

**Ministry of Higher Education and Scientific Research  
University of Mosul/ College of Science  
Department of Geology**



### Description of the academic program of the Department of Geology

This academic program description provides a summary of the most important features of the program and an outcome of the section that the student is required to achieve, demonstrating whether he has made the most of the opportunities available. It is accompanied by a description of each course within the program.

1. Educational institution	University of Al Mosul
2. University department/center	College of Science/Department of Geology
3. Name of the academic program	Bachelor of Geology
4. Name of the final certificate	Bachelor of Geology
5. The academic system	Quarterly
6. Approved accreditation program	ABET
7. Other external influences	Nothing
8. Date the description was prepared	2023

## Objectives of the academic program

Graduating a student familiar with the basic concepts of geology.  
Graduating a student capable of applying geology in the fields of oil and community service.  
Graduating a group of students who have the ability to continue postgraduate studies to supplement their higher education in the future.

### Required learning outcomes and methods of teaching, learning and assessment

#### A- Knowledge and understanding

1. Enable the student to gain an understanding of the Geology subject.
2. Preparing scientific cadres specialized in geology and all its branches to support the country's industrial and research movement through their work in scientific, practical and research institutions that support this trend

#### B- Subject-specific skills

1. Theoretical education skills
2. Practical education and data analysis skills

#### Teaching and learning methods

Theoretical and practical lectures, daily assignments and discussions evaluation methods

#### Evaluation methods

Exams, daily assignments, discussions, laboratory reports, and a graduation project

#### C- Thinking skills

1. Discussions
2. Feedback

#### Teaching and learning methods

Lectures, science experiments, applications, homework and scientific discussions

#### Evaluation methods

Exams, daily assignments, discussions, laboratory reports, and a graduation project

#### D. General and transferable skills (other skills related to the employability and development of the person)

1. The ability to work in a multidisciplinary team.
2. The ability to communicate constructively Teaching and learning methods.

#### Teaching and learning methods

Lectures, scientific experiments, homework and scientific discussions

#### Evaluation methods

Exams, daily assignments, discussions, laboratory reports, and a graduation project

<b>Program structure</b>				
<b>Level / year</b>	<b>Subject code</b>	<b>Subject name</b>	<b>Credit hours</b>	
			<b>Practical</b>	<b>Theoretical</b>
<b>First year</b>	SCGE21-S1011	Physical geology I	2	2
	SCGE21-S1021	Crystallography	2	2
	SCGE21-S1031	Chemistry	2	2
	SCGE21-S1041	Mathematic		2
	SCGE21-S1051	Computer I	2	2
	SCGE21-S1061	Human right		1
	SCGE21-S1071	Arabic language		2
	SCGE21-T1081	Physical geology II	2	2
	SCGE21-T1091	mineralogy	2	2
	SCGE21-T1101	physics	2	2
	SCGE21-T1111	statistic		2
	SCGE21-T1121	Computer II	2	2
	SCGE21-T1131	Democracy		1
	SCGE21-T1141	English language		1
<b>Second Year</b>	SCGE21-S2011	Optical mineralogy	3	2
	SCGE21-S2021	Invertebrate paleontology I	2	2
	SCGE21-S2031	Stratigraphy	2	2
	SCGE21-S2041	Historical geology	2	2
	SCGE21-S2051	Geomorphology	2	2
	SCGE21-S2061	University education (health education)		1
	SCGE21-T2071	Geophysics	2	2
	SCGE21-T2081	Invertebrate paleontology II	2	2
	SCGE21-T2091	Sedimentology	3	2
	SCGE21-T2101	Micropaleontology I	3	2
	SCGE21-T2111	Remote sensing	2	2
	SCGE21-T2121	Petrology	2	2
<b>Third Year</b>	SCGE21-S3011	Geology of Iraq	2	2
	SCGE21-S3021	Geophysics I	2	2
	SCGE21-S3031	Structural geology I	3	2

	SCGE21-S3041	Sedimentary petrology	3	2
	SCGE21-S3051	Igneous rocks	3	2
	SCGE21-S3061	Micropaleontology II	3	2
	SCGE21-T3071	Field geology	2	2
	SCGE21-T3081	Geophysics II	2	2
	SCGE21-T3091	Structural geology II	3	2
	SCGE21-T3101	Geochemistry	2	2
	SCGE21-T3111	Metamorphic rocks	3	2
	SCGE21-T3121	Sedimentary environment	3	2
<b>Fourth Year</b>	SCGE21-S4011	Petroleum geology	2	2
	SCGE21-S4021	Ore geology	2	2
	SCGE21-S4031	Exploration geochemistry & Isotopic geology	2	2
	SCGE21-S4041	Hydrogeology	2	2
	SCGE21-S4051	Basin analysis	2	2
	SCGE21-S4061	Geotectonic	2	2
	SCGE21-S4071	Field work		2
	SCGE21-T4081	Well logging	2	2
	SCGE21-T4091	Industrial rocks	2	2
	SCGE21-T4101	Environmental geology	2	2
	SCGE21-T4111	Engineering geology	2	2
	SCGE21-T4121	Sequence stratigraphy	2	2
	SCGE21-T4131	Project		1
<b>Certificates and credit hours</b>		<b>Bachelor's degree Requires (188) credit hours</b>		<b>188 Hours 146 credit units</b>

## 12. Planning personal development

Extracurricular activities, scientific trips, and scientific tours

## 13. Acceptance standard (establishing regulations related to enrollment in the college or institute)

Central admission

## 14. The most important sources of information about the program

Student guide for central admission prepared by the Ministry of Higher Education and Scientific Research.

For more information, job description and courses

[/https://uomosul.edu.iq/science](https://uomosul.edu.iq/science)

**Department activities on the website**

<https://www.facebook.com/zaid.malk.14?mibextid=ZbWKwL>

### **Academic program requirements from the curriculum**

<b>13.5</b>	<b>Type of curriculums</b>	<b>Number of credit hours</b>	<b>percentage</b>
<b>1</b>	<b>University requirements</b>	<b>8</b>	<b>%8</b>
<b>2</b>	<b>College requirements</b>	<b>16</b>	<b>%16</b>
<b>3</b>	<b>Department requirements</b>	<b>76</b>	<b>%76</b>
<b>Total</b>		<b>100</b>	<b>%100</b>