

Academic program description

University name: University of Anbar

College: College of Science

Scientific Department: Department of Applied Geology

Name of academic or professional program: Bachelor of Science in Geology

Final degree name: Bachelor of Geology

:Academic system

Description preparation date: 1-9-2024

Date of filling out the file 1-9-2024



Elmed

التوقيع:

اسم المعاون العلمي: ا.د احمد سلمان عبيد

التاريخ: ٢٠٢٥ / ٦ / ٢٢

Misha

التوقيع:

اسم رئيس القسم: ا.د علي مشعل عبد

التاريخ: ٢٠٢٥ / ٦ / ٢٢

دقق الملف من قبل: *إحسان خليل إبراهيم*
شعبة ضمان الجودة والاداء الجامعي ونقود الأداء

اسم مدير شعبة ضمان الجودة والاداء الجامعي:

ا.م.د. احمد خليل ابراهيم

التاريخ: ٢٠٢٥ / ٦ / ٢٣

التوقيع:

مصادقة السيد العميد

أ.د. عصمت مزي عبد الغفور
السيد

٢٠٢٥ / ٦ / ٢٣

1. Program Vision

Preparing an educated generation of young people with comprehensive knowledge in the various specializations and branches of earth sciences, to obtain local and international academic recognition and to contribute to the scientific, technical and economic development of the country.

2. Program Mission

Preparing qualified competencies in the field of earth sciences by acquiring logical and scientific thinking and research skills to achieve optimal use of natural resources in a way that serves the country's national economy, and achieve a balance between investment and preserving environmental integrity in a way that serves society.

3. Program Objectives

The department aims to graduate scientific cadres capable of working in:

- 1- Institutions of geological survey, mineral investigation, oil exploration, water resources, and environmental studies, in addition to the central laboratories for construction and engineering applications.
- 2- Building the research and analytical capacity of students
- 3- Developing students' deductive side
- 4- Teaching students how to deal with scientific equipment

4. Program Accreditation

Did not obtain program accreditation

5. Other external influences

nothing

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	٧	١٥	13%	
College Requirements	٤	١٩	7%	
Department Requirements	٤٣	١٥٠	78%	
Summer Training	١	٤	2%	
Other				

* This can include notes whether the course is basic or optional.

7. Program Description				
Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
1st	GEO-111	General Geology 1	٢	٣
1st	GEO-112	Crystallography	٢	٣
1st	GEO-113	Chemistry	٢	٣
1st	GEO-114	Mathematics 1.	٢	
1st	UOA -101	Arabic	٢	
1st	UOA -103	Human rights and democratic	٢	
1st	GEO-121	General Geology 2	٢	٣
1st	GEO-122	Metallurgy	٢	٣
1st	GEO-123	Physics	٢	٣
1st	GEO-124	Mathematics 2.	٢	
1st	UOA007	Computer science	٢	٣
1st	UOA003	English	٢	
2nd	GS 3206	Macro Paleontology	٢	٣
2nd	GS 3201	Stratigraphy	٢	٣
2nd	GS 3203	Mineralogy	٢	٣
2nd	GS 3202	Remote Sensing	٢	٣
2nd	GS 3205	Sedimentology	٢	٣
2nd	GS 3204	Sedimentary Rocks	٢	٣
2nd	GS 3211	Geomorphology	٢	٣
2nd	GS 3208	Petrology	٢	٣
2nd	GS 3212	Hydrology	٢	٣
2nd	GS 3210	Structural Geology	٢	٣
2nd	GS 3209	Geographic Information System (GIS)	٢	----
2nd	GS 3303	English language	٢	٣

8. Expected learning outcomes of the program	
Knowledge	
The department seeks to choose the best modern scientific methods in delivering good information to students through a distinguished cadre of teachers, as well as providing students with scientific and practical geological experience and all its branches through practical training in the department's laboratories and multiple field trips during the academic year, in addition to holding the summer field course. For the fourth stage, for a period of one month	Learning outcomes statement 1
Skills	
The department provided classrooms and laboratories with all modern means and equipment necessary to complete knowledge	Many of the department's graduates have worked in many of the institutions mentioned
Ethics	
Developing the student's ability to understand the specialty and deal with it flexibly Create a state of familiarity with the vocabulary of the specialty Carrying out responsibility in serving society and the country through this specialty	

9. Teaching and Learning Strategies

Explanation and clarification through lectures.
How to display scientific materials using display devices: data show, plasma screens.
Self-learning through homework and mini-projects within lectures.
Daily surprise quizzes and continuous weekly tests
Guiding students to some sources to benefit from and expand students' understanding of scientific material
Graduation projects and scientific visits
Seminars and seminars held in the department and summer training.

