

University of Mosul

جامعة الموصل
كلية العلوم البيئية
قسم تقانات البيئة



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

بكالوريوس علوم - تقانة بيئية



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1. Mission & Vision Statement

Vision Statement

The vision of the department is to prepare specialized competencies capable of effectively contributing to environmental protection, achieving sustainable development, and enabling graduates to compete in the labor market.

Mission Statement

The mission of the department is to prepare specialized and qualified academic cadres in the field of environmental protection technologies and resource management by providing high-quality education based on technical analysis of environmental problems.

2. Program Specification

Programme code:	BSc-ENVTEC	ECTS	240
Duration:	4 levels, 8 Semesters	Method of Attendance:	Full Time

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

- 1) Providing graduates with cognitive skills in the fields of environmental technologies, their suitability for the labor market, and enabling them to apply these skills.
- 2) Developing students' technical skills in the fields of scientific research and postgraduate studies, enabling them to describe environmental problems and develop appropriate solutions.
- 3) Developing academic environmental capabilities and awareness-raising teamwork.
- 4) Instilling environmental values and education that contribute to serving the community.
- 5) Employing practical skills in the fields of environmental technologies to meet labor market needs.
- 6) Providing graduates with knowledge of sustainability technologies and methods for their practical application.
- 7) Providing graduates with skills in environmental management and cost accounting.

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 environmental 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 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

Title	Name	No.
Department Head	Asst. Prof. Hazim Jumaa Mahmood	.1
Department Coordinator	Asst. Lecturer Omar Khair Aldin	.2
Asst. Prof.	Asst. Prof. Dr. Eman Abdulmunaim	.3
Asst. Prof.	Asst. Prof.Dr. Rasha Khalid	.4
Asst. Prof.	Asst. Prof.Dr. Abdulsattar Jubair	.5
Asst. Prof.	Asst. Prof. Mohammed Fakhr Aldin	.6
Asst. Prof.	Asst. Prof. Raid Mahmood Faisal	.7
Lecturer	Dr. Tahseen Ali	.8
Lecturer	Dr. Mayadaa Ahmed Ibrahim	.9
Lecturer	Dr. Hassan Hassan Jasim	.10
Lecturer	Diana Noraldin Mustafa	.11
Lecturer	Roaa Mudhafar Younis	.12
Lecturer	Muthaina Abdulla Mustafa	.13
Lecturer	Wissam Saeed Abd	.14
Asst. lecturer	Hasan Jamal	.15
Asst. lecturer	Maan Hashim Mahmood	.16
Asst. lecturer	Burkan Mutasim	.17
Asst. lecturer	Hamsa Burhan	.18
Asst. lecturer	Abdulla Abdulsatar	.19
Asst. lecturer	Farah Khazaal	.20
Asst. lecturer	Ahmed Abdulrazaq	.21
Asst. lecturer	Raghad Hazim	.22
Asst. lecturer	Lina Nawfal	.23
Asst. lecturer	Mustafa Amer	.24
Asst. lecturer	Hanan Riad	.25
Asst. lecturer	Muhanad Qasim	.26
Asst. lecturer	Mohammed Saadallah	.27
Asst. lecturer	Asmaa Muaid	.28
Asst. lecturer	Basma Ghazwan	.29
Asst. lecturer	Abeer Salih	.30
Asst. lecturer	Zahraa Mohammed	.31
Asst. lecturer	Ous Nawfal	.32

Asst. lecturer	Alaa Jasim	.33
Asst. lecturer	Omar Abduljabbar	.34
Asst. lecturer	Rihab Waad	.35

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
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب - قيد المعالجة	(45-49)	More work required but credit awarded
	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:

$$CGPA = [(1^{st} \text{ module score} \times ECTS) + (2^{nd} \text{ module score} \times ECTS) +] / 240$$

7. Curriculum/Modules

Semester 1 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ENVT101	General Physics	104	71	7.00	C	
ENVT102	General Chemistry	102	98	8.00	C	
ENVT103	General Biology	95	80	7.00	C	
ENVT104	Mathematics 1	106	44	6.00	C	
UOM102	English language1	33	17	2.00	B	

Semester 2 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	USSWL	SSWL	ECTS	Type	Pre-request
ENVT105	Geology	72	78	6.00	C	
ENVT106	Analytical Chemistry	82	93	7.00	C	
ENVT107	Environmental Science	37	63	4.00	C	
ENVT108	Mathematics II	57	93	6.00	C	
UOM103	Computer Science	12	63	3.00	B	
UOM101	Arabic Language	17	33	2.00	B	
UOM104	Democracy and Human Rights	17	33	2.00	B	

Semester 3 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ENVT212	Hydrology 1	90	35	5	C	
ENVT209	Fluids Mechanic 1	78	72	6	C	
ENVT211	Environmental Statistics	63	37	4	C	
ENVT213	Soil Physics	90	35	5	C	
UOM210	Environmental Chemistry 1	78	72	6	C	
UOM2012	Arabic Language 2	33	17	2	B	

UOM2050	The Crimes of the Baath Regime in Iraq	33	17	2	B	
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Semester 4 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ENVT214	Fluids Mechanic 2	90	35	5	C	
ENVT215	Hydrology 2	90	35	5	C	
UOM2032	Computer science 2	63	12	3	B	
ENVT218	Engineering Analysis	90	35	5	C	
ENVT216	Environmental Chemistry 2	90	35	5	C	
ENVT217	Environmental Geology	78	47	5	C	
UOM2022	English language 2	33	17	2	B	

Semester 5 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ENVT319	Water Supply and Treatment	78	72	6	C	
ENVT320	Remote Sensing	90	35	5	C	
ENVT321	Thermodynamic	63	37	4	C	
ENVT322	Soil Pollution	90	35	5	C	
ENVT323	Management and Treatment of Solid Waste	63	37	4	C	
ENVT324	Occupational Safety and Health	33	17	2	C	
ENVT325	Water Quality	63	37	4	C	

Semester 6 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ENVT326	Environmental Chemical Techniques	93	57	6	C	
ENVT327	Geographic Information Systems	63	62	5	C	
ENVT328	Biochemistry	63	27	4	C	
ENVT329	Air Pollution	63	62	5	C	
ENVT330	Environmental Sustainability	48	27	3	C	
ENVT331	Water Reuse	48	27	3	C	

ENVT332	Environmental Microbiology	63	27	4	C	
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Semester 7 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ENVT433	Wastewater Treatment	93	57	6	C	
ENVT434	Environmental Costs	63	62	5	C	
ENVT435	Renewable Energy	63	62	5	C	
ENVT436	Professional Ethics	48	27	3	C	
ENVT437	Desertification and Land Reclamation	63	62	5	C	
ENVT438	Research methodology	48	27	3	C	
ENVT439	Graduation Project1	48	27	3	C	

Semester 8 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
ENVT440	Sludge Management and Treatment	63	62	5	C	
ENVT441	Environmental Management and Legislation	63	27	4	C	
ENVT442	Environmental Nanotechnology	93	57	6	C	
ENVT443	Environmental Impact Assessment	93	57	6	C	
ENVT444	Environmental Biotechnology	93	57	6	C	
ENVT445	Graduation Project2	48	27	3	C	

8. **Contact**

Program Manager:

Hazim Jumaa Mahmood | Ph.D. in Geochemistry | Assistant Prof.

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