

Republic of Iraq
Ministry of Higher Education & Scientific Research
Supervision and Scientific Evaluation Directorate
Quality Assurance and Academic Accreditation
International Accreditation Dept.
Al-Ayen University



Academic Program Specification Form For The Academic

University: Al-Ayen
College : engineering
Number Of Departments In The College :
Date Of Form Completion : 15/10/2023

Dean's Name Jasim M. Salim
Date: 15/10/2023

Dean's Assistant For
Scientific Affairs
Najla H. H. Alabadi

Date: 15/10/2023

The College Quality Assurance
And University Performance

Manager
Date: 24/10/2023

Signature

Signature

Signature

Quality Assurance And University Performance Manager

Date: 24/10/2023

Signature





TEMPLATE FOR PROGRAMME SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

PROGRAMME SPECIFICATION

This Programme Specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It is supported by a specification for each course that contributes to the programme.

1. Teaching Institution	Al-Ayen University
2. University Department/Centre	
3. Programme Title	Engineering / Petroleum department
4. Title of Final Award	Bachelor in Petroleum Engineering
5. Modes of Attendance offered	Yearly
6. Accreditation	Academic accreditation of higher education And scientific research ministry
7. Other external influences	department's outputs match the actual needs of the oil sector and society
8. Date of production/revision of this specification	15/10/2023
9. Aims of the Programme	
1- Providing scientific outputs capable of fulfilling the labor market	
2- Preparing a specialized staff in petroleum engineering capable of keeping pace with the development in this field	
3- Participation with oil institutions in solving the problems facing this field	



10. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Cognitive goals

A. Cognitive goals

- A1. Transfer information and topics in a way that allows the graduate to use his specialization in an elaborate manner
- A2. Organizing and retaining important information for use in the labor market
- A3. The practical part gives the graduate experience that helps him to compete positively in the labor market

A4. Continue thinking and creativity according to scientific data

B. The skills goals special to the programme

- B1. Logical thinking to solve scientific problems facing him and search for solutions
- B2. Integration in the process of academic research and the reinforcement of conclusions and recommendations
- B3. Carrying out practical experiments in the laboratory and practicing them in the field of work

Teaching and Learning Methods

- 1- Focusing on the theoretical side on the study of scientific problems according to a logical scientific method aimed at understanding the problem and working to find solutions to it.
- 2- Focusing on the practical side on acquiring skills in conducting experiments and using them in scientific research
- 3- Learning in the theoretical and scientific aspects is achieved through cooperation between the professor and the student to achieve the optimum benefit by overcoming the obstacles facing the student and impeding the achievement of the desired goals.
- 4- Encouraging students to broadcast information from books and scientific articles on the Internet

Assessment methods

Daily exams - monthly and final theoretical and practical exams - discussion in the classroom - homework - graduation projects

C. Affective and value goals

- C1. Working as one team
- C2. Receiving information and accepting knowledge
- C3. Like to work and do homework
- C4. Commitment to corporate ethics

Teaching and Learning Methods

- 1- Working together in groups
- 2- Encouraging teamwork
- 3- Optimizing the effort to obtain information

Assessment methods

1- Presentations

- 2- Reports completed in groups



D. General and Transferable Skills (other skills relevant to employability and personal development)

- D1. skill of expressing opinion and delivering in the lecture
- D2. Discussion in a scientific manner
- D3. The ability to solve problems and obstacles through duties
- D4. Leadership skill by selecting a supervisor student to work weekly

Teaching and Learning Methods

Teaching assessment of all activities carried out by the student individually or within his group

Assessment Methods

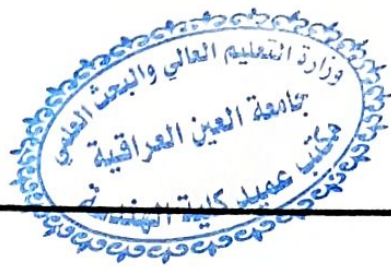
- 1- Evaluation of research and laboratory results
- 2- Evaluation of graduate research
- 3- Evaluation of the experimental side of the students in the laboratory
- 4- Assessment based on daily exams

11. Programme Structure

Level/Year	Course or Module Code	Course or Module Title	Credit Hours	
			Practical	Theoretical
First Year	PE100	General Geology	4	6
First Year	GE102	Mathematics 1	0	6
First Year	GE104	Computer Programming1	4	4
First Year	GE106	Engineering Drawing and Descriptive Geometry	6	2
First Year	GE108	Static's and Dynamics -	0	4
First Year	GE110	English Language I	0	4
First Year	GE114	Physics	0	4



