



**University of Mosul**  
**College of Science**  
**Chemistry Department**  
**2024-2025**

**Academic Program  
and  
Course Description Guide**

## نموذج وصف البرنامج الأكاديمي

اسم الجامعة: جامعة الموصل

الكلية/ المعهد: كلية العلوم

القسم العلمي: قسم الكيمياء

اسم البرنامج الأكاديمي او المهني: بكالوريوس علوم في الكيمياء

اسم الشهادة النهائية: بكالوريوس علوم في الكيمياء

النظام الدراسي: سنوي

تاريخ اعداد الوصف: 2025 / 1 / 12

تاريخ ملء الملف: 2025 / 1 / 12



التوقيع

أ.د. مازن احمد عبد



التوقيع:

أ.د. سالم جاسم محمد صالح

دقق الملف من قبل



شعبة ضمان الجودة والأداء الجامعي

اسم مدير شعبة ضمان الجودة والأداء الجامعي: د. محمود عبد الكاظم حسن



أ.د. هيام عادل ابراهيم

مصادقة السيد العميد



## ***Introduction:***

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.



## Academic program description form

### *Description of the academic program*

This academic program description provides a necessary summary of the most important characteristics of the program and the learning outcomes expected of the student to achieve, demonstrating whether he has made the most of the available opportunities, and is accompanied by a description of each course within the program.

|                                       |   |
|---------------------------------------|---|
| 1- Educational institution            | University of Mosul / College of Science                        |
| 2- University department/center       | <b>Chemistry</b>  |
| 3- Name of the academic program       | <b>National accreditation standards for colleges of science</b> |
| 4- Name of the final certificate      | <b>Bachelor's degree (Chemistry Sciences)</b>                   |
| 5- The academic system                | <b>courses</b>  |
| 6- Accredited accreditation program   | <b>National accreditation standards for colleges of science</b> |
| 7- Date the description was prepared  | <b>12/1/2025</b>  |
| 8- Objectives of the academic program | <b>Reaching the national classification</b>                     |



***Required educational outcomes and teaching, learning and evaluation methods:***

Success in academic subjects for the four years + graduation research + summer training:

**A- Knowledge and understanding**

- 1- Enabling the student to understand the subject of chemistry
- 2- The student should understand the nature of matter and its chemical composition
- 3- That the student understands the mechanisms of chemical reactions

**B- Subject-specific skills**

- 1- Enables the student to teach chemistry
- 2- Enables the student to work in laboratories and health institutions
- 3- Enables the student to work in research institutions
- 4- Enables the student to work in the chemical and petroleum industries

**C- Thinking skills**

- 1- Discussions
- 2- Duties
- 3- Laboratory reports
- 4-Scientific reports



## ***Vision Statement***

The Chemistry Department aims to be at the forefront of scientific departments that contribute to the development of scientific and technical competencies. It strives to become one of the leading and advanced departments in the field of education and scientific research by creating a robust educational environment based on modern scientific curricula that combines fundamentals with continuous development to serve society and achieve sustainable development. The department seeks to equip chemistry graduates with the ability to compete in the employment market, enabling students to explore new horizons in science and develop innovative solutions to contemporary challenges. We believe that education should be a medium for change as those who graduate from the Chemistry Department will be leaders in their fields, keeping pace with the remarkable advancements in scientific and technical research. Additionally, the department is committed to fostering a culture of creativity and innovation in the field of chemistry while maintaining a prominent level of responsibility to meet the demands of the job market.

## ***Mission Statement***

The Chemistry Department is committed to provide a unique educational experience aimed at equipping students with the knowledge and practical skills necessary to address diverse scientific challenges. The department also seeks to prepare students academically and practically in all areas of chemistry, enabling graduates to become pioneers in their fields. This could be attained by enhancing their ability to think scientifically and solve problems innovatively, contributing to sustainable development and supplying the job market with qualified professionals. The department aims to provide society with scientific competencies and specialized personnel trained in modern chemical technologies.

## ***Objectives***

The Chemistry Department strives to achieve the following objectives:

1. **Fostering Innovation:** Enabling students to identify scientific problems and formulate them in new and unconventional ways, enhancing their innovation and scientific thinking skills.
2. **Linking Theory to Practice:** Providing students with opportunities to apply scientific knowledge in real-world situations, enabling them to effectively address field challenges.
3. **Improving the Quality of Scientific Research:** Teaching students how to design and conduct innovative scientific experiments, with a focus on comprehensive analysis of results and scientifically supported conclusions.



4. **Enhancing Creative Communication Skills:** Developing students' skills in effective communication, both orally and in writing, using new methods that allow them to express their ideas clearly and persuasively.
5. **Promoting Ethical Awareness:** Instilling a sense of ethical and professional responsibility in students, emphasizing the importance of adhering to ethical principles in all their scientific activities.
6. **Encouraging Effective Teamwork:** Fostering a spirit of collaboration and teamwork among students, enabling them to set common goals and plan activities innovatively.
7. **Integrating Modern Technology:** Promoting the use of modern technologies in teaching and learning, enabling students to utilize advanced technological tools including information technology in their scientific fields to achieve sustainable development goals.

