

# 2023-2024 | دليل البرنامج الدراسي

College of Environmental Science and Technologies  
Department of Environmental Technologies

Semester 1 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
UoM13211	General Physics	108	67	7.00	C	
UoM13212	General Chemistry	108	67	7.00	C	
UoM13213	General Biology	108	67	7.00	C	
UoM13214	Mathematics	93	57	6.00	S	
UoM13215	English language	47	28	3.00	B	

Semester 2 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
UoM13216	Geology	108	92	8.00	C	
UoM13217	Analytical Chemistry	123	77	8.00	C	
UoM13218	Environmental Science	93	57	6.00	C	
UoM13219	Computer Science	78	47	5.00	S	
UoM132110	Arabic Language	47	28	3.00	B	

كلية العلوم البيئية  
قسم تقانات البيئة

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# University of Mosul

جامعة الموصل  
كلية علوم البيئة وتقاناتها  
قسم تقانات البيئة



بكالوريوس علوم - تقانة بيئية



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جدول المحتويات

- | بيان المهمة والرؤية
- | مواصفات البرنامج
- | أهداف البرنامج
- | مخرجات تعلم الطالب
- | الهيئة التدريسية
- | الاعتمادات والدرجات والمعدل التراكمي
- | المواد الدراسية
- | اتصال

## 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**

<b>Programme code:</b>	BSc-ENVTEC	<b>ECTS</b>	240
<b>Duration:</b>	4 levels, 8 Semesters	<b>Method of Attendance:</b>	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**

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 للشؤون العلمية	م.د. علي بشير عزيز	.3
معاون العميد للشؤون الإدارية	م.د. شيماء خليل عبدالله	.4
مقرر القسم	م.م. عبدالله عبدالستار ذنون	.5
أستاذ مساعد	أ.م. محمد فخر الدين احمد	.6
أستاذ مساعد	أ.م. راند محمود فيصل	.7
مدرس	د.ميادة احمد ابراهيم	.8
مدرس	د.ايماعبدالمنعم 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 زين	.13
مدرس	م.د. علي زين العبيدين حيدر	.14
مدرس	م. د. حسان حسان جاسم	.15
مدرس	م.د. مروان صالح جميل	.16
مدرس	م.ديانا نور الدين مصطفى	.17
مدرس	م.روى مظفر يونس	.18
مدرس	م.مثنىة عبدالله 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.يركان 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 داود	.31
مدرس مساعد	م.م. رعد حازم سعيد	.32
مدرس مساعد	م.م. مهند قاسم علي	.33
مدرس مساعد	م.م. مصطفى عامر ذنون	.34
مدرس مساعد	م.م. محمد سعد الله يونس	.35
مدرس مساعد	م.م. ليثا نوفل محمد	.36
مدرس مساعد	م.م. أسماء مؤيد سعد الله	.37
مدرس مساعد	م.م. بسمة غزوان غاتم	.38
مدرس مساعد	م.م. الاء جاسم محمد	.39
مدرس مساعد	م.م. عيبر 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
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:

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

## **7. Curriculum/Modules**

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

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UoM13211	General Physics	108	67	7.00	C	
UoM13212	General Chemistry	108	67	7.00	C	
UoM13213	General Biology	108	67	7.00	C	
UoM13214	Mathematics	93	57	6.00	S	
UoM13215	English language	47	28	3.00	B	

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

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request

<b>UoM13216</b>	<b>Geology</b>	<b>108</b>	<b>92</b>	<b>8.00</b>	<b>C</b>	
<b>UoM13217</b>	<b>Analytical Chemistry</b>	<b>123</b>	<b>77</b>	<b>8.00</b>	<b>C</b>	
<b>UoM13218</b>	<b>Environmental Science</b>	<b>93</b>	<b>57</b>	<b>6.00</b>	<b>C</b>	
<b>UoM13219</b>	<b>Computer Science</b>	<b>78</b>	<b>47</b>	<b>5.00</b>	<b>S</b>	
<b>UoM132110</b>	<b>Arabic Language</b>	<b>47</b>	<b>28</b>	<b>3.00</b>	<b>B</b>	

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

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
<b>UoM13221</b>	<b>Mathematics 2</b>	<b>93</b>	<b>57</b>	<b>6.00</b>	<b>S</b>	
<b>UoM13222</b>	<b>Fluids</b>	<b>108</b>	<b>67</b>	<b>7.00</b>	<b>C</b>	
<b>UoM13223</b>	<b>Environmental Chemistry</b>	<b>108</b>	<b>67</b>	<b>7.00</b>	<b>C</b>	
<b>UoM13224</b>	<b>Hydrology</b>	<b>108</b>	<b>67</b>	<b>7.00</b>	<b>C</b>	
<b>UoM13225</b>	<b>Human Rights and Democracy</b>	<b>47</b>	<b>28</b>	<b>3.00</b>	<b>B</b>	

