 132

	Semester	Course Code	Course Title	CH	Course type	Semester	Course Code	Course Title	CH	Course type
			Calculus I for Engineering		College Requirement		MATH135	Calculus II for Engineering		College Requirement
	4	PHYS105	General Physics I	3	College Requirement	2	PHYS110	General Physics II	3	College Requirement
1	1	PHYS135	General Physics Lab I	1	College Requirement	2	PHYS140	General Physics Lab II	1	College Requirement
ro,		CHEM111	General Chemistry I	3	College Requirement		Elective	Student choice	3	Gen. Ed. Theme 5: Sustainability
ž	(Fall)	CHEM175	Chemistry Lab I for Engineering		College Requirement	(Spring)	GENG220	Engineering Thermodynamics		College Requirement
	(i aii)		Academic English for Humanities and STEM		Gen. Ed. Theme 2: Academic Language Proficiency	(Jpring)	Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10 or 11
		STAT210	Probability and Statistics	3	College Requirement		GEOL100	Physical Geology	3	Specialization
				17					19	
		CHME390	Engineering and Strength of Materials	3	Specialization		CHME330	Chemical Engineering Fluid Mechanics	3	Specialization
2	2		Introduction to Petroleum Engineering		Specialization	4	GENG315	Engineering Economics		College Requirement
5	3	MATH140	Linear Algebra I	3	College Requirement	4	PETE305	Reservoir Rock & Fluid Properties		Specialization
6	(= 11)		Engineering Ethics		College Requirement	(c ·)	GBE222	Fundamentals of Innovation and Entrepreneurship		Gen. Ed. Theme 4: Entrepreneurship
*	(Fall)		Contemporary Emirati Studies		Gen. Ed. Theme 1: UAE National Identity	(Spring)	MATH275	Ordinary Differential Equations		College Requirement
	(. ,	CHEM282	Organic Chemistry for Non-Majors	3	College Requirement	(1) 0/	GENG230	Computer Programming	3	College Requirement
				15					18	
S	Summer	PETE485	Intrenship I	1						
				1						
		PETE315	Reservoir Rock & Fluid Properties lab	2	Specialization		PETE413	Applied Reservoir Geology	3	Specialization
3	-		Drilling Engineering I		Specialization	<i>c</i>	PETE403	Well Logging		Specialization
h	5		Reservoir Mechanics		Specialization	6 (Spring)	Elective	Student choice		Major Bective
6			Data Analysis in Petroleum Engineering		Specialization		PETE520	Fluid Flow in Porous Media Lab		Specialization
*	(Fall)		Well Performance		Specialization		Elective	Student choice		Major Bective
			Petroleum Production Operations		Specialization		Elective	Student choice	3	Gen. Ed. Theme 3: Innovation
		PETE422	Reservoir Simulation		Specialization					
				18					16	
S	Summer	PETE490	Intrenship II	1						
				1			_			
	7		Well Testing		Specialization	0	PETE590	Capstone Engineering Design Project		Specialization
2	/		Design and Critical Thinking in Petroleum Engineering		Specialization	8	PETE407	Drilling Engineering II		Specialization
a c			Secondary Recovery Methods		Specialization		PETE409	Natural Gas Engineering		Major Elective
Ψ.	(Fall)		Petroleum Property Evaluation		Specialization	(Spring)	Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10 or 11
		Bective	Student choice		Major Elective					

Bachelor of Science in Petroleum Engineering Model Study Plan (2025-2026 Cohort onwards)

For Students Admitted to the University from the Spring Semester Total Degree Credit hours: 132

	Semester	Course Code	Course Title	CH Course type	Semester	Course Code	Course Title	CH	
		MATH130	Calculus I for Engineering	3 College Requirement		MATH135	Calculus II for Engineering	3	College Requirement
	4	PHYS105	General Physics I	3 College Requirement	2	PHYS110	General Physics II	3	College Requirement
-	1	PHYS135	General Physics Lab I	1 College Requirement	2	PHYS140	General Physics Lab II		College Requirement
æ		CHEM111	General Chemistry I	3 College Requirement		GESU121	Sustainability	3	Gen. Ed. Theme 5: Sustainability
Ye	(Spring)	GEAE101	Academic English for Humanities and STEM	3 Gen. Ed. Theme 2: Academic Language Proficiency	(Fall)	Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10 or 11
÷.	(Shime)	CHEM175	Chemistry Lab I for Engineering	1 College Requirement	(1 all)	GEOL100	Physical Geology	3	Specialization
		STAT210	Probability and Statistics	3 College Requirement		GENG220	Engineering Thermodynamics	3	College Requirement
				17				29	
		CHME390	Engineering and Strength of Materials	3 Specialization		CHME330	Chemical Engineering Fluid Mechanics	3	Specialization
\sim	2	PETE290	Introduction to Petroleum Engineering	1 Specialization	4	GENG315	Engineering Economics	3	College Requirement
-	5	MATH140	Linear Algebra I	3 College Requirement	4	PETE305	Reservoir Rock & Fluid Properties	3	Specialization
/ea	(a	GENG215	Engineering Ethics	2 Specialization	/	GBE222	Fundamentals of Innovation and Entrepreneurship	3	Gen. Ed. Theme 4: Entrepreneurship
Y	(Spring)	GEEM110	Contemporary Emirati Studies	3 Gen. Ed. Theme 1: UAE National Identity	(Fall)	MATH275	Ordinary Differential Equations	3	College Requirement
	(CHEM282	Organic Chemistry for Non-Majors	3 Specialization	()	GENG230	Computer Programming	3	College Requirement
				15				18	
í F		PETE315	Reservoir Rock & Fluid Properties lab	2 Specialization		PETE403	Well Logging	3	Specialization
3	_	PETE308	Drilling Engineering I	3 Specialization	6 (Fall)	PETE413	Applied Reservoir Geology	3	Specialization
-	5	PETE320	Reservoir Mechanics	3 Specialization		Elective	Student choice	3	Major Elective
Yea	-	PETE362	Data Analysis in Petroleum Engineering	1 Specialization		PETE520	Fluid Flow in Porous Media Lab	1	Specialization
Ϋ́	(Coring)	PETE419	Well Performance	3 Specialization		Elective	Student choice	3	Major Elective
	(Spring)	PETES12	Petroleum Production Operations	3 Specialization		Elective	Student choice	3	Gen. Ed. Theme 3: Innovation
		PETE422	Reservoir Simulation	3 Specialization					
				15				26	
	Summer	PETE485	Intrenship I	Intenship					
				1					
	_	PETE519	Secondary Recovery Methods	3 Specialization		PETE590	Capstone Engineering Design Project	3	Specialization
4	7	PETES07	Well Testing	3 Specialization	8	PETE407	Drilling Engineering II	3	Specialization
Ъ	'	PETES85	Design and Critical Thinking in Petroleum Engineering	3 Specialization	•	PETE409	Natural Gas Engineering	3	Major Elective
/e	(Contine)	PETES42	Petroleum Property Evaluation	3 Specialization	(Fell)	PETES19	Secondary Recovery Methods	3	Specialization
~	(Spring)	Elective	Student choice	3 Major Elective	(Fall)	Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10 or 11
				15				15	
Year	Summer	PETE490	Intrenship II	1 Internship					