### ***Learning Outcomes***

1. **Ability to Identify Scientific Problems:** Students can recognize and define various scientific problems clearly, using appropriate scientific concepts.
2. **Application of Scientific Knowledge:** Students can apply scientific principles to solve field problems and demonstrate the ability to provide effective solutions that meet societal needs.
3. **Conducting Scientific Experiments:** Students acquire the skills to design and conduct scientific experiments while ensuring quality and can analyze and interpret results accurately.
4. **Effective Communication Skills:** Students can communicate smoothly and effectively, both verbally and in writing, with various groups and administrative levels.
5. **Ethical and Professional Awareness:** Students possess a deep understanding of ethical and professional responsibilities and demonstrate a clear commitment to society in all their scientific activities.
6. **Teamwork:** Students can work effectively within scientific teams, with the ability to set common goals, plan activities, and manage risks.
7. **Keeping Pace with Technological Advancements:** Students acquire the necessary skills to keep up with developments in modern technologies, enabling them to use technological tools effectively in their fields.



## Program Specification :

|                      |                       |                              |           |
|----------------------|-----------------------|------------------------------|-----------|
| <b>Program code:</b> | BSc-Che               | <b>ECTS</b>                  | 240       |
| <b>Duration:</b>     | 4 levels, 8 Semesters | <b>Method of Attendance:</b> | Full Time |

## *Program Structure: A- Graduated Study :*

| Level | Semester | No. | Module Code | Module Name in English  | SSWL   | USSWL  | SWL    | ECTS |
|-------|----------|-----|-------------|---|--------|--------|--------|------|
|       |          |     |             |   | hr/sem | hr/sem | hr/sem |      |
| UGI   | One      | 1   | CHE1101     | Fundamentals of Analytical Chemistry and Qualitative Analysis | 109    | 66     | 175    | 7.00 |
|       |          | 2   | CHE1102     | Fundamentals of inorganic chemistry                           | 79     | 71     | 150    | 6.00 |
|       |          | 3   | CHE1103     | Physics   | 109    | 66     | 175    | 7.00 |
|       |          | 4   | UOM104      | Democracy and Human Rights                                    | 34     | 16     | 50     | 2.00 |
|       |          | 5   | CHE1104     | Chemical Security and Safety                                  | 79     | 71     | 150    | 6.00 |
|       |          | 6   | UOM101      | Arabic Language   | 34     | 16     | 50     | 2.00 |
|       | Two      | 1   | CHE1215     | Volumetric Analytical Chemistry                               | 109    | 91     | 200    | 8.00 |
|       |          | 2   | CHE1216     | Ionic Compounds and Periodic table                            | 109    | 91     | 200    | 8.00 |
|       |          | 3   | Sci-1105    | Mathematics   | 34     | 16     | 50     | 2.00 |
|       |          | 4   | CHE1207     | Geology   | 94     | 81     | 175    | 7.00 |
|       |          | 5   | UOM103      | Computer  | 49     | 26     | 75     | 3.00 |
|       |          | 6   | UOM102      | English Language  | 34     | 16     | 50     | 2.00 |
| UGII  | Three    | 1   | CHE2318     | Gravimetric Analysis Chemistry                                | 94     | 31     | 125    | 5.00 |
|       |          | 2   | CHE2319     | Chemistry of Representative                                   | 79     | 46     | 125    | 5.00 |



|      |       |          |                            |  |     |     |      |      |
|------|-------|----------|----------------------------|--|-----|-----|------|------|
| UGIV |       |          |                            | Elements                               |     |     |      |      |
|      | 3     | CHE23010 | Thermodynamics             | 94                                     | 56  | 150 | 6.00 |      |
|      | 4     | CHE23011 | Organic Chemistry 1        | 94                                     | 56  | 150 | 6.00 |      |
|      | 5     | CHE23012 | Cytology                   | 64                                     | 11  | 75  | 3.00 |      |
|      | 6     | CHE23113 | Mathematics and Statistics | 49                                     | 26  | 75  | 3.00 |      |
|      | 7     | UOM201   | Baath Party crimes in Iraq | 34                                     | 16  | 50  | 2.00 |      |
|      | Four  | 1        | CHE24114                   | Classical Separation Methods           | 94  | 56  | 150  | 6.00 |
|      |       | 2        | CHE24115                   | Solid State Chemistry                  | 94  | 56  | 150  | 6.00 |
|      |       | 3        | CHE24116                   | Phase equilibrium                      | 94  | 56  | 150  | 6.00 |
|      |       | 4        | CHE24117                   | Organic Chemistry 2                    | 94  | 56  | 150  | 6.00 |
|      |       | 5        | CHE24018                   | Nanochemistry                          | 49  | 26  | 75   | 3.00 |
|      |       | 6        | CHE24019                   | Chemistry Software                     | 49  | 26  | 75   | 3.00 |
|      | Five  | 1        | CHE35120                   | Coordination Chemistry 1               | 94  | 56  | 150  | 6.00 |
|      |       | 2        | CHE35121                   | Chemical Kinetics                      | 94  | 56  | 150  | 6.00 |
|      |       | 3        | CHE35122                   | Organic Chemistry 3                    | 94  | 56  | 150  | 6.00 |
|      |       | 4        | CHE351323                  | Principles of Biochemistry             | 94  | 56  | 150  | 6.00 |
|      |       | 5        | CHE35024                   | Industrial Chemistry and Pollution     | 49  | 51  | 100  | 4.00 |
|      |       | 6        | CHE35025                   | Elective 1                             | 19  | 31  | 50   | 2.00 |
|      | Six   | 1        | CHE36126                   | Coordination Chemistry 2               | 94  | 56  | 150  | 6.00 |
|      |       | 2        | CHE36127                   | Electrochemistry and Surface chemistry | 109 | 41  | 150  | 6.00 |
|      |       | 3        | CHE36128                   | Organic Chemistry 4                    | 94  | 56  | 150  | 6.00 |
|      |       | 4        | CHE36129                   | Biomolecules                           | 94  | 56  | 150  | 6.00 |
|      |       | 5        | CHE36130                   | Application of Industrial Chemistry    | 49  | 51  | 100  | 4.00 |
|      |       | 6        | CHE36031                   | Scientific Research Methodology        | 19  | 31  | 50   | 2.00 |
| UGV  | Seven | 1        | CHE47132                   | Instrumental Analysis                  | 94  | 56  | 150  | 6.00 |
|      |       | 2        | CHE47133                   | Identification of Organic Compounds    | 79  | 71  | 150  | 6.00 |
|      |       | 3        | CHE47134                   | Metabolism of Carbohydrates            | 94  | 56  | 150  | 6.00 |
|      |       | 4        | CHE47135                   | Petroleum Chemistry and Petrochemicals | 109 | 41  | 150  | 6.00 |



