# Applied Geology

| Course Title | Course Code | Course Type | Credit Hour |
|---|---|---|---|
| **Semester 1** | | | |
| GEN(NS) | | General | 3 |
| Functional English | GENG-101 | General | 3 |
| Civics and Community Engagement | GCCE-101 | General | 2 |
| Islamic Studies / Ethics (for Non-Muslims) | GISL-101 / GETH-101 | General | 2 |
| Tarjuma-e-Quran | HQ-001 | Compulsory | 0 |
| General Geology | AG-101 | Major | 3 |
| Paleontology | AG-102 | Major | 3 |
| | | | Total Credit Hours 16 |
| **Semester 2** | | | |
| GEN(AH) | | General | 2 |
| Quantitative Reasoning (I) | GQR-101 | General | 3 |
| Entrepreneurship | GENT-101 | General | 2 |
| Ideology and Constitution of Pakistan | GICP-101 | General | 2 |
| Fieldwork I | AG-104 | Major | 3 |
| Tarjuma-e-Quran | HQ-002 | Compulsory | 1 |
| Mineralogy I | AG-103 | Major | 3 |
| | | | Total Credit Hours 16 |
| **Semester 3** | | | |
| Applications of Information and Communication Technologies | GICT-201 | General | 3 |
| Expository Writing | GENG-201 | General | 3 |
| Field Geology | AG-203 | Major | 3 |
| Stratigraphy of Pakistan | AG-202 | Major | 3 |
| Geomorphology | AG-201 | Major | 3 |
| Tarjuma-e-Quran | HQ-003 | Compulsory | 0 |
| Pakistan Studies. | GPST-201 | General | 2 |
| | | | Total Credit Hours 17 |
| **Semester 4** | | | |
| GEN(SS) | | General | 2 |
| Quantitative Reasoning (II) | GQR-201 | General | 3 |
| Fieldwork II | AG-206 | Major | 3 |
| Structural Geology | AG-205 | Major | 3 |
| Igneous & Metamorphic Petrology | AG-204 | Major | 3 |
| Tarjuma-e-Quran | HQ-004 | Compulsory | 1 |
| | | | Total Credit Hours 15 |
| **Semester 5** | | | |
| Geophysics | AG-302 | Interdisciplinary | 3 |
| Chemistry I | AG-301 | Interdisciplinary | 3 |
| Mining Geology | AG-305 | Major | 3 |
| Sequence Stratigraphy | AG-304 | Major | 3 |
| Sedimentology | AG-303 | Major | 3 |
| Tarjuma-e-Quran | HQ-005 | Compulsory | 0 |
| Engineering Geology | AG-306 | Major | 3 |
| | | | Total Credit Hours 18 |
| **Semester 6** | | | |
| Remote Sensing & GIS | AG-308 | Interdisciplinary | 3 |
| Geochemistry | AG-307 | Interdisciplinary | 3 |
| Geology & Tectonics of Pakistan | AG-311 | Major | 3 |
| Micropaleontology | AG-310 | Major | 3 |
| Mineralogy II | AG-309 | Major | 3 |
| Tarjuma-e-Quran | HQ-006 | Compulsory | 1 |
| Fieldwork III | AG-312 | Major | 2 |
| | | | Total Credit Hours 18 |
| **Semester 7** | | | |
| Fieldwork / Intership | | Major | 3 |
| Economic Geology | AG-404 | Major | 3 |
| Petroleum Geology | AG-403 | Major | 3 |
| Hydrology | AG-402 | Major | 3 |
| Environmental Geology | AG-401 | Major | 3 |
| Tarjuma-e-Quran | HQ-007 | Compulsory | 0 |
| Elective I | AG-405 | Major | 3 |
| | | | Total Credit Hours 18 |
| **Semester 8** | | | |
| Capstone Project | | Major | 3 |
| Elective V | AG-409 | Major | 3 |
| Elective IV | AG-408 | Major | 3 |
| Elective III | AG-407 | Major | 3 |
| Elective II | AG-406 | Major | 3 |
| Tarjuma-e-Quran | HQ-008 | Compulsory | 1 |
| | | | Total Credit Hours 16 |