



Self-evaluation report for the Department of Geology

Depending on criteria

(ABET Accredited Certification Program)

2022-2023



Republic of Iraq جمهورية العراق

Ministry of Higher Education & Scientific Research

University of Mosul جامعة الموصل

College of Science

Department of Geology



# **University of Mosul / College of Science/ Department of Geology**

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#### Introduction

According to the directives of the Minister of Higher Education and Scientific Research on the necessity of developing universities and educational institutions, He instructed the establishment of a centre for ensuring quality and reliability through which the scientific services provided by the Ministry and its educational institutions are matched with international quality standards, taking into account the current and future needs of Iraqi society, to graduate qualified cadres capable of meeting these needs.

Based on the commitment of the Department of Geology/ College of Science/ University of Mosul to establish and apply quality practices to support the mission of the university towards achieving its strategic goals and reaching global leadership, a self-evaluation report was written.

The ABET Accreditation Standards self-evaluation is an examination of the overall functions and activities of the department, taking into account the mission and goals of the department, justifying the analysis extensively with conclusions and evidence, and taking advice from others who can provide independent comments. The responsibility for conducting the self-study falls on those in charge of the department so that everyone is committed to conducting an objective, subjective, and scientific evaluation. Evaluation is an effective means of reviewing the strengths and weaknesses of the department.

The report aims to make changes that contribute to raising the level of performance, supporting strengths, and eliminating weaknesses through work that achieves the standards of the ABET accreditation program, giving a comprehensive overview of the level of activities, services, and educational programs provided by the department, knowing the levels of students, and ways to improve the educational reality, and determining what they need training courses and development programs to ensure the quality of the programs and outputs of the department to ensure the effectiveness of ongoing quality processes and procedures.

#### Report preparation methodology

The methodology for preparing the self-evaluation report for the Department of Geology/ College of Science was based **on ABET** program accreditation standards, the participatory work of department officials, and direct coordination with the Quality Assurance Department at the college. Electronic workshops were initiated to clarify how to work with the standards while discussing ways and mechanisms of work before writing the self-report to be the basic building block from which the final self-evaluation report will emerge.

# Mechanism for involving academic and administrative units and students in implementing the study

After the department outlined the comprehensive model in preparing for the self-evaluation study, it determined the organizational structure of the committee supervising the self-evaluation study and the work teams in accordance with the quality management system applied in it so that the department defined the organizational structure as follows:

- ✓ Supervising the self-evaluation study.
- ✓ Form a committee of the academic staff of the department to collect evidence supporting each standard, number them according to the standard, and determine an action plan for the work groups.
- ✓ Preparing and writing the report.

# Tools for collecting information to prepare the report

The following tools were used to prepare the report

- ✓ Vision, mission and goals.
- ✓ ABET Standards Guide.
- ✓ Book of laws, regulations and instructions of the Ministry of Higher Education.
- ✓ Annual and executive plans, decisions, records, procedures, and forms.
- ✓ Questionnaires, personal interviews, meeting minutes, periodic reports, quarterly reports, and annual reports.
- ✓ Studies, research, and completed development projects.

# Writing and preparing the report

Assistant Prof. Dr Ibrahim Younis Al-Sharifi

# **Supervisory committee**

Prof. Dr Omar Ahmed Al-Badrani
Assistant Prof. Dr Falah Abed Al-Miamary
Lecturer Dr Mahmood Abdul Haq Al-Sumaidaie

# **Evidence collection committee**

Assistant Prof. Dr Falah Abd Almammari
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Lecturer Dr Radwan Khalil Haider
Lecturer Zainab Musadeq Shanshal
Lecturer Zahraa Jerjees Mohammed

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# **Chapter one**

- Name and address of the institution: Ministry of Higher Education and Scientific Research - University of Mosul - College of Science - Department of Geology
- Department contact information:
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• Department Rapporteur: Lecturer Dr Saddam Issa Mustafa Al-Khatuni Iraq - Mosul - University of Mosul - College of Science - Department of Geology

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- Year of establishment: 1964
- Language of study: English.
- Initial study period: four years.
- Duration of postgraduate study (Master): two years.
- Duration of postgraduate study (doctorate): three years.

# **Department in Brief**

The Department of Geology is one of the founding scientific departments of the College of Sciences since the middle of the last century. It was established in the sixth decade of the century, which provided all state institutions, without exception, with leading scientific competencies in their field. It played a positive role in the economic advancement of our dear country in terms of oil, mineral exploration, ores and water resources to invest them to build a strong and stable country. At the very beginning when the department launched, the teaching staff was mostly European, American, Pakistani and Indians and in various geological specialties. After 1970, Iraqi staff began to return to the department after finishing their studies abroad and took up every duties in the department.