|       |   |          |   |     |    |     |      |
|-------|---|----------|---|-----|----|-----|------|
| Eight | 5 | CHE47036 | Quantum Chemistry                       | 64  | 36 | 100 | 4.00 |
|       | 6 | CHE47037 | Elective 2                              | 19  | 31 | 50  | 2.00 |
|       | 1 | CHE48138 | Chromatographic Methods                 | 94  | 56 | 150 | 6.00 |
|       | 2 | CHE48139 | Application of Organic Spectrum         | 79  | 71 | 150 | 6.00 |
|       | 3 | CHE48140 | Metabolism of Lipids and proteins       | 94  | 56 | 150 | 6.00 |
|       | 4 | CHE48141 | Polymers: Fundamentals and applications | 109 | 41 | 150 | 6.00 |
|       | 5 | CHE48142 | Spectroscopy                            | 64  | 36 | 100 | 4.00 |
|       | 6 | CHE48143 | Research Project                        | 33  | 17 | 50  | 2.00 |
|       |   |          |   |     |    |     |      |
|       |   |          |   |     |    |     |      |
|       |   |          |   |     |    |     |      |
|       |   |          |   |     |    |     |      |
|       |   |          |   |     |    |     |      |

## B-Post Graduate Study :

| Codes               | Number of hours | University academic system           | Subject Name               | No. | Educational level |
|---------------------|-----------------|--------------------------------------|----------------------------|-----|-------------------|
| <b>F6061-SCCH10</b> | 2               | First semester                       | Industrial chemistry       | 1   | <b>Master</b>     |
| <b>F6091-SCCH10</b> | 2               | Second Semester                      | Organic spectrum           | 2   |                   |
| <b>F6071-SCCH10</b> | 1               | Semester (first and (second semester | English language           | 3   |                   |
| <b>F6401-SCCH10</b> | 2               | Second Semester                      | nutrition Human            | 4   |                   |
| <b>F6041-SCCH10</b> | 2               | Second Semester                      | Bioinorganic chemistry     | 5   |                   |
| <b>F6311-SCCH10</b> | 2               | Second Semester                      | Enzymes and hormones       | 6   |                   |
| <b>F6301-SCCH10</b> | 2               | Second Semester                      | Clinical biochemistry      | 7   |                   |
| <b>F6331-SCCH10</b> | 2               | Second Semester                      | Molecular biology          | 8   |                   |
| <b>F6101-SCCH10</b> | 2               | Second Semester                      | Physical organic chemistry | 9   |                   |
| <b>F6151-SCCH10</b> | 2               | First semester                       | Colloids                   | 10  |                   |
| <b>F6021-SCCH10</b> | 2               | First semester                       | analytical chemistry       | 11  |                   |
| <b>F6171-SCCH10</b> | 2               | First semester                       | X-ray                      | 12  |                   |
| <b>F6161-SCCH10</b> | 2               | Second Semester                      | Group Theory               | 13  |                   |
| <b>F6111-SCCH10</b> | 2               | Second Semester                      | Organic construction       | 14  |                   |
| <b>F6191-SCCH10</b> | 2               | First semester                       | Advanced life              | 15  |                   |
| <b>F6031-SCCH10</b> | 2               | Second Semester                      | Life technologies          | 16  |                   |
| <b>F6211-SCCH10</b> | 2               | Second Semester                      | Molecular interactions     | 17  |                   |
| <b>F6341-SCCH10</b> | 2               | First semester                       | Thermodynamic              | 18  |                   |
| <b>F6081-SCCH10</b> | 2               | Second Semester                      | Stereochemistry            | 19  |                   |
| <b>F6121-SCCH10</b> | 2               | Second Semester                      | Heterocyclic               | 20  |                   |



