



**University of Mosul
College of Science
Chemistry Department**



**Program Catalogue
2025-2026**

First Cycle – Bachelor's degree (B.Sc.) – Chemistry





University of Mosul College of Science Chemistry Department



Table of Contents|

About the Department

Mission & Vision Statement

Program Specification

Program (Objectives) Goals

Program Student learning

outcomes

Academic Staff

Credits, Grading and GPA

Modules

Contact

About the Department

The Department of Chemistry in the College of Science offers a four-year academic program leading to a Bachelor's degree in General Chemistry. This program is designed to provide students with a solid scientific and methodological foundation that enables them to keep pace with technological advancements in scientific research and contribute effectively to both the public and private sectors, such as the Ministry of Health.

Through this program, students develop a comprehensive understanding of chemical knowledge, concepts, and practical skills. A variety of teaching and learning methods are employed, including lectures, interactive sessions, educational programs, guided reading sessions, seminars, and workshops. These formats encourage student engagement in scientific discussions and hands-on learning. Additionally, long-term



University of Mosul College of Science Chemistry Department



projects and practical lessons are integrated into the curriculum to reinforce applied understanding of chemical principles.

The department is also equipped with specialized laboratories featuring instruments such as Atomic Absorption Spectroscopy (AAS), Fourier-Transform Infrared Spectroscopy (FTIR), and Ultraviolet (UV) Spectroscopy. These facilities support graduate students (Master's and Ph.D. levels) in analyzing and identifying their chemical compounds with precision.

Academic Degrees Offered by the Department of Chemistry

Bachelor's Degree in General Chemistry:

The Bachelor's program spans four academic years, divided into eight semesters. To earn a Bachelor's degree in General Chemistry, students must successfully complete all eight semesters.

Master's Degree in Chemistry:

The Master's program is structured into two main phases:

- **Preparatory Phase (First Year):**

This phase consists of two semesters. The first semester covers core courses, including Analytical Chemistry, Biochemistry, Physical Chemistry, Organic Chemistry, and Inorganic Chemistry. The second semester focuses on specialized subjects within particular fields, along with some elective courses.

- **Research Phase (Second Year):**

During this calendar year, the student conducts a scientific research project in either a theoretical or applied chemistry discipline. The program culminates in a thesis defense before a specialized committee, which evaluates the student's eligibility for the degree.



University of Mosul College of Science Chemistry Department



Doctoral Degree in Chemistry:

The PhD program is also divided into two phases:

- **Preparatory Phase:**

This includes two semesters. The first semester covers foundational courses similar to those in the Master's program, while the second semester offers advanced specialized and elective courses.

- **Research Phase:**

Progression to this phase requires passing a comprehensive examination after the completion of the preparatory phase. This research stage lasts no less than two years, during which the student undertakes original research. The program concludes with the submission and defense of a doctoral dissertation before a panel of experts.

Mission & Vision Statement

Mission and Vision Statmente

The Department of Chemistry strives to lead the advancement of chemical sciences toward a sustainable future by focusing on cutting-edge fundamental research in the design of novel materials and chemical processes. Our goal is to graduate students who are not only scientifically competent and technologically skilled but also disciplined, well-mannered individuals who serve as exemplary citizens. We are committed to cultivating knowledgeable thinkers with empathy and a strong sense of responsibility, capable of contributing to the development of a strong and progressive nation.

Vision Statement

We envision a future shaped by dedicated educators employing effective teaching methodologies to disseminate modern technological knowledge and education. Our goal is



University of Mosul College of Science Chemistry Department



to nurture young minds into morally and professionally upright adults, thereby enhancing productivity and value-based living standards through ethical and rational strategies. The Department of Chemistry aspires to lead the field toward a sustainable future by emphasizing key areas of fundamental research, including the discovery and design of new materials and chemical processes. By integrating teaching, research, and personal growth across the curriculum, we aim to transform the student experience.

Mission Statement

A primary objective of the college is to prepare students academically and scientifically in alignment with the demands of scientific advancement, particularly in the fundamental sciences that form the basis of our understanding of the universe. The mission of the Department of Chemistry is to equip students professionally and scientifically through a rigorous academic program tailored to their educational needs and skill development. Committed to promoting human health, the department paves the way for the exploration of potential therapies. Advances in diagnostics and mechanistic understanding are driven by the development of innovative tools for investigation and diagnosis.