#### Heads of the Department of geology /College of Science since its establishment

Mr. C. M. G. Bolton (1964-1970)

Prof. Dr. Farouk Sinallah Al-Omari (1970-1972)

Prof. Dr. Abdul Hadi Yahya Al-Sayegh (1972-1973)

Prof. Dr. Farouk Sinallah Al-Omari (1973-1973)

Prof. Dr. Abdul Hadi Yahya Al-Sayegh (1973-1976)

Prof. Dr. Riyad Hamid Al-Dabbagh (1976-1978)

Dr. Abdul Latif Al-Hasso (1978-1979)

Prof. Dr. Abdul Hadi Yahya Al-Sayegh (1979-1983)

Prof. Dr. Zuhair Daoud Al-Sheikh (1983-1991)

Prof. Dr. Abdul Hadi Yahya Al-Sayegh (1991-1999)

Prof. Dr. Ramzi Khader Al-Nasser (1999-2003)

Prof. Dr. Amer Daoud Nader (2003-2005)

Prof. Dr. Thanoun Abdul Rahman (2005-2006)

Prof. Dr. Nabil Qadir Al-Azzawi (2006-2008)

Prof. Dr. Majed Magdi El Metwally (2008-2011)

Prof. Dr. Thanoun Hamid Al-Dabbagh (2011-2013)

A. Prof. Dr. Abdulaziz Mahmood Al-Hamdani (2013-2016)

A. Prof. Dr. Mohamed Ahmed Mohamed Al-Hajj (2016-202)

Prof. Dr. Zaid Abdul Wahab Malak (2020 – 2022)

Prof. Dr. Omar Ahmed Al-Badrani (2022 – now )

## **Achievements and activities:**

	The scientific activity	Title	Date
1	Conference	The First National Geosciences Conference	2001
2	Conference	The Second National Geosciences Conference	2013

# **Vision, Mission & Objectives**

#### **Vision**

Building a scientific department in a modern system with advanced curricula and competent scientific staff that match world standards, as well as striving to make the department. a scientific edifice with specialized and technically advanced scientific laboratories furnished with all modern scientific equipment and devices.

#### **Mission**

The Department of Geology sought to provide the scientific community of the country with qualified graduates who participate in the implementation of development plans and raise the levels of civilizational progress at the academic and applied levels in the field of Earth Sciences.

#### **Objectives**

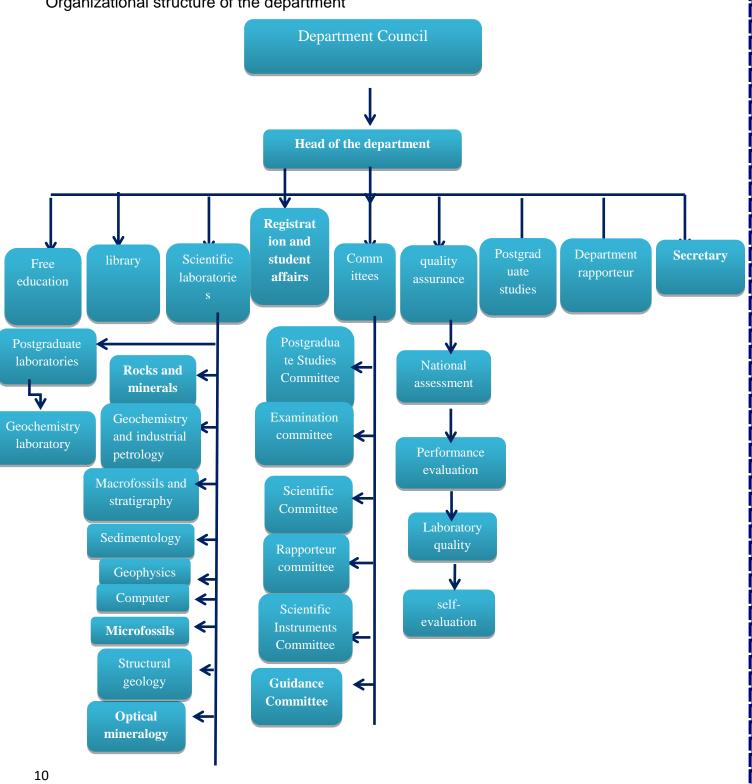
The importance of Geology comes from the fact that it provides the requirements of human life. This stems from the reality that each branch of geology has a strong connection with industrial, agricultural, economic or service aspects of life. The main objectives are the following:

- 1- Teaching undergraduate and postgraduate levels, and conducting scientific, academic and applied research in the domains of Geology.
- 2- Saving or providing highly-qualified specialists to implement plans and draw strategies for different institutions of the government.
- 3- Standing (the department) as a consulting front for the projects of the state geological

departments, participating in the implementation of geological programs for the private and public sector.