|                     |          |                                      |                                    |    |
|---------------------|----------|--------------------------------------|------------------------------------|----|
| <b>F6011-SCCH10</b> | 2        | First semester                       | Physical processes                 | 21 |
| <b>F6241-SCCH10</b> | <b>2</b> | Second Semester                      | Organic analysis                   | 22 |
| <b>F6411-SCCH10</b> | <b>2</b> | Second Semester                      | Biopolymer                         | 23 |
| <b>F7161-SCCH10</b> | 2        | First semester                       | Polymerization                     | 1  |
| <b>F7061-SCCH10</b> | <b>1</b> | Semester (first and (second semester | English language                   | 2  |
| <b>F7251-SCCH10</b> | 2        | Second Semester                      | Human nutrition                    | 3  |
| <b>F7411-SCCH10</b> | 2        | Second Semester                      | Metabolic diseases                 | 4  |
| <b>F7311-SCCH10</b> | 2        | First semester                       | Heterocyclic                       | 5  |
| <b>F7371-SCCH10</b> | 2        | First semester                       | Biotechnology                      | 6  |
| <b>F7241-SCCH10</b> | 2        | Second Semester                      | Enzymes and hormones               | 7  |
| <b>F7441-SCCH10</b> | 2        | Second Semester                      | Oxidants and antioxidants          | 8  |
| <b>F7321-SCCH10</b> | 2        | Second Semester                      | Computer Chemistry ((Computational | 9  |
| <b>F7091-SCCH10</b> | 2        | Second Semester                      | Organometallic                     | 10 |
| <b>F7101-SCCH10</b> | 2        | First semester                       | Coordination chemistry             | 11 |
| <b>F7341-SCCH10</b> | 2        | Second Semester                      | Transitional elements              | 12 |
| <b>F7581-SCCH10</b> | 2        | First semester                       | Inorganic (M. Selected)            | 13 |
| <b>F7121-SCCH10</b> | 2        | First semester                       | Reaction kinetics                  | 14 |
| <b>F7151-SCCH10</b> | 2        | First semester                       | Physical processes                 | 15 |
| <b>F7381-SCCH10</b> | 2        | First semester                       | Physical spectrum                  | 16 |
| <b>F7391-SCCH10</b> | 2        | Second Semester                      | Colloids and surfaces              | 17 |

**PHD**

### Planning for personal development:

A-Extra-class activity:

- Participation in multiple dialogues via direct sessions provided by advanced universities.
- Participation in national and external scientific conferences and transfer of skills through joint seminars.

B-Extracurricular activities, scientific trips, and scientific tours.

**Admission standard (establishing regulations related to enrollment in the college or institute)**



## Central admission

### • Academic Program Requirements of Curriculum

| Percentage | Hours | Type of Study           | No. |
|------------|-------|-------------------------|-----|
| %8         | 8     | University Requirements | 1   |
| %16        | 16    | College Requirements    | 2   |
| %76        | 76    | Department Requirements | 3   |
| %100       | 100   | <b>Total</b>            |     |

### Department outputs:

1. Determine the department's measurable cognitive skills that are consistent with the objectives of the academic department's programs through daily, quarterly and final examinations and reports.
2. Determine the priorities of the knowledge and skills that the department is keen to achieve for the graduate
3. The extent to which graduate students achieve the department's academic program
4. The department's mechanisms used in evaluating the department's academic program:
  - Graduate opinion polls, as the department cooperates with the head of the rehabilitation and employment unit at the college in order to communicate with the department's graduates and listen to their opinions and ideas in developing the department.
  - Opinions of employment agencies: The department communicates and cooperates with government employment agencies, the most important of which are the Directorate of Health and the Directorate of Education, as well as some companies, health centers and clinics in the private sector.



- Graduates' performance in jobs: Graduates perform very well in jobs because they have benefited from valuable information during their years of study.
- Graduate employment data through the College's Qualification and Employment Unit.

### Academic Staff:

| No. | Name  | Academic title  | General Subject | Fine Subject         |
|-----|---|-----------------|-----------------|----------------------|
| 1.  | Dr. Salem Jassim Mohammed Saleh Al-Juhaishi     | Prof.           | Chemistry       | Organic Chemistry    |
| 2.  | Dr. Ammar Abdel Sattar Ibrahim Yahya Al Dabbagh | Prof.           | Chemistry       | Physical Chemistry   |
| 3.  | Dr. Imad Younis Hassan Al-Nasser                | Lecturer        | Chemistry       | Analytical 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 Abdel 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 Muhammad Al-Jawadi       | Prof.           | Chemistry       | Biochemistry         |
| 11. | Dr. Zahraa Muhammad Ali Ahmed Mustafa Hamouda   | Prof.           | Chemistry       | Biochemistry         |
| 12. | Dr. Amer Thanoun Abdul Rahman Ahmed Al-Taie     | Prof.           | Chemistry       | Physical Chemistry   |
| 13. | Dr. Ammar Hussein Abdullah Fares Al-Sabaawi     | Prof.           | Chemistry       | Organic Chemistry    |
| 14. | Dr. Hana Shukr Mahmoud Ahmed Al-Omari           | Prof.           | Chemistry       | Analytical Chemistry |
| 15. | Dr. Sahba Ali Ahmed Hassan Al-Sabaawi           | Prof.           | Chemistry       | Inorganic Chemistry  |
| 16. | Dr. Shaima Khazal Younis Omar Al-Azzawi         | Prof.           | Chemistry       | Organic Chemistry    |
| 17. | Dr. Laila Abdullah Mustafa Abdullah Abdul Al    | Assistant Prof. | Chemistry       | Biochemistry         |
| 18. | Dr. Saba Zaki Mahmoud Khader Al-Abaji           | Assistant Prof. | Chemistry       | Biochemistry         |
| 19. | Dr. Muhammad Bahri Hassan Abdel Saadoun         | Assistant Prof. | Chemistry       | Biochemistry         |