Program Specification

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



University of Mosul College of Science Chemistry Department



Educational and Program Goals

1. Offer chemistry majors' current curriculum in each of the five major sub-disciplines of chemistry: organic, inorganic, physical, analytical, and biochemistry to give them a solid foundation in each field.
2. Give biochemistry majors a solid foundation in organic, analytical, and biochemistry while placing an emphasis on the intersection of chemistry and biology.
3. Give students hands-on lab and research experiences that are pertinent to their studies of chemistry while also instructing them in safe, ethical laboratory procedures.
4. Give students the chance to learn about the chemical industries, careers, and daily duties of working chemists and biochemists.
5. By highlighting the interdisciplinary character of chemistry and utilizing concrete examples to highlight links between it and other scientific disciplines, you may give pupils a more comprehensive understanding of the subject.

Program Objectives

1. Introduce learners to the main subfields of chemistry.
2. Assist students in understanding fundamental chemical principles.
3. Provide students with a strong foundation for a rewarding career in chemistry.
4. Help develop analytical, quantitative, and critical thinking skills in chemistry.
5. Enable students to acquire laboratory knowledge and skills by engaging them in diverse chemical processes.
6. Enhance students' ability for self-directed learning.
7. Support students in gaining a deeper understanding of the theories underlying chemical concepts.
8. Prepare advanced degree scientists capable of supervising industrial projects.



**University of Mosul
College of Science
Chemistry Department**



9. Graduate experienced scientific personnel qualified to manage universities and research institutions both scientifically and administratively
-





University of Mosul College of Science Chemistry Department



Student Learning Outcomes:

The Department of Chemistry aims to prepare qualified professional and academic personnel capable of contributing effectively to various vital sectors of the country, particularly in medical, agricultural, and industrial fields. The program is designed to provide students with a solid foundation in the main branches of chemistry, while enhancing their intellectual and research skills and enabling them to keep pace with modern technological advancements. Emphasis is also placed on familiarizing students with contemporary scientific software and technologies to strengthen their ability to apply theoretical knowledge in practical settings.

Upon completion of this program, students will be able to:

1. Demonstrate an understanding of the fundamental principles across various fields of chemistry, including organic, inorganic, physical, analytical, petrochemical, and biochemistry.
2. Employ modern scientific methods and software tools in data analysis and chemical research.
3. Apply theoretical knowledge and acquired skills to solve scientific problems in medical, agricultural, or industrial contexts.
4. Develop scientific research capabilities and critical thinking aligned with contemporary scientific and technological advancements.
5. Work effectively within multidisciplinary teams and communicate proficiently in academic and scientific environments.