4- Implemeting service projects in support of investment projects in the country.

Organizational structure of the department



#### **Students**

#### 1. Student admission policy

The student is accepted into the department centrally by distributing the student by the Ministry to various colleges and institutes, where the student who graduates from preparatory school in the biological and applied branches fills out the admission form through which he is accepted, based on the sequence of his choices and his average. And the numbers of students applying and the minimum averages. Students applying to the college are generally accepted on the basis of the scientific departments, of which the Department of Geology is one of them. Students are distributed among these departments depending on their desires, which are confirmed by filling out an options form. Internally, as well as on their grades in preparatory school, according to the total.

#### 2. Central guidance

The Central Guidance Committee seeks to establish mechanisms to maintain the student's needs during the university stage by providing the necessary and appropriate environment to enable the student to succeed and achieve academic excellence and enhance confidence in his abilities, especially in his future work Secondly, identifying the problems or obstacles that may cause a negative impact on his studies and the urgent mechanisms to work to overcome the difficulties that the student may encounter in the scientific, personal and psychological aspects. The most important thing you can do in the field of personality development is the student is to enhance cooperation between the student and the professor in the field of scientific knowledge and for the student to resort to the advisor and the college in the event of a problem or topic that is difficult to solve and to refer to guidance as an important means of confidence and personality for the student. There are four professors supervising each stage in the department.

#### 3. Graduation requirements

Graduation requirements for a student in the initial stage of study include the following:

Our department's program awards a degree of bachelor in Geology. Consequently, in order to obtain the certificate granted by the program, the student must provide the following requirements:

Passing the four levels of study through:

First: Attending attendance hours for each subject of no less than (90% of the hours scheduled for the subject).

Second: Obtaining a passing grade in each subject for the year in question, which is equal to 50%. The grade for each subject is determined based on the evaluation method used.

In addition to continuous monitoring of the student's attendance at theoretical and practical lectures, the student is considered not to have completed the subject if his hours of absence exceed 10% of the total hours for that subject.

After completing the above certificate requirements, the student will be awarded a degree of bachelor in Geology. The department has a fieldwork committee that organizes the process of training students during the summer vacation by selecting an area to apply Geology concepts.

#### 4. Student transfer policies and classroom equivalency

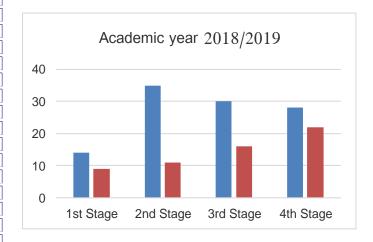
The department relies on a unified academic program approved by the Committee of Deans of Colleges of Science, which includes a high policy in moving between colleges.

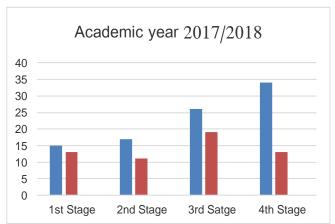
graduate's field of work	graduate qualifications	Job title	Certificate Description	Department	College	University
The institutions of the Ministry of Oil, Geological Survey, cement factories, well drilling, agriculture and resources Watercolor, Ministry of	Degree of Bachelor in Geology	Geological Research Assistant	Degree of Bachelor in Geology	Geology	Science	Mosul

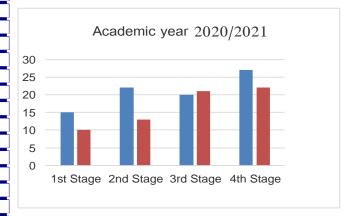
Education			

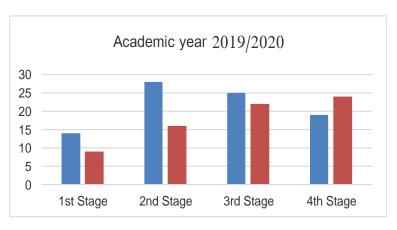
Number of students in the Department of Geology for the last five years before the evaluation year

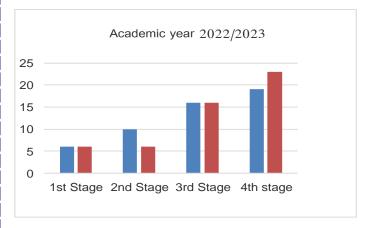
Total	Number of female students	Number of male students	Year
148	57	91	2018-2017
165	68	97	2019-2018
157	78	79	2020-2019
150	73	77	2021-2020
146	69	77	2022-2021
102	50	52	2023-2022