|     |  |                 |           |                      |
|-----|--|-----------------|-----------|----------------------|
| 20. | Dr. Wasan Khairallah Ali Hussein Al-Dulaimi      | Assistant Prof. | Chemistry | Biochemistry         |
| 21. | Dr. Iman Ismail Ahmed Majdhab Al-Akidi           | Assistant Prof. | Chemistry | Industrial Chemistry |
| 22. | Dr. Fatima Abdul Hamid Muhammad Al-Atrushi       | Assistant Prof. | Chemistry | Biochemistry         |
| 23. | Dr. Sakina Hussein Rashid Ali Al-Rawi            | Assistant Prof. | Chemistry | Biochemistry         |
| 24. | Dr. Iman Adel Hadi Hamdoun Ramadan               | Assistant Prof. | Chemistry | Biochemistry         |
| 25. | Dr. Khansa Shaker Nemat Allah Al-Nima            | Assistant Prof. | Chemistry | Inorganic Chemistry  |
| 26. | Dr. Khaleda Muhammad Omar Daed Al-Tai            | Assistant Prof. | Chemistry | Analytical Chemistry |
| 27. | Dr. Amra Fares Muhammad Darwish Al-Sarraj        | Assistant Prof. | Chemistry | Inorganic Chemistry  |
| 28. | Dr. Munira Youssef Raouf Al-Naqshbandi           | Assistant Prof. | Chemistry | Organic Chemistry    |
| 29. | Dr. Laila Jumaa, Najam, Zaher star               | Assistant Prof. | Chemistry | Inorganic Chemistry  |
| 30. | Dr. Farah Tariq Saeed Muhammad Al-Tikriti        | Assistant Prof. | Chemistry | Inorganic Chemistry  |
| 31. | Dr. Omar Adel Sharif                             | Assistant Prof. | Chemistry | Physical Chemistry   |
| 32. | Dr. Safaa Abdel Aziz Taha Amin Al-Amin           | Assistant Prof. | Chemistry | Biochemistry         |
| 33. | Dr. Saeed Abdel Qader Saeed Al-Bighamberly       | Assistant Prof. | Chemistry | Organic Chemistry    |
| 34. | Dr. Saad Hassani, Sultan of Zarzis Allawi        | Assistant Prof. | Chemistry | Analytical Chemistry |
| 35. | Dr. Alaa Muhammad Tayyab Hussein Al Laila        | Assistant Prof. | Chemistry | Physical Chemistry   |
| 36. | Dr. Fanar Muhammad Ismail Muhammad Al-Hayali     | Assistant Prof. | Chemistry | Physical Chemistry   |
| 37. | Dr. Shaima Hashem Abdel Rahman Mustafa Al-Hilali | Assistant Prof. | Chemistry | Physical Chemistry   |
| 38. | Dr. Haifa Younis Hussein Darwish Al-Jubouri      | Assistant Prof. | Chemistry | Organic Chemistry    |
| 39. | Dr. Atallah Muhammad Sheet Mahmoud Al-Sharifi    | Assistant Prof. | Chemistry | Organic Chemistry    |
| 40. | Dr. Harith Muhammad Salman Abdul Ajili           | Assistant Prof. | Chemistry | Organic Chemistry    |
| 41. | Dr. Amal Taha Yassin Ramla Al Jeraisy            | Assistant Prof. | Chemistry | Biochemistry         |
| 42. | Dr. Rana Hassan Ahmed, all of them               | Assistant Prof. | Chemistry | Physical Chemistry   |
| 43. | Dr. Ala Aldin Mohammed Hani Darghouth            | Assistant Prof. | Chemistry | Physical Chemistry   |
| 44. | Dr. Rana Abdul Malik Suleiman Ali Al Qa'ba       | Assistant Prof. | Chemistry | Inorganic Chemistry  |
| 45. | Dr. Firas Ahmed Thanon Al-Lolage                 | Assistant Prof. | Chemistry | Physical Chemistry   |
| 46. | Dr. Asim Salman Abdullah Fathi Al-Boutani        | Lecturer        | Chemistry | Inorganic Chemistry  |
| 47. | Dr. Amira Muhammad Faraj Saleh Suleiman          | Lecturer        | Chemistry | Organic Chemistry    |



|     |   |                 |           |                      |
|-----|---|-----------------|-----------|----------------------|
| 48. | Dr. Heba Amin Ibrahim Dhanoun Al-Alaf         | Lecturer        | Chemistry | Organic Chemistry    |
| 49. | Dr. Nada Bashir Sharif Hamid Al Nuaimi        | Lecturer        | Chemistry | Physical Chemistry   |
| 50. | Dr. Rafd Rabie Saadoun Muhammad Al-Taie       | Lecturer        | Chemistry | Biochemistry         |
| 51. | Dr. Samir Saadallah Azza Nasser Al-Hayali     | Lecturer        | Chemistry | Inorganic Chemistry  |
| 52. | Dr. Saleh Awaid Aboud Muhammad Al-Obaidi      | Lecturer        | Chemistry | Organic Chemistry    |
| 53. | Dr. Alaa Hussein Jalil Muhammad Al-Taei       | Lecturer        | Chemistry | Physical Chemistry   |
| 54. | Dr. Azzam Ahmed Muhammad Hodayd Al-Hadidi     | Lecturer        | Chemistry | Organic Chemistry    |
| 55. | Dr. Ihab Salem Ahmed MahalAl-Jubouri          | Lecturer        | Chemistry | Industrial Chemistry |
| 56. | Dr. Shaima Sultan Abo Al-Mutlaq Al-Aqidi      | Lecturer        | Chemistry | Industrial Chemistry |
| 57. | Dr. Aseel Nameer Abdul-Jabar                  | Lecturer        | Chemistry | Analytical Chemistry |
| 58. | Dr. Ibrahim Muhammad Hayes Saleh Al-Khafaji   | Lecturer        | Chemistry | Physical Chemistry   |
| 59. | Dr. Maha Thanoun Hussein Abdullah Al-Obaidi   | Lecturer        | Chemistry | Analytical Chemistry |
| 60. | Dr. Heba Farouk Muhammad Amin Yahya Al-Kateb  | Lecturer        | Chemistry | Inorganic Chemistry  |
| 61. | Dr. Tahani Walid Jihad Yacoub Qato            | Lecturer        | Chemistry | Organic Chemistry    |
| 62. | Dr. Heba Amin Ibrahim Dhanoun Al-Alaf         | Lecturer        | Chemistry | Organic Chemistry    |
| 63. | Dr. Ahmed Salem Mahmoud Muhammad Al-Taie      | Lecturer        | Chemistry | Inorganic Chemistry  |
| 64. | Dr. Heba Abdul Salam Muhammad Abdullah        | Lecturer        | Chemistry | Organic Chemistry    |
| 65. | Dr. Roaa Qasim Yahya                          | Lecturer        | Chemistry | Industrial Chemistry |
| 66. | Dr. Amna Farouk Sanallah Abdullah Al-Omari    | Lecturer        | Chemistry | Industrial Chemistry |
| 67. | Dr. Omar Ismail Muhammad Al-Dhanoun           | Lecturer        | Chemistry | Biochemistry         |
| 68. | Dr. Hanan Hamid Ahmed Suleiman Al-Ali         | Lecturer        | Chemistry | Analytical Chemistry |
| 69. | Dr..Asmaa Natiq Abdul Qadir Mahmoud Al Arhaim | Lecturer        | Chemistry | Analytical Chemistry |
| 70. | Neaam Muhammad Tayyab Hussein Al Laila        | Assistant Prof. | Chemistry | Industrial Chemistry |
| 71. | Amal Ghazi Abdel Rahawi Al-Sarraj             | Assistant Prof  | Chemistry | Physical Chemistry   |
| 72. | Inaam Ahmed Hamdoun Al-Gargis                 | Assistant Prof. | Chemistry | Analytical Chemistry |
| 73. | Israa Ali Hassan Ali Haj Hussein              | Assistant Prof. | Chemistry | Inorganic Chemistry  |
| 74. | Kawakeb of Abdul Aziz Muhammad Majeed Al-Tai  | Lecturer        | Chemistry | Inorganic Chemistry  |
| 75. | Zeina Talal Shaker Mahmoud Bakr               | Lecturer        | Chemistry | Analytical Chemistry |



