# Program Catalogue | 2023-2024

College of Environmental Science and Technologies Department of Environmental Technologies

Semester 1	Module	SSWL	USSWL	ECTS	Туре	Pre-request
Code	Module					
UoM13211	General Physics	108	67	7.00	С	
UoM13212	General Chemistry	108	67	7.00	С	
UoM13213	General Biology	108	67	7.00	С	
UoM13214	Mathematics	93	57	6.00	S	
UoM13215	English language	47	28	3.00	В	

Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request
UoM13216	Geology	108	92	8.00	С	
UoM13217	Analytical Chemistry	123	77	8.00	С	
UoM13218	Environmental Science	93	57	6.00	С	
UoM13219	Computer Science	78	47	5.00	S	
UoM132110	Arabic Language	47	28	3,00	В	

كلية العلوم البيئي قسم تقانات البيئ

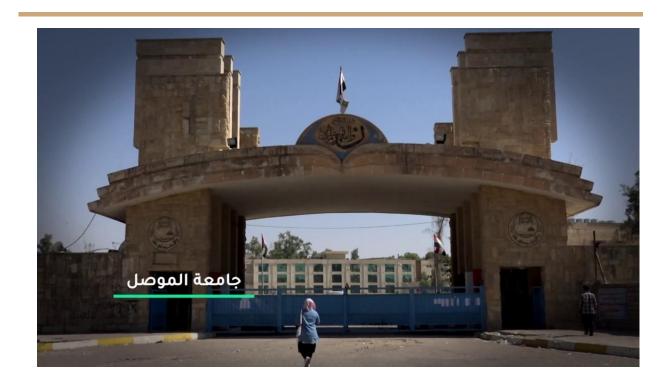
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# **University of Mosul**

# College of Environmental Sciences Department of Environmental Technologies



First Cycle – Bachelor's degree (B.Sc.) – Science Environmental Technologies



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# 1. Mission & Vision Statement

#### Vision Statement

The Department of Environmental Technologies is one of the modern and rare departments, and the department includes in its rationale a link between environmental technical aspects and environmental engineering aspects. The undergraduate program provides students with a basic understanding of the basics of environmental science, in addition to a broad background in related fields.

#### **Mission Statement**

The department's mission is to communicate all information related to ecology during the four years of preliminary studies, as shown below:

First Year - During your first academic year, you begin to establish a strong foundation in the natural sciences, understand the structure and function of the environment, and apply environmental thinking to all aspects of life.

Second Year - The second study is a year devoted to the enhancement of general technical skills and the acquisition of skills in environmental technologies and management practices. You will have the competence to assist under supervision in the monitoring and management of projects in environmental technology.

Third year - During the third academic year, you continue to deepen your skills in dealing with environmental problems, finding appropriate solutions, and building an efficient personality in project work and practical environmental tasks.

Fourth Year - Year 4 is the time to develop your competence in selected modules and prepare yourself for the challenges of working life

# 2. **Program Specification**

Programme code:	BSc-ENVTEC	ECTS	240	

Duration:	4 levels, 8 Semesters	Method of Attendance:	Full Time
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The department grants a bachelor's degree in environmental technologies, and there are no postgraduate programs in the department yet. Obtaining the initial certificate takes place after skipping the four academic levels, through attending lectures, participating in classroom activities, preparing laboratory reports, participating in systematic training programs, and succeeding in tests and examinations. It takes place throughout the four levels of academic journey, knowing that the academic system in the department is following the bologna process.

# 3. Program Goals

The department aims to prepare technical-environmental engineering cadres concerned with environmental affairs in all its elements and works to graduate competent cadres specialized in the field of environmental technologies capable of diagnosing environmental problems and trying to develop appropriate solutions to them by linking the theoretical, laboratory and practical aspects of knowledge that the student receives through the years and stages of study Which extends for four years. The student graduates from the department is granted a bachelor's degree in the field of environmental science and technology and is qualified to work in the government departments and institutions and the mixed and private sectors concerned with environmental, health and related departments.

# 4. Student Learning Outcomes

The learning outcomes of the department for the primary study in the field of environmental technologies can be summarized in the following points:

1. Provide students with a broad understanding of the major.

2. To provide students with a sound foundation in the fundamentals and principles of engineering design and technical engineering analysis.