10. Evaluation methods

Quizzes and homework
Semester and final exams for theoretical and practical subjects and small projects within the lesson
Providing activities, semester and final tests, and activities

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Professor		4			4	
Assistant Professor		5			5	
Teacher		2			2	
Assistant teacher	٢	3			5	

Professional Development

Mentoring new faculty members

They are permitted to teach after passing the teaching methods course and the central teaching suitability test

Professional development of faculty members

Overall, the goal of an academic and professional development plan is to empower faculty members to excel in their roles as educators, scholars, and leaders within their academic

community. It fosters a culture of continuous learning and improvement, ultimately benefiting both faculty and students alike.

12.Acceptance Criterion

The student must be accepted as a sixth-grade graduate with a grade of no less than 70%, in addition to special admissions

13.The most important sources of information about the program

One of the most important sources of information for the study program based on the commonly accepted curricula and courses in colleges and scientific departments in English and American universities. In addition to communicating with institutions and state departments that have geological cadres to develop study programs to graduate students with experience to work in these relevant departments and institutions, as well as supporting postgraduate programs.

14.Program Development Plan

The department's approved curricula were developed after its inclusion in the Bologna process and according to international curricula, where some important materials were modified and added that support the development of the department's graduates and hone their skills to suit the labor market.

Program Skills Outline

				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
1st	GEO-111	General Geology 1	Basic	√	√	√			√	√			√		
1st	GEO-112	Crystallography	Basic	√	√	√			√	√			√		
1st	GEO-113	Chemistry	Basic	√				√							
1st	GEO-114	Mathematics 1.	Basic	√				√							
1st	UOA -101	Arabic	Optional	√				√							
1st	UOA -103	Human rights and democratic	Optional	√				√							
1st	GEO-121	General Geology 2	Basic	√				√							
1st	GEO-122	Metallurgy	Basic	√	√			√	√			√			
1st	GEO-123	Physics	Basic	√				√	√			√			
1st	GEO-124	Mathematics 2.	Optional	√				√	√			√			

1st	UOA007	Computer science	Basic	√				√							
1st	UOA003	English	Optional	√				√							
2nd	GS 3206	Macro Paleontology	Basic	√				√							
2nd	GS 3201	Stratigraphy	Basic	√	√	√			√	√			√		
2nd	GS 3203	Mineralogy	Basic	√				√							
2nd	GS 3202	Remote Sensing	Basic	√				√							
2nd	GS 3205	Sedimentology	Basic	√	√			√	√			√			
2nd	GS 3204	Sedimentary Rocks	Basic	√				√	√			√			
2nd	GS 3211	Geomorphology	Basic	√				√	√			√			
2nd	GS 3208	Petrology	Basic	√				√							
2nd	GS 3212	Hydrology	Basic	√	√			√	√			√			
2nd	GS 3210	Structural Geology	Basic	√				√							
2nd	GS 3209	Geographic Information System (GIS)	Basic	√				√							
2nd	GS 3303	English language	Optional	√				√							

3rd	GS 3301	Physics of the earth	Basic	√				√							
3rd	GS 3302	Petroleum Geology	Basic	√	√			√	√			√			
3rd	GS 3305	Geochemistry	Basic	√				√	√			√			
3rd	GS 3306	Geology of Iraq	Basic	√				√	√			√			
3rd	GS 3304	Engineering Geology	Basic	√				√							
3rd	GS 3307	Ore Minerals	Basic	√				√							
3rd	GS 3306	English Language	Optional	√			√	√			√	√	√		
3rd	GS 3304	Gravity & Magnetic Method	Basic	√				√							
3rd	GS 3307	Field Geology	Basic	√				√							
3rd	GS 3311	Mechanic Rock	Basic	√				√							
3rd	GS 3309	Optical Mineralogy	Basic	√	√			√	√			√			
3rd	GS 3201	Research Method	Basic	√				√	√			√			
3rd	GS 3312	Micro Paleontology	Basic	√				√	√			√			
3rd	GS 3310	Field Survey	Basic	√				√							

4th	GS 3308	Hydrogeology	Basic	√			√	√			√	√	√		
4th	GS 3402	Electric Method	Basic	√				√							
4th	GS 3404	Environmental Geology	Basic	√				√							
4th	GS 3405	Quaternary	Basic	√				√							
4th	GS 3403	Geotectonic	Basic	√				√							
4th	GS 3401	Igneous & Metamorphic Rocks	Basic	√	√			√	√			√			
4th	GS 3409	Well Logging	Basic	√				√	√			√			
4th	GS 3410	Exploration Geochemistry	Basic	√				√	√			√			
4th	GS 3408	Seismic Investigation	Basic	√				√							
4th	GS 3407	Western desert geology	Basic	√	√			√	√			√	√	√	
4th	GS 1401	Research project	Basic	√	√			√	√			√	√	√	
4th	GS 3406	English Language	Optional	√			√	√			√	√	√		

- Please tick the boxes corresponding to the individual program learning outcomes under evaluation.