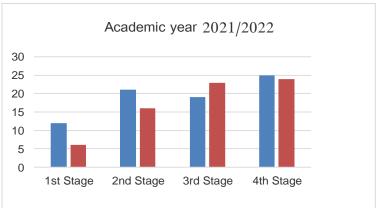






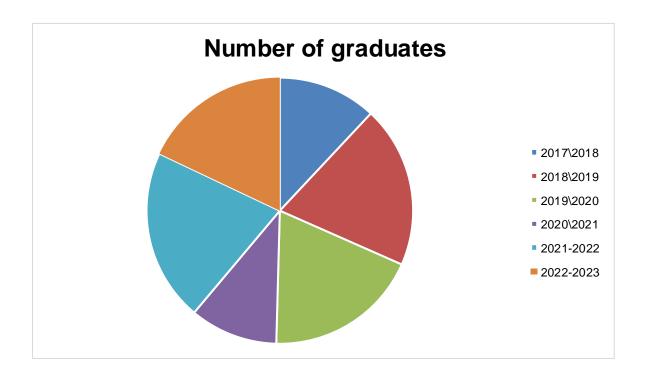






# Number of graduates for the last five years

Number	Year
28	2018-2017
46	2019-2018
44	2020-2019
25	2021-2020
49	2022-2021
42	2023-2022



Academic program description form

Reviewing the performance of higher education institutions ((academic program review))

Description of the academic program

This academic program description provides a summary of the most important features of the program and the department's outputs. The student is required to achieve this by proving whether he has made the most of the opportunities provided. Available. It is accompanied by a description of each course within the program.

1- Educational institution	University of 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- academic system	Semesters
6- Approved accreditation program	ABET
7- Other external influences	Non
8- Date the description was prepared	2023

#### 9. 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 higher education as postgraduate students.

# 10. 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** 

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

Lectures, scientific experiments, homework and scientific discussions

**Evaluation methods** 

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

		11. Program structure	;	
Credit h	nours	Course Name	Course	
Theoretical	Practical		code	Level/year
Theoretical	Fractical			
2	2	Physical geology I	SCGE21-S1011	
2	2	Crystallography	SCGE21-S1021	
2	2	Chemistry	SCGE21-S1031	
2		Mathematic	SCGE21-S1041	
2	2	Computer I	SCGE21-S1051	
1		Human right	SCGE21-S1061	
2		Arabic language	SCGE21-S1071	One week
2	2	Physical geology II	SCGE21-T1081	One year
2	2	mineralogy	SCGE21-T1091	
2	2	physics	SCGE21-T1101	
2		statistic	SCGE21-T1111	
2	2	Computer II	SCGE21-T1121	
1		Democracy	SCGE21-T1131	
1		English language	SCGE21-T1141	
2	3	Optical mineralogy	SCGE21-S2011	
2	2	Invertebrate paleontology I	SCGE21-S2021	
2	2	Stratigraphy	SCGE21-S2031	
2	2	Historical geology	SCGE21-S2041	
2	2	Geomorphology	SCGE21-S2051	
1		University education	SCGE21-S2061	
		(health education)		Two years
2	2	Geophysics	SCGE21-T2071	
2	2	Invertebrate paleontology II	SCGE21-T2081	
2	3	Sedimentology	SCGE21-T2091	
2	3	Micropaleontology I	SCGE21-T2101	
2	2	Remote sensing	SCGE21-T2111	
2	2	Petrology	SCGE21-T2121	
2	2	Geology of Iraq	SCGE21-S3011	
2	2	Geophysics I	SCGE21-S3021	
2	3	Structural geology I	SCGE21-S3031	Three years
2	3	Sedimentary petrology	SCGE21-S3041	inice years
2	3	Igneous rocks	SCGE21-S3051	
2	3	Micropaleontology II	SCGE21-S3061	

2	2	Field geology	SCGE21-T3071	
2	2	Geophysics II	SCGE21-T3081	
2	3	Structural geology II	SCGE21-T3091	
2	2	Geochemistry	SCGE21-T3101	
2	3	Metamorphic rocks	SCGE21-T3111	
2	3	Sedimentary environment	SCGE21-T3121	
2	2	Petroleum geology	SCGE21-S4011	
2	2	Ore geology	SCGE21-S4021	
2	2	Exploration geochemistry &Isotopic geology	SCGE21-S4031	
2	2	Hydrogeology	SCGE21-S4041	
2	2	Basin analysis	SCGE21-S4051	
2	2	Geotectonic	SCGE21-S4061	E
2		Field work	SCGE21-S4071	Four years
2	2	Well logging	SCGE21-T4081	
2	2	Industrial rocks	SCGE21-T4091	
2	2	Environmental geology	SCGE21-T4101	
2	2	Engineering geology	SCGE21-T4111	
2	2	Sequence stratigraphy	SCGE21-T4121	
1		Project	SCGE21-T4131	
Hours 188 Credits 146		achelor's Degree ires (188) credit hours	Certificates and	d credit hours