3. Meeting the needs and aspirations of individuals and the labor market by working to match technical education with these needs.

4. Graduate high-quality students with the understanding, knowledge, skill, and personal qualities to carry out careers in the field of environmental engineering technologies as well as in the field of scientific research.

5. Enable students to apply theoretical skills in the field of work.

6. Enable students to undertake technical engineering projects in the field of specialization and in accordance with the academic program.

7. Providing an educational environment that meets the academic requirements to enable graduates of the department to join scientific institutions of environmental sciences / environmental engineering technologies.

8. Enable students to complete their studies within the prescribed period according to international standards, and then enroll in postgraduate studies.

# 5. Academic Staff

اللقب العلمي	الاسم	ت
عميد الكلية	أ.م.د. يسرى مجيد الشاكر	.1
رئيس القسم	أ.م.د. اياد فضيل قاسم	.2
معاون العميد للشوّون العلمية	م.د. علي بشير عزيز	.3
معاون العميد للشوّون الإدارية	م.د. شیماء خلیل عبدالله	.4
مقرر القسم	م.م. عبدالله عبدالستار ذنون	.5
أستاذ مساعد	أ.م. محمد فخر الدين احمد	.6
أستاذ مساعد	أ.م. رائد محمود فيصل	.7
مدرس	د.ميادة احمد ابراهيم	.8
مدرس	د.ايمانعبدالمنعم محمد صالح	.9
مدرس	د.حازم جمعة محمود	.10
مدرس	م.د. رشا خالد صبري	.11
مدرس	م.د. تحسين علي حسين	.12
مدرس	م.د.عبدالستار جبير زبن	.13
مدرس	م.د. علي زين العبدين حيدر	.14
مدرس	م. د. حسان حسان جاسم	.15
مدرس	م.د. مروان صالح جمیل	.16
مدرس	م ديانا نور الدين مصطفى	.17
مدرس	م.روی مظفر یونس	.18
مدرس	م.مثينةعبدالله مصطفى	.19
مدرس	م. وسام سعيد عبد	.20
مدرس مساعد	م.م. معن هاشم محمود	.21
مدرس مساعد	م.م. محمد عبد الرزاق ياسين	.22
مدرس مساعد	م.م.برکان معتصم مطشر	.23
مدرس مساعد	م.م. همسة برهان محمد( مجاز)	.24
مدرس مساعد	م.م. هناء عدالت حسن	.25
مدرس مساعد	م.م.عمر خير الدين محي الدين	.26
مدرس مساعد	م.م. فرح خزعل احمد	.27
مدرس مساعد	م.م.اوس نوفل احمد	.28
مدرس مساعد	م.م. عمر عبدالجبار عبدالله	.29
مدرس مساعد	م.م. احمد عبدالرزاق خضر	.30
مدرس مساعد	م.م.رحاب وعد داؤد	.31

مدرس مساعد	م.م. رغد حازم سعيد	.32
مدرس مساعد	م.م. مهند قاسم علي	.33
مدرس مساعد	م.م. مصطفی عامر ذنون	.34
مدرس مساعد	م.م. محمد سعد الله يونس	.35
مدرس مساعد	م.م. لينا نوفل محمد	.36
مدرس مساعد	م.م. أسماء مؤيد سعد الله	.37
مدرس مساعد	م.م. بسمة غزوان غانم	.38
مدرس مساعد	م.م. الاء جاسم محمد	.39
مدرس مساعد	م.م. عبير صالح عطية	.40
مدرس مساعد	م.م. زهراء محمد يونس	.41

# 6. **Credits, Grading and GPA**

#### Credits

University of Mosul is following the Bologna Process with the European Credit Transfer System (ECTS) credit system. The total degree program number of ECTS is 240, 30 ECTS per semester. 1 ECTS is equivalent to 25 hrs student workload, including structured and unstructured workload.

