

## CURRICULUM OF DEGREE PROGRAM

First Year, Fall Semester 30 Credits					
Course Code	Course Name	(Hour) Credit	ECTS	Category	Prerequisite
ENG1101	English I	3	6	ECS	
MATH101	Calculus I	3	6	MT	
OGEN1101	Intro to Petroleum Engineering	2	3	OGOE	
CHEM1101	General Chemistry I	3	6	BS	
LAB1101	Introduction to Laboratory Safety & Hazardous Materials	2	3	BS	
ECON1101	Industrial Economics & Finance	3	6	BS	

First Year, Spring Semester 30 Credits					
Course Code	Course Name	(Hour) Credit	ECTS	Category	Prerequisite
ENG1201	English II	3	5	ECS	ENG1101
MATH1201	Calculus II	3	6	MT	MATH101
CHEM1201	General Chemistry II	3	6	BS	CHEM1101
LAB1201	General Chemistry II Lab	2	4	BS	CHEM1201
PHYS1201	General Physics	3	5	BS	
TECH1201	Statics & Mechanics	2	4	BS	

Second Year, Fall Semester 30 Credits					
Course Code	Course Name	(Hour) Credit	ECTS	Category	Prerequisite
ENG2101	Technical English I	3	6	ECS	ENG 1201
EXP2101	Exposition And Argumentation	3	6	ECS	
MATH2101	Analitical Geometry & Linear Algebra	3	6	MT	MATH1201
OGEN2101	Reservoir Fluid Flow	3	5	OGOE	OGEN 1101
LAB2101	Reservoir Fluid Flow Lab	2	3	OGOE	OGEN2101
NTE	Elective	3	4	ECS	

Second Year, Spring Semester 30 Credits					
Course Code	Course Name	(Hour) Credit	ECTS	Category	Prerequisite

ENG2202	Technical English II	3	5	ECS	ENG2101
MATH2202	Differential Equations	3	6	MT	MATH2101
OGEN2202	Drilling Fluids	3	6	OGOE	OGEN1101
LAB2201	Drilling Fluids Laboratory	2	4	OGOE	OGEN2201
OGEN2201	Petrolphysics & Formation Eval.	3	6	OGOE	
LAB2202	Petroleum & Formation Eval Lab	2	3	OGOE	OGEN2201

Third Year, Fall Semester 30 Credits

Course Code	Course Name	(Hour) Credit	ECTS	Category	Prerequisite
OGEN3101	Improved Petroleum Recovery	3	5	OGOE	OGEN2101
OGEN3101	Phase Behavior	3	6	OGOE	
OGEN3101	Drilling Engineering	3	6	OGOE	
LAB3101	Drilling Engineering Lab	2	3	OGOE	OGEN3101
TECH3102	Senior Design I	2	4	CS	
TE	Technical Elective	3	6	EGOE	

Third Year, Spring Semester 30 Credits

Course Code	Course Name	(Hour) Credit	ECTS	Category	Prerequisite
OGEN3202	Reservoir Engineering	3	6	OGOE	
OGEN3202	Transport Phenomenon	3	5	OGOE	
TECH3202	Senior Design II	2	4	CS	
OGEN3202	Production Engineering	3	5	OGOE	
LAB3201	Production Engineering Lab	2	4	OGOE	OGEN3202
TE	Technical Elective	3	6	EGOE	

Fourth Year, Fall Semester 30 Credits

Course Code	Course Name	(Hour) Credit	ECTS	Category	Prerequisite
OGEN4101	Natural Gas Engineering	3	4	OGOE	
OGEN4101	Well Design Control	3	4	OGOE	OGEN3101
OGEN4101	Well Comp; P & R	3	4	OGOE	
TE	Technical Elective	3	6	EGOE	
TE	Technical Elective	3	6	EGOE	
TE	Technical Elective	3	6	EGOE	

Fourth Year, Spring Semester

Course Code	Course Name	(Hour) Credit	ECTS	Category	Prerequisite
	Practical training		21	PT	
	Bachelor Thesis with Final Presentation		9	BT	

MT: Mathematics, BS: Basic Science, ECS: English Composition and Social Sciences, CS: Computer Science, OGOE: Obligatory Oil-Gas Engineering Courses, EGOE: Elective Oil-Gas Engineering Courses, BT: Bachelor's Thesis, SI: Summer Internship.

#### Non-Technical Elective

- HIST 5001 History of Azerbaijan

#### Technical Electives

- OGEN 5001 Offshore Engineering
- OGEN 5002 Natural Gas Reservoir Engineering
- OGEN 5003 Natural Gas Production Engineering
- OGEN 5004 Statistics & Probability for Petroleum Engineers
- OGEN 5005 Directional Drilling Tools and Calculations
- OGEN 5006 Well Stimulation
- OGEN 5007 Special Operation in Drilling
- OGEN 5008 Well Test Analysis
- OGEN 5009 Reservoir Characterization
- OGEN 5010 Pressure Control
- OGEN 5011 Transportation & Storage of Natural Gas
- OGEN 5012 Oil Transportation & Storage
- OGEN 5013 Simulating of Geosystems
- OGEN 5014 Mathematical Modeling of Hydrocarbon Reservoirs