University of Mosul
College of Science
Chemistry Department



Academic Staff

No.	Name	Academic title	Field	Fine Subject
1.	Dr. Firas Ahmed Thanon Al-Lolage	Assist. Prof.	Chemistry	Physical Chemistry
2.	Basemah Ahmed Abdel Hadi Salim Al-Taha	Assist. Prof.	Chemistry	Analytical Chemistry
3.	Dr. Alaa Hussein Jalil Muhammad Al-Taei	Lecturer	Chemistry	Physical Chemistry
4.	Dr. Nabil Sobeih Othman Khader Tahafi	Prof.	Chemistry	Analytical Chemistry
5.	Dr. Rabah Ali Khalil Mahmoud Al-Hamdani	Prof.	Chemistry	Physical Chemistry
6.	Dr. Asaad Faisal Khattab Omran Al Omran	Prof.	Chemistry	Industrial Chemistry
7.	Dr. Thikra of Ali Fathi Alloush Aloush	Prof.	Chemistry	Biochemistry
8.	Dr. Louay Abd Ali Ismail Al-Hilali	Prof.	Chemistry	Biochemistry
9.	Dr. Abdul Rahman Basil Fadel Amin Al-Obaidi	Prof.	Chemistry	Industrial Chemistry
10.	Dr. Zeina Abdel Moneim Al-Jawadi	Prof.	Chemistry	Biochemistry
11.	Dr. Zahraa Muhammad Ali Mustafa Hamouda	Prof.	Chemistry	Biochemistry
12.	Dr. Amer Thanon Abdul Rahman Al-Taie	Prof.	Chemistry	Physical Chemistry
13.	Dr. Salem Jassim Mohammed Al-Juhaishi	Prof.	Chemistry	Organic Chemistry
14.	Dr. Ammar Hussein Abdullah Fares Al-Sabaawi	Prof.	Chemistry	Organic Chemistry
15.	Dr. Ammar Abdulsattar Ibrahim Al Dabbagh	Prof.	Chemistry	Physical Chemistry
16.	Dr. Hana Shukr Mahmoud Ahmed Al-Omari	Prof.	Chemistry	Analytical Chemistry
17.	Dr. Shaima Khazal Younis Omar Al-Azzawi	Prof.	Chemistry	Organic Chemistry
18.	Dr. Sahbaa Ali Ahmed Hassan Al-Sabaawi	Prof.	Chemistry	Inorganic Chemistry
19.	Dr. Sakina Hussein Rashid Ali Al-Rawi	Prof.	Chemistry	Biochemistry
20.	Dr. Saba Zaki Mahmoud Khader Al-Abaji	Assist. Prof.	Chemistry	Biochemistry
21.	Dr. Muhammad Bahri Hassan Abdel Saadoun	Assist. Prof.	Chemistry	Biochemistry
22.	Dr. Wasan Khairallah Ali Hussein Al-Dulaimi	Assist. Prof.	Chemistry	Biochemistry
23.	Dr. Iman Ismail Ahmed Majdhab Al-Akidi	Assist. Prof.	Chemistry	Industrial Chemistry
24.	Dr. Fatima Abdul Hamid Al-Atrushi	Assist. Prof.	Chemistry	Biochemistry



University of Mosul College of Science Chemistry Department



25.	Dr. Iman Adel Hadi Hamdoun Ramadan	Assist. Prof.	Chemistry	Biochemistry
26.	Dr. Khansa Shaker Nemat Allah Al-Nima	Assistant Prof.	Chemistry	Inorganic Chemistry
27.	Dr. Khaleda Muhammad Omar Daed Al-Tai	Assist. Prof.	Chemistry	Analytical Chemistry
28.	Dr. Amra Fares Muhammad Darwish Al-Sarraj	Assist. Prof.	Chemistry	Inorganic Chemistry
29.	Dr. Munira Youssef Raouf Al-Naqshbandi	Assist. Prof.	Chemistry	Organic Chemistry
30.	Dr. Laila Juma Zaher	Assist. Prof.	Chemistry	Inorganic Chemistry
31.	Dr. Farah Tariq Saeed Muhammad Al-Tikriti	Assist. Prof.	Chemistry	Inorganic Chemistry
32.	Dr. Omar Adel Sharif	Assist. Prof.	Chemistry	Physical Chemistry
33.	Dr. Safaa Abdel Aziz Taha Amin Al-Amin	Assist. Prof.	Chemistry	Biochemistry
34.	Dr. Saeed Abdel Qader Saeed Al-Bighamberly	Assist. Prof.	Chemistry	Organic Chemistry
35.	Dr. Alaa Muhammad Tayyab Hussein Al Laila	Assist. Prof.	Chemistry	Physical Chemistry
36.	Dr. Saad Hassani, Sultan of Zarzis Allawi	Assist. Prof.	Chemistry	Analytical Chemistry
37.	Dr. Shaima Hashem Abdel Rahman Al-Hilali	Assist. Prof.	Chemistry	Physical Chemistry
38.	Dr. Fanar Muhammad Ismail Al-Hayali	Assist. Prof.	Chemistry	Physical Chemistry
39.	Dr. Haifa Younis Hussein Darwish Al-Jubouri	Assist. Prof.	Chemistry	Organic Chemistry
40.	Dr. Atallah Muhammad Sheet Al-Sharifi	Assist. Prof.	Chemistry	Organic Chemistry
41.	Dr. Harith Muhammad Salman Abdul Ajili	Assist. Prof.	Chemistry	Organic Chemistry
42.	Dr. Amal Taha Yassin Ramla Al Jeraisy	Assist. Prof.	Chemistry	Biochemistry
43.	Dr. Rana Hassan Ahmed	Assist. Prof.	Chemistry	Physical Chemistry
44.	Dr. Ala aldin M. Hani Darghouth	Assist. Prof.	Chemistry	Physical Chemistry
45.	Dr. Rana Abdul Malik Suleiman Ali Al Qa'ba	Assist. Prof.	Chemistry	Inorganic Chemistry
46.	Dr. Ahmed Mukhaiber Hamdoun	Assist. Prof.	Chemistry	Organic Chemistry
47.	Dr. Asim Salman Abdullah Fathi Al-Boutani	Lecturer	Chemistry	Inorganic Chemistry
48.	Dr. Amira Muhammad Faraj Saleh Suleiman	Lecturer	Chemistry	Organic Chemistry
49.	Dr. Imad Younis Hassan Al-Nasser	Lecturer	Chemistry	Analytical Chemistry
50.	Dr. Heba Amin Ibrahim Dhanoun Al-Alaf	Lecturer	Chemistry	Organic Chemistry
51.	Dr. Nada Bashir Sharif Hamid Al Nuaimi	Lecturer	Chemistry	Physical Chemistry