#### 12.Planning for personal development

Extra-curricular activity, scientific trips and conducting scientific tours

13. Admission criterion (setting 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 <a href="https://uomosul.edu.iq/science/">https://uomosul.edu.iq/science/</a>

#### Activities of the department on the website

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

Academic Program Applications from the Curriculum

NO.	Type of curriculum	Number of Credit Hours	Percentage
1	University Requirements	8	8%
2	College Requirements	16	16%
3	Department Requirements	76	76%
	Total	100	100%

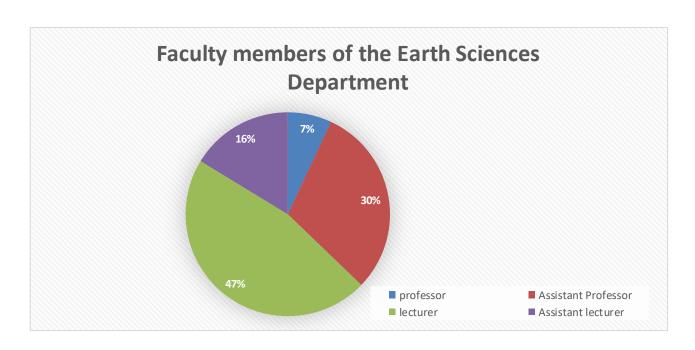
#### **Department Outputs**

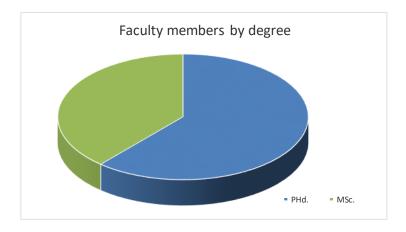
- 1. Identify the measurable cognitive skills of the department that are consistent with the objectives of the department's academic programs through daily, quarterly and final exams and reports.
- 2. Determine the priorities of knowledge and skills that the department is keen to achieve for the graduate
- 3. The extent to which graduate students achieve the academic program of the department
- 4. The mechanisms of the department followed in evaluating the academic program of the department:

- Alumni surveys, where the department cooperates with the official of the rehabilitation and employment unit in the college in order to communicate with the graduates of the department and listen to their opinions and ideas in the development of the department.
- Opinions of recruiters: The department conducts communication and cooperation with government recruiters, the most important of which are the Directorate of Health and the Directorate of Education, as well as some companies, centers and health clinics with the private sector.
- Graduates' performance in jobs: Graduates perform very well in jobs because they benefited from valuable information during the years of study.
- Graduates' employment data through the Rehabilitation and Employment Unit in the college.

#### Faculty Members

Department	Master	PhD	Total	Prof.	Ast.	Lecturer	Ast.	Total
					Professor		Lecturer	
Earth	18	25	43	3	13	18	9	43
Science								
Total	18	25	43	3	13	18	9	43





#### A summary of the most important works at the level of quality assurance:

- Quality assurance standards
- 1. Writing and implementing boards for the department's vision, mission and objectives.
- 2. Preparing questionnaires for students to evaluate the teacher.
- 3. Follow up the implementation of the department's self-evaluation standards
- 4. Participation in many seminars, workshops and conferences on quality within the country.
- 5. Holding workshops aimed at improving the quality of the department.
- 6. Establishing and attending scientific courses for evaluating the performance of the department's employees.
- 7. Prepare a plan for what has been done before starting the self-evaluation process for the department.
- 8. Work on coding the new curricula and exam questions periodically.
- 9. Develop special mechanisms for the quality of laboratories.
  - University Performance Field:
- 1. Completion of the evaluation file annually for the department.
- 2. Conducting evaluations for teachers as well as evaluations for staff.
- 3. Information archiving (automation): Electronic documentation of information in the Quality Assurance Committee in the department.

- 4. Completion of the national evaluation form for scientific departments.
- 5. Completion and writing of the department's self-evaluation report in accordance with the standards of the accredited accreditation program ABET
- 6. Writing a report of conformity with the standards of the accredited accreditation program ABET.

#### 1. Infrastructure

Rock and Minerals Laboratory

Geochemistry and Industrial Rocks Laboratory

Mega and Stratigraphy Fossils Laboratory

Microfossils and Stratigraphy Laboratory

Sediments and Sedimentary Rocks Laboratory

Computer Lab

Geophysics Laboratory

Mineral Optical Laboratory

Structural Lab

Hydrogeology Laboratory

#### The department also owns

4 classrooms

Modern discussion room x 1

A large library with 772 books, about 450 doctoral theses and master's theses, and thousands of periodicals and volumes.

