

## Description of the academic program

University name: Anbar University

College: College of Applied Sciences - Hit

Scientific Department: Department of Applied Chemistry

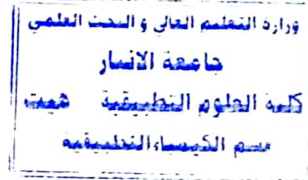
Name of the academic or professional program: Bachelor of Applied Chemistry

Name of final degree: Bachelor of Applied Chemistry

Academic system: courses

:Description preparation date

:File filling date 21/5/2024



التوقيع:

اسم المعاون العلمي: ا. م. د. راسم فراج مسلم

التاريخ: 2024/5/21

التوقيع:

اسم رئيس القسم: ا. م. د. مروان محمد فرحان

التاريخ: 2024/5/21

دقق الملف من قبل

شعبة ضمان الجودة والاداء الجامعي

اسم مدير شعبة ضمان الجودة والاداء  
الجامعي

التاريخ

التوقيع

## مصادقة السيد العميد

### 1. See the program

Leadership in higher education, scientific research and development of academic programs to achieve sustainable community development

### 2. Program message

Excellence in the quality of teaching, learning and scientific research by adopting analytical and critical thinking strategies to qualify human resources cognitively and intellectually Skilled in a competitive and creative environment

### 3. Program Goals

- 1- Consolidating the scientific foundations in pure chemistry and developing the applied aspects
- 2- Stimulating students' research aspects with applied trends
- 3- Preparing competent cadres in the field of applied chemistry in industrial and clinical directions
- 4- Developing graduates' potential for employment optimum For devices Laboratory and understanding the outputs of various analyses
- 5- Contributing to the development of cadres working in the field of chemistry in state institutions and departments

**4. Program accreditation**

Comprehensive evaluation of college or university programs, and ensuring their quality is appropriate to the type of degree awarded

**5. Other external influences**

Is there a sponsor for the program

**6. Program structure**

* comments	percentage	Study unit	Number of courses	Program structure
				Enterprise requirements
				College requirements
				Department requirements
				summer training
				Other

.Notes may include whether the course is core or elective \*

**7. Program description**

Credit hours		Name of the course or course	Course or course code	Year/level
practical	theoretical			

**8. Expected learning outcomes of the programme**

<b>Knowledge</b>	
<p>A-1 To know how to deal with chemicals</p> <p>To have a culture of chemistry and the community's A-2 needs for safe handling</p> <p>the chemical management system A-3 To analyze</p> <p>A-4 To be able to completion Analyzes related to chemical components For materials</p> <p>the actual needs for developing uses A-5 To classify Various chemicals</p>	A- Cognitive objectives
<b>Skills</b>	
<p>B1 - The student's knowledge of dealing with chemical materials</p> <p>B2 - The student's ability to evaluate different chemical analyses</p>	B - The program's skill objectives
<p>B3 - Empowering students with applied trends in the field of chemistry</p>	Learning outcomes 3
<b>Value</b>	
<p>C-1 Developing the ability to read external books related to chemistry</p> <p>peers C-2 Group work with</p>	C- Emotional and value goals.
<p>. C-3 Thinking towards green chemistry and preserving the environment.</p> <p>Stimulating the ability to deal transparently and C-4 professionally with society.</p>	Learning outcomes 5

<b>9. Teaching and learning strategies</b>
<ul style="list-style-type: none"> <li>- How to present/ present (lectures)</li> <li>- Student groups</li> <li>workshops -</li> </ul>

Brainstorming ideas -

E-learning on campus -

Experiential learning -

Education application -

#### 10. Evaluation methods

- Learning matrix
- Feedback from students
- Learning triangle

#### 11. education institution

##### Faculty members

Preparing the teaching staff		Special requirements/skills (if any)		Specialization		Scientific rank
lecturer	angel			private	general	
	X			Analytical chemistry	chemistry	.Mr
	X			Biochemistry	chemistry	.Mr

	X			organic chemist ry	chemi stry	Assistant Professor
	X			organic chemist ry	chemi stry	Assistant Professor
	X			Bioche mistry	chemi stry	Assistant Professor
	X			Analytic al	chemi stry	Assistant Professor
	X			Library manage ment		Assistant Professor
	X			Nano chemistr y	chemi stry	Teacher
	X			analytic al chemistr y	chemi stry	Teacher
	X				chemi stry	assistant teacher
	X				chemi stry	assistant teacher
	X				chemi stry	assistant teacher