|      |  |                    |                  |                         |
|------|--|--------------------|------------------|-------------------------|
| 76.  | Sariya Walid Zidan Thanoun Al-Taie         | Lecturer           | Chemistry        | Inorganic Chemistry     |
| 77.  | Israa Adnan Saeed Ahmed Al-Shukarji        | Lecturer           | Chemistry        | Inorganic Chemistry     |
| 78.  | Mawada Muhammad Suleiman Hassan Al-Ghabsha | Lecturer           | Computer Science | Artificial intelligence |
| 79.  | Saba Mumtaz Saleh Taha Al-Asali            | Lecturer           | Chemistry        | Inorganic Chemistry     |
| 80.  | Noha Abdel Qader Sharif Omar Al Talib      | Assistant Prof.    | Chemistry        | Biochemistry            |
| 81.  | Afia Muayyed Younis Mustafa Al-Dabbagh     | Lecturer           | Chemistry        | Inorganic Chemistry     |
| 82.  | Basemah Ahmed Abdel Hadi Salim Al-Taha     | Assistant Prof.    | Chemistry        | Analytical Chemistry    |
| 83.  | Mafaz Khaled Saeed Tawfiq Al-Sayegh        | Lecturer           | Chemistry        | Biochemistry            |
| 84.  | Lama Taha Daoud Sharif Al-Bakr             | Lecturer           | Chemistry        | Analytical Chemistry    |
| 85.  | Naseem Maysar Abdel Hamid Al-Hamdani       | Lecturer           | Chemistry        | Analytical Chemistry    |
| 86.  | Safa Abdel Aleem Ahmed Younis Zakaria      | Lecturer           | Chemistry        | Analytical Chemistry    |
| 87.  | Anfal Raad Mahmoud Ahmed Al-Barhawi        | Lecturer           | Chemistry        | Physical Chemistry      |
| 88.  | Sana Abdel-Ilah Ahmed Girgis Abdel-Mawjoud | Lecturer           | Chemistry        | Biochemistry            |
| 89.  | Saba Hazem Siddiq Hassan Al-Sarati         | Lecturer           | Chemistry        | Synthetic Chemistry     |
| 90.  | Fayhaa Kamal Hussein Ali Al-Jarrah         | Lecturer           | Chemistry        | Inorganic Chemistry     |
| 91.  | Raghad Abdel Mawjoud Muhammad Al-Abadi     | Lecturer           | Chemistry        | Biochemistry            |
| 92.  | Lana Abdel Hamid Rashid                    | Lecturer           | Chemistry        | Inorganic Chemistry     |
| 93.  | Enas Samir Thanoun Mahmoud Mulla Hamo      | Lecturer           | Chemistry        | Analytical Chemistry    |
| 94.  | Shahla Ahmed Younis Abdel-Jamas            | Lecturer           | Chemistry        | Organic Chemistry       |
| 95.  | Shaima Younis Ibrahim Dhanoun Al-Taie      | Lecturer           | Chemistry        | Organic Chemistry       |
| 96.  | Muhammad Adnan Muhammad Ali Al-Qaba        | assistant Lecturer | Chemistry        | Organic Chemistry       |
| 97.  | Khaled Nazir Hamid Abdullah Al-Sarraf      | assistant Lecturer | Chemistry        | Inorganic Chemistry     |
| 98.  | Muhammad Qahtan Hassan Ali Siala           | assistant Lecturer | Chemistry        | Physical Chemistry      |
| 99.  | Amna Adnan Muhammad Shihab Al Fares        | assistant Lecturer | Chemistry        | Inorganic Chemistry     |
| 100. | Iman Bahjat Bashir Tawfiq Mulla Jarjis     | assistant Lecturer | Chemistry        | Analytical Chemistry    |