University of Mosul College of Science Chemistry Department



52.	Dr. Samir Saadallah Azza Nasser Al-Hayali	Lecturer	Chemistry	Inorganic Chemistry
53.	Dr. Rafd Rabie Saadoun Muhammad Al-Taie	Lecturer	Chemistry	Biochemistry
54.	Dr. Azzam Ahmed Muhammad Al-Hadidi	Lecturer	Chemistry	Organic Chemistry
55.	Dr. Saleh Awaid About Muhammad Al-Obaidi	Lecturer	Chemistry	Organic Chemistry
56.	Dr. Ehab Salem Ahmed Mahal Al-Jubouri	Lecturer	Chemistry	Industrial Chemistry
57.	Dr. Shaima Sultan Abo Al-Mutlaq Al-Aqidi	Lecturer	Chemistry	Industrial Chemistry
58.	Dr. Aseel Namir Abdul-Jabbar Obaid Agha	Lecturer	Chemistry	Analytical Chemistry
59.	Dr. Heba Farouk Muhammad Amin Al-Kateb	Lecturer	Chemistry	Inorganic Chemistry
60.	Dr. Tahani Walid Jihad Yacoub Qato	Lecturer	Chemistry	Organic Chemistry
61.	Dr. Heba Abdul Salam Muhammad Abdullah	Lecturer	Chemistry	Organic Chemistry
62.	Dr. Amna Farouk Sanallah Abdullah Al-Omari	Lecturer	Chemistry	Industrial Chemistry
63.	Dr. Hanan Hamid Ahmed Suleiman Al-Ali	Lecturer	Chemistry	Analytical Chemistry
64.	Asmaa Natiq Abdul Qadir Al Arhaim	Lecturer	Chemistry	Analytical Chemistry
65.	Dr. Ibrahim Muhammad Hayes Saleh Al-Khafaji	Lecturer	Chemistry	Physical Chemistry
66.	Dr. Afia Muayyed Younis Mustafa Al-Dabbagh	Lecturer	Chemistry	Organic Chemistry
67.	Dr. Muhammad Qahtan Hassan Ali Siala	Lecturer	Chemistry	Physical Chemistry
68.	Israa Ali Hassan Ali Haj Hussein	Assist. Prof.	Chemistry	Inorganic Chemistry
69.	Neaam Muhammad Tayyab Hussein Al Laila	Assist. Prof.	Chemistry	Industrial Chemistry
70.	Inaam Ahmed Hamdoun Al-Gargis	Assist. Prof.	Chemistry	Analytical Chemistry
71.	Noha Abdel Qader Sharif Omar Al Talib	Assist. Prof.	Chemistry	Biochemistry
72.	Amal Ghazi Abd Rahawi Al-Sarraj	Assist. Prof.	Chemistry	Physical Chemistry
73.	Sana Abdel-Ilah Ahmed Girgis Abdel-Mawjoud	Lecturer	Chemistry	Biochemistry
74.	Safa Abdel Aleem Ahmed Younis Zakaria	Lecturer	Chemistry	Analytical Chemistry
75.	Sariya Walid Zidan Thanoun Al-Taie	Lecturer	Chemistry	Inorganic Chemistry
76.	Dr. Omar Ismail Mohammed	Assist. Lecturer	Chemistry	Biochemistry
77.	Kawakeb of Abdul Aziz Muhammad Al-Tai	Lecturer	Chemistry	Inorganic Chemistry