A specialized geological workshop that contains many devices for preparation of slides and grinding rocks ... etc

# **Chapter Two**

# ABET Accreditation Program Standards

**About Accreditation:** 

(Accreditation Board for Engineering and Technology (ABET)

It is an American non-governmental organization that accredits academic programs in colleges and universities around the world in the fields of applied science, computer, engineering, and technology, and is one of the most trusted academic accreditations in the United States of America. ABET has been providing accreditation in affirming the quality of academic programs in undergraduate studies for more than 75 years.

What does ABET accreditation mean:

ABET accreditation is a confirmation that the academic program obtained applies the quality of education specifications agreed upon by the relevant experts in education to equip and qualify students. Learning specifications in terms of the mission of the academic program, learning objectives, learning outcomes and study plan for engineering programs are developed by experts in engineering education, with confirmation of the existence of mechanisms to ensure that feedback is taken from all sources and used for continuous improvement of the academic program so that graduates of these programs remain with the highest specifications. And the qualifications and skills needed by the labor market and to ensure that the graduate remains able to continuous self-learning that enables him to keep pace with the development in his field.

Why ABET accreditation is important:

- ABET accreditation ensures confidence that the academic program has met the basic standards for preparing graduates to enter the STEM fields that have become a requirement for the global job market.
- Graduates from an ABET-accredited program have a strong and capable educational foundation that enables them to embark on the path of rapid technological innovations and developments.
- Accreditation helps students and their parents choose a trusted major, as it ensures that their educational experience keeps pace with international standards of technical learning and education in the professional field.
- Accreditation gives companies and employers the opportunity to select and employ graduates knowing that these graduates have been taught specialization within international standards.
- 5. Enhances employment opportunities for the graduate as multinational corporations require graduation from an accredited program.
- 6. Registrars, licensees and certification holders can use accreditation in selecting applicants for these licenses and certificates.
- 7. Accreditation helps universities and departments in setting up an organized mechanism to evaluate and develop the quality of their programs.

#### U.S. Accreditation Commission Standards:

The study aimed to evaluate the current situation of the department, and the extent to which the department achieves quality assurance standards, noting that the department from the beginning has reviewed the experiences of regional and local universities and reached the following fact: The department needs to support a quality management system to ensure the continuity of development and improve performance, and this in turn requires development and modernization in the management method And its mechanisms of work, in line with international standards for the quality of higher education and achieves compliance with the standards set by the Ministry of Higher Education and Scientific Research / Scientific Supervision and Evaluation Authority / Department of Quality Assurance and Academic Accreditation by adopting programmatic standards.

The results of the self-assessment study showed the extent to which these criteria have been achieved as follows:

Standard Number	Standard Name	Degree of conform		ormity
		None	Partially	Totally
1	Students			<b>√</b>
2	Objectives of the educational program			✓
3	Continuous improvement of the educational environment of the educational institution		✓	
4	Curriculum			✓
5	Teaching Staff			<b>√</b>
6	Financial support		<b>√</b>	
7	Evaluation and Examinations System			<b>√</b>

No.	Students	Degree of conformity		
		None	Partially	Totally

1	1.	Student Acceptance		
	2.	Providing advice to the student regarding		
		the curriculum and job opportunities.		
	3.	There must be a program to evaluate the		
		student's progress for the purpose of		
		achieving the success of the program		✓
		outputs in order to help them to take full		<b>√</b>
		advantage of the program.		·
	4.	The program must have the following:		✓
				✓
	5.	Clear policies regarding the acceptance of		
		student transfer from other institutes or		
		universities and verification of subjects		
		(clearing) in his accreditation to complete		
		the program in terms of units.		
	6.	The program should include clear ways to		
		ensure that all students meet the		
		requirements of the program.		

No.	Objectives of the educational program	Degree of conformity		
	, , , , , , , , , , , , , , , , , , , ,	None	Partially	Totally

2	1. The educational objectives of the	
	program (printed) and in line with	
	the vision of the educationa	
	institution	✓
	2. The program must have a continuous	
	evaluation process for	
	programmed periods of time that	
	show that the objectives are buil-	
	according to needs.	
	3. There must be a continuous evaluation	
	and evaluation process for all the	
	program's vocabulary, which	
	shows the desired degree or	
	which the objectives were set.	