|      |   |                    |           |                      |
|------|---|--------------------|-----------|----------------------|
| 101. | Sahba Younis Majeed Abdul Ghani Al-Taie | assistant Lecturer | Chemistry | Inorganic Chemistry  |
| 102. | Haif Nasr Abdel Fattah                  | assistant Lecturer | Chemistry | Physical Chemistry   |
| 103. | Dhaha Nidal Saad                        | assistant Lecturer | Chemistry | Organic Chemistry    |
| 104. | Omar Mohamed Hameed                     | assistant Lecturer | Chemistry | Biochemistry         |
| 105. | Marow Talal Mahmood                     | assistant Lecturer | Chemistry | Organic Chemistry    |
| 106. | Semaa Mowafaq Alamarly                  | assistant Lecturer | Chemistry | Analytical Chemistry |

### **The most important sources of information about the program**

Student guide for central admission counted by the Ministry of Higher Education and Scientific Research for more information.

### **job description and courses:**

<https://bityl.co/P7V3>

### **Department lectures on the website:**

Department lectures <https://rb.gy/8j3a70> ✓

**College Guide:** <https://bityl.co/P7TV>

**CV of teachers:** <https://cv.uomosul.edu.iq/list/science/chemistry> ✓

**Members of the College Council :** <https://shorturl.at/eBT27>

**Links to faculty research on the college website :**

<https://cv.uomosul.edu.iq/list/science/chemistry>

**Links to graduation projects for department students:**

<https://shorturl.at/oHLU0>



**Subjects and units :**

<https://shorturl.at/kuz06>

**Continuing education courses:**

[https://uomosul.edu.iq/public/files/datafolder\\_3067/\\_20211103\\_100359\\_230.docx](https://uomosul.edu.iq/public/files/datafolder_3067/_20211103_100359_230.docx)

**Lectures:** <https://shorturl.at/iGJTV>

**Class schedules:** <https://uomosul.edu.iq/pages/ar/science/42594>

- **Description of the faculty members in the department:**

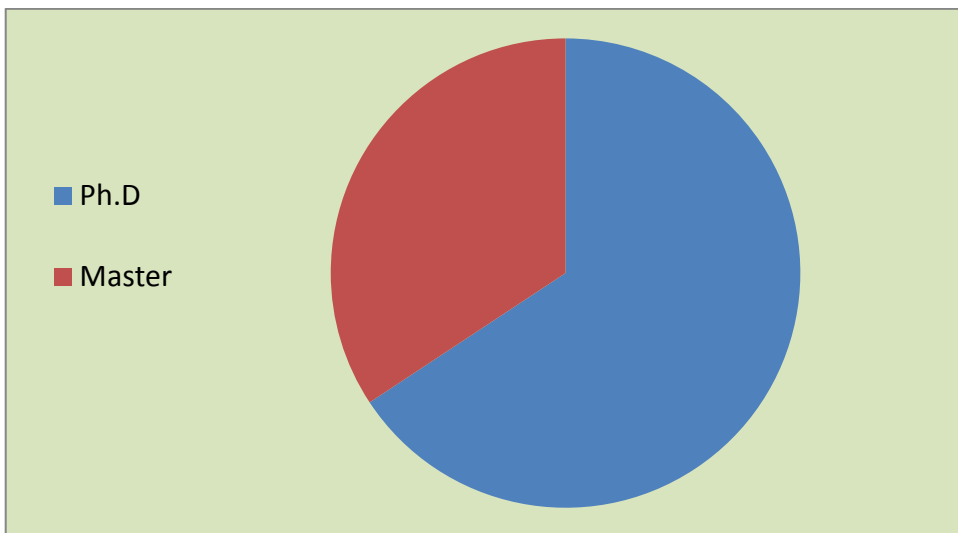
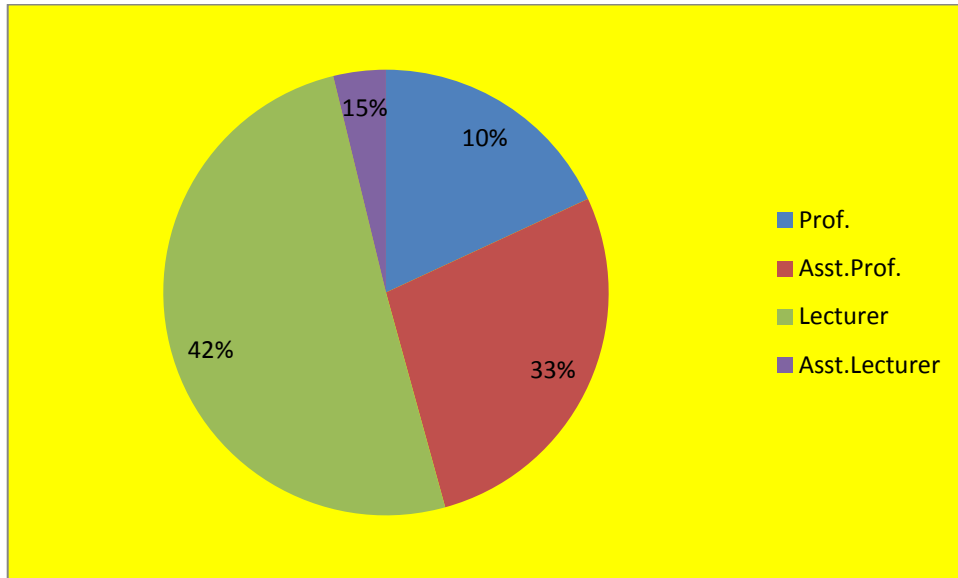
|        |      | Scientific degree |          |            |       | Coalification |      | Staff |
|--------|------|-------------------|----------|------------|-------|---------------|------|-------|
| female | Male | Asst.<br>lecturer | Lecturer | Asst.Prof. | Prof. | Master        | Ph.D |       |
| 75     | 31   | 11                | 45       | 35         | 15    | 37            | 69   | 106   |