University of Mosul College of Science Chemistry Department



78.	Zeina Talal Shaker Mahmoud Bakr	Lecturer	Chemistry	Analytical Chemistry
79.	Israa Adnan Saeed Ahmed Al-Shukarji	Lecturer	Chemistry	Inorganic Chemistry
80.	Mawada Muhammad Suleiman Al-Ghabsha	Lecturer	Computer Science	Artificial intelligence
81.	Mafaz Khaled Saeed Tawfiq Al-Sayegh	Lecturer	Chemistry	Biochemistry
82.	Saba Mumtaz Saleh Taha Al-Asali	Lecturer	Chemistry	Inorganic Chemistry
83.	Lama Taha Daoud Sharif Al-Bakr	Lecturer	Chemistry	Analytical Chemistry
84.	Naseem Maysar Abdel Hamid Al-Hamdani	Lecturer	Chemistry	Analytical Chemistry
85.	Anfal Raad Mahmoud Ahmed Al-Barhawi	Lecturer	Chemistry	Physical Chemistry
86.	Saba Hazem Siddiq Hassan Al-Sarati	Lecturer	Chemistry	Synthetic Chemistry
87.	Raghad Abdel Mawjoud Muhammad Al-Abadi	Lecturer	Chemistry	Biochemistry
88.	Lana Abdel Hamid Rashid	Lecturer	Chemistry	Inorganic Chemistry
89.	Enas Samir Thanoun Mahmoud Mulla Hamo	Lecturer	Chemistry	Analytical Chemistry
90.	Shaima Younis Ibrahim Dhanoun Al-Taie	Lecturer	Chemistry	Organic Chemistry
91.	Shahla Ahmed Younis	Lecturer	Chemistry	Organic Chemistry
92.	Sahba Younis Majeed Abdul Ghani Al-Taie	Lecturer	Chemistry	Inorganic Chemistry
93.	Fayhaa Kamal Hussein Ali Al-Jarrah	assistant Lecturer	Chemistry	Inorganic Chemistry
94.	Muhammad Adnan Muhammad Ali Al-Qaba	assistant Lecturer	Chemistry	Organic Chemistry
95.	Amna Adnan Muhammad Shihab Al Fares	assistant Lecturer	Chemistry	Inorganic Chemistry
96.	Iman Bahjat Bashir Tawfiq Mulla Jarjis	assistant Lecturer	Chemistry	Analytical Chemistry
97.	Heif Naseer Abdel Fattah Al-Jumard	assistant Lecturer	Chemistry	Physical Chemistry
98.	Omar Muhammad Hamid	assistant Lecturer	Chemistry	Biochemistry
99.	Marwa Talal Mahmoud	assistant Lecturer	Chemistry	Organic Chemistry
100.	Simaa Muwaffaq Al-Omari	assistant Lecturer	Chemistry	Analytical Chemistry

Credits, Grading and GPA



University of Mosul
College of Science
Chemistry Department



Credits

College of Science, Mosul University 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:

Group	Grade	Marks (%)	Definition
Success Group (50 - 100)	A – Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C – Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E – Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	(45-49)	More work required but credit awarded
	F – Fail	(0-44)	Considerable amount of work required

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:

$$\text{CGPA} = [(1\text{st module score} \times \text{ECTS}) + (2\text{nd module score} \times \text{ECTS}) + \dots] / 24$$