#### Grading

Before the evaluation, the results are divided into two subgroups: pass and fail. Therefore, the results are independent of the students who failed a course. The grading system is defined as follows:

	GRADING SCHEME مخطط الدرجات						
Group	Grade	التقدير	Marks (%)	Definition			
	A - Excellent	امتياز	90 - 100	Outstanding Performance			
Success	B - Very Good	جيد جدا	80 - 89	Above average with some errors			
Group	C - Good	ختر	70 - 79	Sound work with notable errors			
(50 - 100)	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings			
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria			
Fail Group	FX – Fail	ر اسب - قيد المعالجة	(45-49)	More work required but credit awarded			
(0 – 49)	F – Fail	راسب	(0-44)	Considerable amount of work required			
Note:							

Number Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

#### Calculation of the Cumulative Grade Point Average (CGPA)

1. The CGPA is calculated by the summation of each module score multiplied by its ECTS, all are divided by the program total ECTS.

CGPA of a 4-year B.Sc. degree:

CGPA = [ (1st<sup>m</sup>odule score x ECTS) + (2nd<sup>m</sup>odule score x ECTS) + ......] / 240

# 7. Curriculum/Modules

#### Semester 1 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request
UoM13211	General Physics	108	67	7 <b>.00</b>	С	
UoM13212	General Chemistry	108	67	7 <b>.00</b>	С	
UoM13213	General Biology	108	67	7 <b>.00</b>	С	
UoM13214	Mathematics	93	57	6 <b>.00</b>	S	
UoM13215	English language	47	28	3 <b>.00</b>	В	

#### Semester 2 | 30 ECTS | 1 ECTS = 25 hrs

Code Module	SSWL	USSWL	ECTS	Туре	Pre-request
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UoM13216	Geology	108	92	8 <b>.00</b>	С	
UoM13217	Analytical Chemistry	123	77	8 <b>.00</b>	С	
UoM13218	Environmental Science	93	57	6 <b>.00</b>	С	
UoM13219	Computer Science	78	47	5 <b>.00</b>	S	
UoM132110	Arabic Language	47	28	3 <b>.00</b>	В	

# Semester 3 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request
UoM13221	Mathematics 2	93	57	6 <b>.00</b>	S	
UoM13222	Fluids	108	67	7 <b>.00</b>	С	
UoM13223	Environmental Chemistry	108	67	7.00	С	
UoM13224	Hydrology	108	67	7.00	С	
UoM13225	Human Rights and Democracy	47	28	3.00	В	

# Semester 4 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request
UoM13226	Environmental Statistics	78	47	5 <b>.00</b>	С	
UoM13227	Soil Physics	93	82	7.00	С	
UoM13228	Remote Sensing	93	82	7.00	С	
UoM13229	Environmental Geology	108	42	6.00	С	
UoM132210	Surveying	78	47	5 <b>.00</b>	С	

Somostor F	1 ECTS = 25 hrs
Semester 5	1 ECI3 - 25 IIIS

Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request	
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UoM13231	Advanced Mathematics	93	32	5 <b>.00</b>	С	
UoM13232	Microbiology	108	67	7 <b>.00</b>	С	
UoM13233	Management and treatment of solid waste	78	47	5 <b>.00</b>	С	
UoM13234	Soil Pollution	108	67	7 <b>.00</b>	С	
UoM13235	Biochemistry	78	72	6 <b>.00</b>	С	

### Semester 6 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request
UoM13236	Water supply and water treatment	93	82	7 <b>.00</b>	С	
UoM13237	Water Quality	78	72	6.00	С	
UoM13238	Renewable Energy	78	72	6 <b>.00</b>	С	
UoM13239	Thermodynamics	78	72	6.00	С	
UoM132310	Geographic Information System	78	47	5.00	С	

# Semester 7 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request
UoM13241	Wastewater Management and Treatment	108	92	8 <b>.00</b>	С	
UoM13242	Environmental Management and cost	120	55	7.00	С	
UoM13243	Air pollution	93	57	6 <b>.00</b>	С	
UoM13244	Environmental Laws and legislations	63	37	4 <b>.00</b>	С	
UoM13245	Nano Technology	78	47	5 <b>.00</b>	С	

Semester 8 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request
UoM13246	Environmental Impact Assessment	93	57	6 <b>.00</b>	С	
UoM13247	Sustainable development	93	32	5.00	С	
UoM13248	Radioactive and Noise Pollution	78	47	5.00	С	
UoM13249	Urban Planning	93	32	5 <b>.00</b>	С	
UoM132410	Elective	63	62	5 <b>.00</b>	С	
UoM132411	Graduation Project	30	70	4.00	С	

# 8. Contact

Program Manager:

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