65%

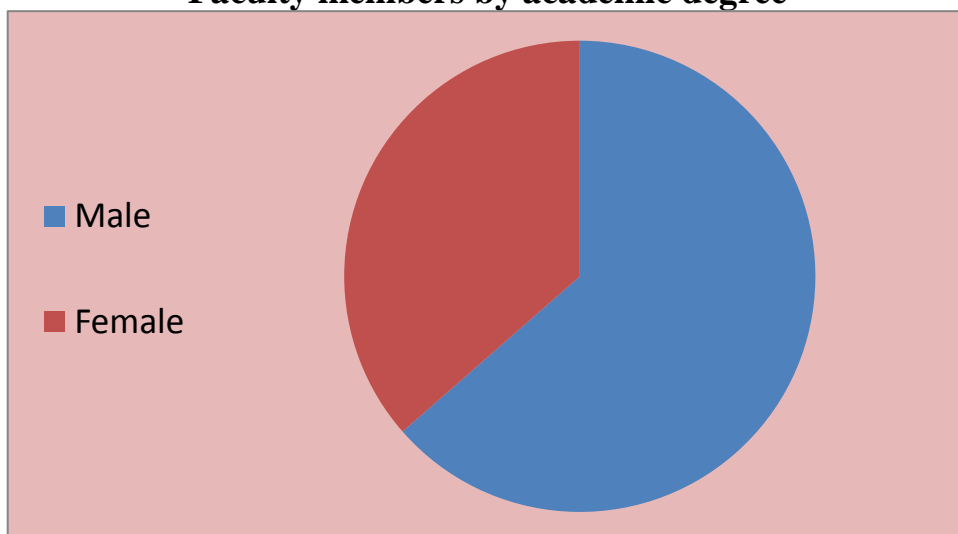
**% of Ph.D**

35%

**% of Master**



**Faculty members by academic degree**



**Faculty members by gender**



•Average hours of additional teaching load for faculty members:

| Number of load hours | The number of quorum hours specified | The scientific title |
|----------------------|--------------------------------------|----------------------|
| 16                   | 6-4                                  | Prof.                |
| 13                   | 8                                    | Asst. Prof.          |
| 15                   | 10                                   | Lecturer             |
| 17                   | 12                                   | Asst. Lecturer       |



•Employees and administrators according to academic qualification

| Number of contract employees | Number of permanent employees | Academic qualification of employees |
|------------------------------|-------------------------------|-------------------------------------|
|                              | 13                            | Bachelor's                          |
|                              | 3                             | Technical Diploma                   |
|                              | 0                             | Preparatory school                  |
|                              | 1                             | Medium                              |
| 2                            | 1                             | Primary                             |



- **Ratio of students to teachers:**

Number of Chemistry Department students in 2024-2025 (1088) for the four stages

Preparation of teaching staff in the Chemistry Department for the year 2024-2025 (106) teaching staff

Ratio of students to teachers = 0.1

A summary of the most important work at the quality assurance level:

- **Quality field:**

- 1- Writing and implementing boards related to the department's vision, mission, and goals.
- 2- Preparing questionnaires for students to evaluate the teaching.
- 3- Follow up on the implementation of the department's self-evaluation standards
- 4- Participation in many seminars, workshops and conferences related to quality within the country.
- 5- Holding workshops aimed at improving quality in the department.
- 6- Holding and attending scientific courses on performance evaluation for department members.
- 7- Prepare a plan on what was done before starting the department's self-evaluation process.
- 8- Working on coding the new curricula and exam questions on a regular basis.
- 9- Establishing special mechanisms for laboratory quality.



### • Field of university performance:

- 1- Completing the department's annual calendar file.
- 2- Conducting evaluations of teachers as well as evaluations of employees.
- 3- Archiving (automation) of information: electronic documentation of information in the department's Quality Assurance Committee.
- 4- Completing the national evaluation form for scientific departments.
- 5- Completing and writing the department's self-evaluation report according to the standards of the accredited national accreditation standards for colleges of science accreditation program
- 6- Writing a report on conformity with the standards of the accredited ABET accreditation program.

### Infrastructure

| Ratio of students to hall area | Area m <sup>2</sup> | no | Buildings              | No. |
|--------------------------------|---------------------|----|------------------------|-----|
| 0.86                           | 610                 | 10 | Teaching halls         | .1  |
| 4.0                            | 180                 | 2  | Event halls            | .2  |
|                                | 220                 | 1  | Central laboratory     | .3  |
| 0.3                            | 1317                | 31 | Laboratories           | .4  |
|                                | 0                   | 0  | Technical workshops    | .5  |
|                                | 950                 | 54 | Faculty offices        | .6  |
|                                | 18.5                | 2  | Internet units         | .7  |
|                                | 60                  | 1  | Clubs, sports stadiums | .8  |
|                                | 1800                | 4  | Parking lot            | .9  |
|                                | 1200                | 4  | Gardens and squares    | .10 |
|                                | 210                 | 1  | the library            | .11 |
|                                | 270                 | 9  | Bathrooms              | .12 |