University of Mosul
College of Science
Chemistry Department



1. Curriculum/Modules

Semester 1 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
CHE1101	Fundamentals of Analytical Chemistry and Qualitative Analysis	109	66	7.00	C	
CHE1102	Fundamentals of inorganic chemistry	79	71	6.00	C	
CHE1103	Physics	109	66	7.00	S	
UoM104	Democracy and Human Rights	34	16	2.00	B	
CHE1104	Chemical Security and Safety	79	71	6.00	C	
UoM101	Arabic Language	34	16	2.00	B	

Semester 2 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
CHE1215	Volumetric Analytical Chemistry	109	91	8.00	C	CHE1101
CHE1216	Ionic Compounds and Periodic table	109	91	8.00	C	CHE1102
Sci-101	Mathematics	34	16	2.00	B	
CHE1207	Geology	94	81	7.00	S	
UOM103	Computer	49	26	3.00	B	
UoM102	English Language	34	16	2.00	B	



University of Mosul
College of Science
Chemistry Department



Semester 3 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
CHE2308	Gravimetric Analysis Chemistry	79	71	6.00	C	
CHE2309	Chemistry of Representative Elements	79	71	6.00	C	
CHE23010	Thermodynamics	94	56	6.00	C	
CHE23011	Organic Chemistry 1	94	56	6.00	C	
CHE23012	Mathematics and Statistics	34	16	2.00	S	
UOM2050	Baath Party crimes in Iraq	33	17	2.00	B	
UOM2022	English Language 2	34	16	2.00	B	

Semester 4 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
CHE24013	Classical Separation Methods	79	46	5.00	C	
CHE24014	Solid State Chemistry	79	46	5.00	C	
CHE24015	Phase equilibrium	94	56	6.00	C	
CHE24016	Organic Chemistry 2	94	56	6.00	C	
CHE24017	Nanochemistry	34	41	3.00	C	
UOM2032	Computer 2	49	26	3.00	C	
UOM2012	Arabic Language2	34	16	2.00	B	



University of Mosul
College of Science
Chemistry Department



Semester 5 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
CHE35019	Coordination Chemistry 1	94	56	6.00	C	
CHE35020	Chemical Kinetics	94	56	6.00	C	
CHE35021	Organic Chemistry 3	94	56	6.00	C	
CHE35022	Principles of Biochemistry	94	56	6.00	C	
CHE35023	Industrial Chemistry and Pollution	49	51	4.00	C	
CHE35024	Elective 1(Heterocyclic -colloids - cytology)	19	31	2.00	E	

Semester 6 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
CHE36025	Coordination Chemistry 2	79	71	6.00	C	
CHE36026	Electrochemistry and Surface chemistry	109	41	6.00	C	
CHE36027	Organic Chemistry 4	94	56	6.00	C	
CHE36028	Biomolecules	94	56	6.00	C	
CHE36029	Application of Industrial Chemistry	49	51	4.00	C	
CHE36030	Scientific Research Methodology	19	31	2.00	C	



University of Mosul
College of Science
Chemistry Department



Semester 7 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
CHE47031	Instrumental Analysis	94	56	6.00	C	
CHE47032	Identification of Organic Compounds	79	71	6.00	C	
CHE47033	Metabolism of Carbohydrates	94	56	6.00	C	
CHE47034	Petroleum Chemistry and Petrochemicals	94	56	6.00	C	
CHE47035	Quantum Chemistry	64	36	4.00	C	
CHE47036	Elective 2(Reaction mechanics - clinical chemistry)	19	31	2.00	E	

Semester 8 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
CHE48037	Chromatographic Methods	94	56	6.00	C	
CHE48038	Application of Organic Spectrum	79	71	6.00	C	
CHE48039	Metabolism of Lipids and proteins	79	71	6.00	C	
CHE48040	Polymers: Fundamentals and applications	94	56	6.00	C	
CHE48041	Spectroscopy	64	36	4.00	C	
CHE48042	Research Project	33	17	2.00	C	



**University of Mosul
College of Science
Chemistry Department**



Contact

Program Director:

Program Coordinator:

Dr. Firas Ahmed Dhunoon

Official Email:

firas.allolage@uomosul.edu.iq

Mobile: 07738498510

Dr. Basma Ahmed Abdulhadi

Official Email:

basmasaleem@uomosul.edu.iq

Mobile: 07719828063