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

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
<b>UoM13226</b>	<b>Environmental Statistics</b>	<b>78</b>	<b>47</b>	<b>5.00</b>	<b>C</b>	
<b>UoM13227</b>	<b>Soil Physics</b>	<b>93</b>	<b>82</b>	<b>7.00</b>	<b>C</b>	
<b>UoM13228</b>	<b>Remote Sensing</b>	<b>93</b>	<b>82</b>	<b>7.00</b>	<b>C</b>	
<b>UoM13229</b>	<b>Environmental Geology</b>	<b>108</b>	<b>42</b>	<b>6.00</b>	<b>C</b>	
<b>UoM132210</b>	<b>Surveying</b>	<b>78</b>	<b>47</b>	<b>5.00</b>	<b>C</b>	

**Semester 5 | 30 ECTS | 1 ECTS = 25 hrs**

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request



<b>UoM13231</b>	<b>Advanced Mathematics</b>	<b>93</b>	<b>32</b>	<b>5.00</b>	<b>C</b>	
<b>UoM13232</b>	<b>Microbiology</b>	<b>108</b>	<b>67</b>	<b>7.00</b>	<b>C</b>	
<b>UoM13233</b>	<b>Management and treatment of solid waste</b>	<b>78</b>	<b>47</b>	<b>5.00</b>	<b>C</b>	
<b>UoM13234</b>	<b>Soil Pollution</b>	<b>108</b>	<b>67</b>	<b>7.00</b>	<b>C</b>	
<b>UoM13235</b>	<b>Biochemistry</b>	<b>78</b>	<b>72</b>	<b>6.00</b>	<b>C</b>	

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

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
<b>UoM13236</b>	<b>Water supply and water treatment</b>	<b>93</b>	<b>82</b>	<b>7.00</b>	<b>C</b>	
<b>UoM13237</b>	<b>Water Quality</b>	<b>78</b>	<b>72</b>	<b>6.00</b>	<b>C</b>	
<b>UoM13238</b>	<b>Renewable Energy</b>	<b>78</b>	<b>72</b>	<b>6.00</b>	<b>C</b>	
<b>UoM13239</b>	<b>Thermodynamics</b>	<b>78</b>	<b>72</b>	<b>6.00</b>	<b>C</b>	
<b>UoM132310</b>	<b>Geographic Information System</b>	<b>78</b>	<b>47</b>	<b>5.00</b>	<b>C</b>	

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

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
<b>UoM13241</b>	<b>Wastewater Management and Treatment</b>	<b>108</b>	<b>92</b>	<b>8.00</b>	<b>C</b>	
<b>UoM13242</b>	<b>Environmental Management and cost</b>	<b>120</b>	<b>55</b>	<b>7.00</b>	<b>C</b>	
<b>UoM13243</b>	<b>Air pollution</b>	<b>93</b>	<b>57</b>	<b>6.00</b>	<b>C</b>	
<b>UoM13244</b>	<b>Environmental Laws and legislations</b>	<b>63</b>	<b>37</b>	<b>4.00</b>	<b>C</b>	
<b>UoM13245</b>	<b>Nano Technology</b>	<b>78</b>	<b>47</b>	<b>5.00</b>	<b>C</b>	

**Semester 8 | 30 ECTS | 1 ECTS = 25 hrs**

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
<b>UoM13246</b>	<b>Environmental Impact Assessment</b>	<b>93</b>	<b>57</b>	<b>6.00</b>	<b>C</b>	
<b>UoM13247</b>	<b>Sustainable development</b>	<b>93</b>	<b>32</b>	<b>5.00</b>	<b>C</b>	
<b>UoM13248</b>	<b>Radioactive and Noise Pollution</b>	<b>78</b>	<b>47</b>	<b>5.00</b>	<b>C</b>	
<b>UoM13249</b>	<b>Urban Planning</b>	<b>93</b>	<b>32</b>	<b>5.00</b>	<b>C</b>	
<b>UoM132410</b>	<b>Elective</b>	<b>63</b>	<b>62</b>	<b>5.00</b>	<b>C</b>	
<b>UoM132411</b>	<b>Graduation Project</b>	<b>30</b>	<b>70</b>	<b>4.00</b>	<b>C</b>	

## 8. **Contact**

Program Manager:

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Mobile no.:

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