



## Description of the academic program of the Department of Geology

This academic program description provides a summary of the program's most important features and outcomes of the section that the student is required to achieve, demonstrating whether he has made the most of the opportunities Available. It is accompanied by a description of each course within the program.

|                                      |   |
|--------------------------------------|---|
| 1. Educational institution           | University of Mosul                       |
| 2. University department/center      | College of Science/ Department of Geology |
| 3. Academic program title            | Bachelor of Geology                       |
| 4. Final certificate title           | Bachelor of Geology                       |
| 5. Academic system                   | Semesters                                 |
| 6. Approved accreditation program    | ABET                                      |
| 7. Other external influences         | Non                                       |
| 8. Date of preparing the description | 2021                                      |

|   |
|---|
| <b>9. Objectives of the academic program</b>  |
| <p>Graduating a student familiar with the basic concepts of Geology</p> <p>Graduating a student capable of applying Geology in the fields of oil and community service.</p> <p>Graduating a group of students who have the ability to continue higher education as postgraduate students.</p>   |
| <b>10. Required learning outcomes and methods of teaching, learning and assessment</b>  |
| <b>A- Knowledge and understanding</b>   |
| <ol style="list-style-type: none"> <li>1. Enable the student to gain an understanding of the Geology subject.</li> <li>2. Preparing scientific cadres specialized in Geology and all its branches to support the country's industrial and research movement through their work in scientific, practical and research institutions that support this trend.</li> </ol> |
| <b>B- Subject-specific skills</b>   |
| <ol style="list-style-type: none"> <li>1. Theoretical education skills</li> <li>2. Practical education and data analysis skills</li> </ol>  |
| Teaching and learning methods   |
| Theoretical and practical lectures, daily assignments and discussions   |
| Evaluation methods  |
| Exams, daily assignments, discussions, laboratory reports, and a graduation project   |
| <b>C- Thinking skills</b>   |
| <ol style="list-style-type: none"> <li>1. Discussions</li> <li>2. Feedback</li> </ol>   |
| Teaching and learning methods   |
| Lectures, science experiments, applications, homework and scientific discussions  |
| Evaluation methods  |
| Exams, daily assignments, discussions, laboratory reports, and a graduation project   |
| <b>D. General and transferable skills (other skills related to the employability and development of the person)</b>   |
| <ol style="list-style-type: none"> <li>1. The ability to work in a multidisciplinary team</li> <li>2. The ability to communicate constructively</li> </ol>  |
| Teaching and learning methods   |
| Lectures, scientific experiments, homework and scientific discussions   |
| Evaluation methods  |
| Exams, daily assignments, discussions, laboratory reports, and a graduation project   |

| 11. Program structure |           |  |              |            |
|-----------------------|-----------|--|--------------|------------|
| Hours                 |           | Module Name                                | Module Code  | Level/year |
| Theoretical           | Practical |  |              |            |
| 2                     | 2         | Physical geology I                         | SCGE21-S1011 | First year |
| 2                     | 2         | Crystallography                            | SCGE21-S1021 |            |
| 2                     | 2         | Chemistry                                  | SCGE21-S1031 |            |
| 2                     |           | Mathematic                                 | SCGE21-S1041 |            |
| 2                     | 2         | Computer I                                 | SCGE21-S1051 |            |
| 1                     |           | Human right                                | SCGE21-S1061 |            |
| 2                     |           | Arabic language                            | SCGE21-S1071 |            |
| 2                     | 2         | Physical geology II                        | SCGE21-T1081 |            |
| 2                     | 2         | mineralogy                                 | SCGE21-T1091 |            |
| 2                     | 2         | physics                                    | SCGE21-T1101 |            |
| 2                     |           | statistic                                  | SCGE21-T1111 |            |
| 2                     | 2         | Computer II                                | SCGE21-T1121 |            |
| 1                     |           | Democracy                                  | SCGE21-T1131 |            |
| 1                     |           | English language                           | SCGE21-T1141 |            |
| 2                     | 3         | Optical mineralogy                         | SCGE21-S2011 |            |
| 2                     | 2         | Invertebrate paleontology I                | SCGE21-S2021 |            |
| 2                     | 2         | Stratigraphy                               | SCGE21-S2031 |            |
| 2                     | 2         | Historical geology                         | SCGE21-S2041 |            |
| 2                     | 2         | Geomorphology                              | SCGE21-S2051 |            |
| 1                     |           | University education<br>(health education) | SCGE21-S2061 |            |
| 2                     | 2         | Geophysics                                 | SCGE21-T2071 |            |
| 2                     | 2         | Invertebrate paleontology II               | SCGE21-T2081 |            |
| 2                     | 3         | Sedimentology                              | SCGE21-T2091 |            |
| 2                     | 3         | Micropaleontology I                        | SCGE21-T2101 |            |
| 2                     | 2         | Remote sensing                             | SCGE21-T2111 |            |
| 2                     | 2         | Petrology                                  | SCGE21-T2121 |            |
| 2                     | 2         | Geology of Iraq                            | SCGE21-S3011 | Third year |
| 2                     | 2         | Geophysics I                               | SCGE21-S3021 |            |
| 2                     | 3         | Structural geology I                       | SCGE21-S3031 |            |
| 2                     | 3         | Sedimentary petrology                      | SCGE21-S3041 |            |