No.	Continuous improvement of the	Degree of		
	educational environment of the educational	conformity		
2	institution	None	Partially	Totally
3	1.Classrooms and laboratories with modern			
	equipment that suit the objectives of			
	the program and provide a suitable			
	educational environment must be			
	available.			
	2.These requirements are necessary to			
	increase interaction between faculty			
	and students and create an			✓
	appropriate and encouraging			
	environment for the development of the			✓
	profession.			
	3.The program should provide an			./
	opportunity for students to learn and			•
	use the latest scientific equipment			
	4.infrastructures must be in place to			
	support the educational activities of			✓
	students and teachers and the			
	educational objectives of the program			
	and the educational institution.			
	5.We must ensure that the curriculum has			
	sufficient teaching hours for each			✓
	paragraph and for each item, in line			·
	with the required outcomes, and the			
	objectives of the program and the			
	faculty.			
	laddity.			
	6.The scientific part of the program should			

include the basic principles of physics,		
and may contain some practical		
experience related to the specialization		

No.	Curriculum	Degree of conformity		
		None	Partially	Totally

|--|

No.	Curriculum	Degree of conformity		
			Partially	Totally
5	<ol> <li>Must be available</li> <li>A sufficient number of teachers who have the ability to cover all the program's items.</li> <li>It must have high scientific specifications to be able to provide the student with adequate advice and guidance regarding the vocabulary of the curriculum.</li> <li>Also, the faculty member must have the ability to evaluate and evaluate the program continuously in terms of scientific objectives and outputs.</li> </ol>			*

No.		Financial Support	Degree of conformity		
			None	Partially	Totally
6	1.	The support of the educational institution			
		in terms of financial resources and			
		constructive leadership must be effective			
		to ensure the sustainability and value of			<b>✓</b>
		the program, and the resources must be			,
		prepared to ensure continuity and			
		operation of all facilities and laboratory			
		equipment related to the program, in			
		addition to supporting the services			
		related paragraphs.			
	2.	The evaluation system in the college			✓
	1) 2)	Data collection, evaluation and analysis Using data to develop the software.			

# Analysis (SWOT)

The first and the second criterion: students and the objectives of the educational program Strengths.

 There are multiple mechanisms to support students, whether at the level of guidance and rehabilitation or at the level of academic performance as well as about the existence of a system to support students financially.

- 2. The presence of counseling and educational committees in the department that take it upon themselves to follow up on students, provide them with educational advice and guidance and help them overcome the problems and difficulties they face.
- 3. Department sponsorship of artistic and sports activities
- 4. Forming a committee to introduce the department to the department at the beginning of the academic year, especially for new students, explaining the objectives and mission of the department, describing the graduate's work from the department, the department's curricula, and others.
- 5. Survey students' opinions in recent years regarding subjects, the level of exam questions and obstacles to the teaching and learning process.

#### Weak points

- 1. Accepting students in the department at the lowest rates, which indicates the low scientific level of students admitted to the department.
- 2. Sometimes the admission of a student to the department is not by choice either due to the average or an error in the admission form.
- 3. The absence of a division or unit that takes care of the affairs of graduates and communicates with them.
- 4. The lack of an electronic link to the department within the college website for graduates can communicate with them and benefit from feedback opinions in improving the teaching and learning process.
- 5. The weakness of the systematic training program, despite its importance, due to the lack of seriousness of the training sites and the weak follow-up by the competent committees and after these sites, as the student usually chooses the location close to his place of residence.

The absence of a mechanism to activate relations between the corresponding departments and colleges in the Arab world and globally.

#### A Future Improvement Plan.

 Learn about the educational and training programs announced by Arab and international universities and guide students to take advantage of them.

2. Trying to find a mechanism to promote the department's program to attract Arab or even foreign students.

#### **Threats**

1. The lack of graduates getting jobs leads to a lack of enthusiasm for students, lack of interest in studying, laziness and staying away from creativity.

#### Third criterion: continuous improvement of the department's educational environment.

1. Strength points.

The number of classrooms available at the time is sufficient to cover the lecture schedule.

#### 2.Weaknesses.

- 1. Lack of scientific laboratories available devices and equipment for some laboratories.
- 2. The level of furnishing of the classrooms is considered modest.

## 3.Improvement

- Increase the financial allocations necessary to build model laboratories with sufficient areas and equipped with modern laboratory devices and equipment.
- Increase financial allocations for furnishing classrooms and equipping them with the necessary modern technologies.

#### 4.Threats

5. Poor performance of students in the implementation of laboratory experiments for experiments in which one or two devices are used, as this leads to the inability of all students to carry out the experiments themselves, but only watching their colleagues or laboratory staff during the implementation of such experiments, which reflects negatively on the scientific level of the student due to the importance of the practical side in scientific disciplines.

#### Fourth criterion: curriculum

#### 1. Strengths

Compatibility between the curriculum and the stated mission of the department.

#### 2. Weak points

- 1) Lack of effective participation of beneficiaries in the design and development of curricula.
- 2) Lack of international and regional cooperation mechanisms for curriculum development.
- 3) Lack of financial resources allocated for authorship and translation that serve both learning and teaching.