First Year	GE101	Analytical Chemistry	2	2
First Year	GE103	Electrical Technology	2	2
First Year	GE112	Arabic	0	2
Second Year	PE200	Structural and Petroleum Geology	4	4
Second Year	GE202	Mathematics 2	0	6
Second Year	GE204	Computer Programming 2	4	2
Second Year	PE206	Fundamental of petroleum Engineering	0	4
Second Year	GE208	Fluid Mechanics	2	4
Second Year	GE210	English Language 2	0	4
Second Year	PE201	Petroleum Properties	3	1
Second Year	PE203	Eng. Thermodynamics	0	3
Second Year	GE203	Strength of Materials	2	2
Second Year	GE212	Human Rights	0	2
Third Year	PE300	Petroleum Reservoir Eng.1	4	6
Third Year	PE302	Petroleum Drilling Eng.1	4	6
Third Year	PE304	Petroleum Production Eng.1	0	4
Third Year	PE306	Well Logging.	0	6
Third Year	PE308	Petroleum Engineering Economics	0	4
Third Year	GE302	Engineering Mathematics	0	6
Third Year	GE310	Technical English	0	4
Third Year	PE301	Geophysics	0	2
Third Year	GE303	Engineering Statistics	0	2
Fourth Year	PE400	Petroleum Reservoir Eng.2	0	6



Fourth Year	PE402	Petroleum Drilling Eng.2	0	6
Fourth Year	PE404	Petroleum Production Eng.2	0	6
Fourth Year	PE406	Secondry Oil Recovry	0	6
Fourth Year	PE408	Numerical Methods and Rervoir Simulation	4	4
Fourth Year	PE410	Engineering Project	4	2
Fourth Year	PE401	Gas Technology	0	3
Fourth Year	PE403	Optimization	0	3
Fourth Year	PE405	Integrated Reservoir Management	1	2



13. Personal Development Planning

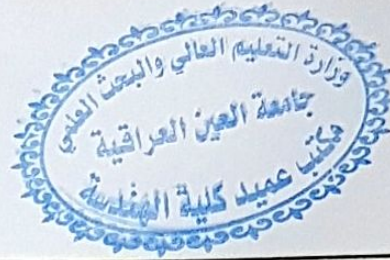
- 1- Encouraging employees of the Oil Department to participate in external seminars, training courses and conferences
- 2- Designing scientific plans to include training courses for the department's employees in various fields
- 3- Periodic scientific review of the department in all its activities
- 4- Designing evaluation forms for the teaching staff, the employee and the head of the department, as well as the student's evaluation of the teaching and curriculum

14. Admission criteria

The central admission system approved by the Central Admission Department in the Ministry of Higher Education and Scientific Research

15. Key sources of information about the programme

- 1- University of Baghdad Academic Description Program
- 2- College curricula
- 3- Instructions of the Ministry of Education and Scientific Research



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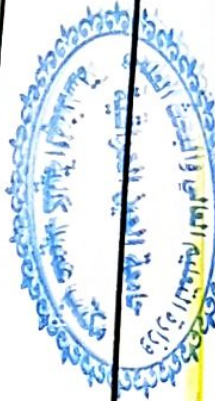
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Curriculum Skills Map

please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed

Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	Programme Learning Outcomes												General and Skills (or) Other skills relevant to employability and personal development	
				Knowledge and understanding				Subject-specific skills				Thinking Skills					
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4		
First year	PE100	General Geology	(C)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	GE102	Mathemat ics 1	(C)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	GE104	Computer Programm ing1	(C)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	GE106	Engineeri ng Drawing and Descriptiv e Geometry	(C)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	GE108	Static's and Dynamics	(C)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	GE110	English Language I	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	GE104	Physics	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	GE101	Analytical Chemistry	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓



		Y																									
GE103	Electrical Technology	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GE112	Arabic	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PE200	Structural and Petroleum Geology	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GE202	Mathematics 2	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GE204	Computer Programming 2	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PE206	Fundamental of petroleum Engineering	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GE208	Fluid Mechanics	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GE210	English Language 2	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PE201	Petroleum Properties	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PE203	ENG Thermodynamics	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GE203	Strength of Materials	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GE212	Human Rights	(G)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Second year



[illegible]