|                      |   |   |                               |  |
|----------------------|---|---|-------------------------------|--|
| 2                    | 3   | Igneous rocks                                 | SCGE21-S3051                  |  |
| 2                    | 3   | Micropaleontology II                          | SCGE21-S3061                  |  |
| 2                    | 2   | Field geology                                 | SCGE21-T3071                  |  |
| 2                    | 2   | Geophysics II                                 | SCGE21-T3081                  |  |
| 2                    | 3   | Structural geology II                         | SCGE21-T3091                  |  |
| 2                    | 2   | Geochemistry                                  | SCGE21-T3101                  |  |
| 2                    | 3   | Metamorphic rocks                             | SCGE21-T3111                  |  |
| 2                    | 3   | Sedimentary environment                       | SCGE21-T3121                  |  |
| 2                    | 2   | Petroleum geology                             | SCGE21-S4011                  |  |
| 2                    | 2   | Ore geology                                   | SCGE21-S4021                  |  |
| 2                    | 2   | Exploration geochemistry<br>&Isotopic geology | SCGE21-<br>S4031              |  |
| 2                    | 2   | Hydrogeology                                  | SCGE21-S4041                  |  |
| 2                    | 2   | Basin analysis                                | SCGE21-S4051                  |  |
| 2                    | 2   | Geotectonic                                   | SCGE21-S4061                  |  |
| 2                    |   | Field work                                    | SCGE21-S4071                  |  |
| 2                    | 2   | Well logging                                  | SCGE21-T4081                  |  |
| 2                    | 2   | Industrial rocks                              | SCGE21-T4091                  |  |
| 2                    | 2   | Environmental geology                         | SCGE21-T4101                  |  |
| 2                    | 2   | Engineering geology                           | SCGE21-T4111                  |  |
| 2                    | 2   | Sequence stratigraphy                         | SCGE21-T4121                  |  |
| 1                    |   | Project                                       | SCGE21-T4131                  |  |
| 188 hour<br>146 unit | Degree of Bachelor<br>Requires (188) credit hours |   | Certificates and credit hours |  |

## 12 Planning for personal development

Extracurricular activities, scientific trips, and scientific tours

## 13 Acceptance standard (establishing regulations related to enrollment in the college or institute)

Central admission

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

Student guide for central admission prepared by the Ministry of Higher Education and Scientific Research

For more information, job description and courses

<https://uomosul.edu.iq/science/%d9%82%d8%b3%d9%85-%d8%b9%d9%84%d9%88%d9%85-%d8%a7%d9%84%d8%a3%d8%b1%d8%b6>

<https://uomosul.edu.iq/science/%d9%88%d8%b5%d9%81-%d8%a7%d9%84%d8%a8%d8%b1%d9%86%d8%a7%d9%85%d8%ac-%d8%a7%d9%84%d8%a3%d9%83%d8%a7%d8%af%d9%8a%d9%85%d9%8a-%d9%84%d9%82%d8%b3%d9%85-%d8%b9%d9%84%d9%88%d9%85-%d8%a7%d9%84%d8%a3%d8%b1>

### Department activities on the website

<https://www.facebook.com/zaid.malk.14?mibextid=ZbWKwL>

### Academic program requirements from the curriculum

| Percentage | Number of credit hours | Type of curriculum      | No. |
|------------|------------------------|-------------------------|-----|
| %8         | 8                      | University requirements | 1   |
| %16        | 16                     | College requirements    | 2   |
| %76        | 76                     | Department requirements | 3   |
| %100       | 100                    | <b>Total</b>            |     |