**Professional development**

**Orienting new faculty members**

Briefly describes the process used to orient new, visiting, full-time, and part-time faculty at the institution and department levels

**Professional development for faculty members**

Briefly describe your academic development plan and arrangements For faculty members , such as teaching and learning strategies, assessment of learning outcomes, professional development, .etc

**12. Acceptance standard**

Establishing regulations related to enrollment in the college or institute, whether central ) (admission or others mentioned

**13. The most important sources of information about the program**

Remember briefly

**14. Program development plan**

Program skills chart																
Learning outcomes required from the programme												Essential or optional	Course Name	Course Code	Year/level	
Value				Skills				Knowledge								
C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1					
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Foundations of analytical chemistry		the first The first course
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Inorganic chemistry		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	cytology		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	General physics		
													my choice	Calculators		
													my choice	mathematics		
													my choice	Arabic		



Program skills chart																
Learning outcomes required from the programme												Essential or optional ?	Course Name	Course Code	Year/level	
Value				Skills				Knowledge								
C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1					
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	Basic	Quantitative analysis chemistry		the first  The second course
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Inorganic chemistry		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	General biology		
													my choice	Statistics		
													my choice	human rights		
													my choice	English		
													my choice	ComputerII		

Program skills chart																
Learning outcomes required from the programme												Essential or optional ‡	Course Name	Course Code	Year/level	
Value				Skills				Knowledge								
C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1					
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	Basic	Gravimetric analytical chemistry		The first course  the second
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	chemistry (similar elements)		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Physical chemistry I		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Organic Chemistry I		
													my choice	Linear algebra		
													my choice	English		
													my choice	Computer I		

Program skills chart																
Learning outcomes required from the programme												Essential or optional ?	Course Name	Course Code	Year/level	
Value				Skills				Knowledge								
C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1					
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Gravimetric analytical chemistry		the second The second course
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Physical chemistryII		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Organic ChemistryII		
													my choice	Nano technologies		
													my choice	Freedoms		
													my choice	ComputerVI		

Program skills chart																
Learning outcomes required from the programme												Essential or optional §	Course Name	Course Code	Year/lev	
Value				Skills				Knowledge								
C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1					
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Stereochemistry		the third The first course
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Inorganic (coordination) chemistry		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Kinetic physical chemistry		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Heterogeneous organic chemistry		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Basics of biochemistry		
													my choice	English		
													my choice	Industrial chemistry		

Program skills chart																
Learning outcomes required from the programme												Essential or optional ?	Course Name	Course Code	Year/level	
Value				Skills				Knowledge								
C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1					
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Mechanics of organic reactions		the third The second course
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Cellular metabolism		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Food chemistry		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Environmental chemistry		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Natural products		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Polymer chemistry		
													my choice	Research methodology		

Program skills chart															
Learning outcomes required from the programme												Essential or optional	Course Name	Course Code	Year/level
Value				Skills				Knowledge							
C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1				
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			Basic	Organic diagnosis I	the fourth The first course
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Oil chemistry	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Clinical chemistry	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	Automated analysis I	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		Basic	research project	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		my choice	Organic diagnosis I	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		my choice	Optional subject	

Program skills chart															
Learning outcomes required from the programme												Essential or optional	Course Name	Course Code	Year/level
Value				Skills				Knowledge							
C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1				
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Spectrum		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Organic diagnosisII		the fourth The second course
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Basic	Instrumental analysis II		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	my choice	EnglishIV		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	my choice	Optional subject		

Course description

1. Course Name
2. Course Code



3. Semester/year					
4. The date this description was prepared					
5. Available attendance forms					
6. Number of study hours (total)\number of units (total)					
7. Name of the course administrator ( if more than one name is mentioned)					
:Name: Email					
8. Course objectives					
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>					Objectives of the study subject
9. Teaching and learning strategies					
					The strategy
10. Course structure					
Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week

<b>11. Course evaluation</b>					
Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, reports, etc					
<b>12. Learning and teaching resources</b>					
			Required prescribed books (Methodology, if any)		
			Main references (sources)		
			books and supporting Recommended references (scientific journals, reports...)		
			Electronic references , websites		