#### 3. Improvement

Seeking to develop curricula through the application of continuous updating of curricula.

Paying attention to the labor market and meeting its growing and evolving needs.

Benefit from new information for scientific competencies that have completed their studies abroad.

#### 4. Threats

Ongoing financial and political crises and their impact on curriculum development plans

Weak will of the teaching staff in the field of self-development.

Weak mutual trust between different generations within the educational framework due to lack of communication.

#### Proposed procedures for the fourth criterion

- Periodic review of educational curricula through specialized committees compared to scientific development and progress
- Prepare regular reports on the needs and needs of the labor market and their suitability to the approved curricula.
- Allow private sector educational institutions and employers to participate in curriculum development.
- The department listens to the opinions of students and stakeholders to determine their requirements and formulate curricula and general orientations towards achieving their desires and needs.
- Achieve a balance as much as possible between the requirements of modernization and application and the needs of the learner and society.
- Benefit from the results of the evaluation in the process of making corrective decisions to develop curricula and educational programs.

#### Elements of evaluation of the fourth criterion

• The existence of a study prepared by the scientific committee of the department shows the appropriateness of the objectives of the curricula with the educational outputs and the extent of their conformity with international standards.

- The existence of an academic description of all courses that provides sufficient information on teaching methods, learning, evaluation and the contents of the courses, which is announced on the website and documented.
- Courses contain theoretical and practical aspects that help the student acquire applied skills.
- The department adopts a variety of methods of teaching and learning, including interactive lectures, e-learning, self-education, problem solving and teaching in small groups.
- Promote students' self-education through graduation research in the last academic year.
- The existence of a diversity in the methods of evaluating students such as theoretical and electronic exams and oral exams.

#### Fifth criterion: faculty members

#### Strength points.

- 1. Diversity of subspecialties of the teaching staff.
- 2. All teachers complete their teaching quorum in addition to assigning most of them additional hours.
- 3. Most teachers receive scientific promotion, especially from the degree of assistant teacher to teacher.
- 4. The ratio of students to the number of teachers is fairly acceptable.

#### Weak points.

- 1. Low Number of teachers who have the title of professor or assistant professor in the exact specialization of the department.
- Lack of opportunities for contact with international academic institutions, which negatively affects the access to modern methods in the teaching and learning processes.

### . Improvement

- 1. Increasing the support of training programs for teaching staff by the Ministry for the purpose of informing the largest possible number of teachers about the modern methods used in higher education systems in the world.
- 2. Activating agreements between the department and the corresponding departments in the world to increase the experiences of teachers.
- 3. Increasing the chances of obtaining scientific promotions for the purpose of supporting initial study programs and the possibility of opening a graduate program in the department.

#### Threats

• The modest experience of some teachers sometimes prevents the proper application of the curriculum.

#### The Six Criterion: Financial Support

#### Strength points.

- 1. The salaries of employees and teachers are secured from the annual budget.
- The department maintains a good scientific level so that the financial aspect does not
  affect its work, which suffers from colleges that rely on the financial dues paid by the
  student to secure the study, which leads to a low scientific level.

#### Weak points

1. The lack of financial allocations in the aspect of scientific research and the lack of financial allocations for the purchase of modern laboratory equipment and materials for the purpose of keeping pace with the developments of the times.

#### Improvement

- Ease of securing financial resources when available to cover the department's needs of other devices and materials.
- 2. Activating the joint cooperation mechanism to provide financial resources that help cover some expenses for which resources are not available or limited budget.

#### **Threats**

- 1. The lack of appointments of new young cadres, even scientifically superior, limits the possibility of developing or implementing some ambitious programs.
- The department is unable to contract with administrative, technical or teaching cadres to meet its needs due to the lack of self-financing that can be used to cover the expenses of paying salaries.

#### The Seventh Criterion: Evaluation and Examination System

Strength points.

The department has an evaluation system and strong exams that can collect data about students in terms of their degree of scientific qualification to practice the profession and their performance after graduation, and in a way that helps feedback from evaluation programs and examinations, and the two previous standards are related to both the student and the teacher.

- 1. The evaluation system in the college
- 2. Data collection, evaluation and analysis
- Using data to develop the software

Students Strength points.

- 1. Scientific tests (written and oral, tests during learning)
- 2. Evaluation of individual and group work among students
- 3. Student Success Rates
- 4. Educational and scientific supervision forms

Improvement

Conducting training courses for students and teaching staff to view and learn to conduct electronic tests and the latest programs

Providing smart electronic halls

Weak points.

Poor English for students, which hinders the answer process

Lack of experience of students and teaching staff in electronic matters and management of evaluation programs

The completion file of the self-assessment report of the Department of Earth Sciences has been reviewed, audited and approved by.