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| **BACHELOR OF SCIENCE IN GEOSCIENCE WITH AN EMPHASIS IN ENVIRONMENTAL GEOSCIENCE** | | | | | | | | | | | | | | | | | | | | | | | |  |  |  |  |  |  | |
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| **REQUIRED CORE COURSES:** | | | | | | | | | | | | | | | | | | | | | | | |  |  |  |  |  |  | |
| Course | | Title | | | | Credits | | | | Prerequisites | | | | Offered | | | | | | Taking When | | | |  |  |  |  |  |  | |
| GEO 1110 | | INTRO TO EARTH SYSTEMS | | | | 3 | | | | N/A | | | | FALL/SPRING | | | | | |  | | | |  |  |  |  |  |  | |
| GEO 1115 | | INTRO TO EARTH SYSTEMS LAB | | | | 1 | | | | N/A | | | | FALL/SPRING | | | | | |  | | | |  |  |  |  |  |  | |
| GEO 3010 | | GEOPHYSICS (QI) | | | | 3 | | | | MATH 1220, GEO 3080, PHYS 2220 | | | | SPRING | | | | | |  | | | |  |  |  |  |  |  | |
| GEO 3060 | | STRUCTURAL GEOLOGY AND TECTONICS | | | | 3 | | | | GEO 1110, MATH 1060 | | | | FALL/SPRING | | | | | |  | | | |  |  |  |  |  |  | |
| GEO 3080 | | EARTH MATERIALS I (QI) | | | | 4 | | | | CHEM 1210 | | | | FALL/SPRING | | | | | |  | | | |  |  |  |  |  |  | |
| GEO 3090 | | EARTH MATERIALS II | | | | 3 | | | | GEO 1110, 3080, MATH 1210 | | | | FALL/SPRING | | | | | |  | | | |  |  |  |  |  |  | |
| GEO 4500 | | FIELD METHODS (CW) | | | | 3 | | | | GEO 1110, 3060, 3080, 3090, 5760 | | | | SPRING | | | | | |  | | | |  |  |  |  |  |  | |
| GEO 4510  GEO 4520 | | FIELD GEOLOGY (1st half)  FIELD GEOLOGY (2nd half) | | | | 2  2 | | | | GEO 4500  GEO 4500 & 4510 | | | | SUMMER | | | | | |  | | | |  |  |  |  |  |  | |
| GEO 5760 | | STRATIGRAPHY AND SEDIMENTARY PROCESSES | | | | 4 | | | | GEO 3090, 3060 | | | | FALL | | | | | |  | | | |  |  |  |  |  |  | |
| **REQUIRED COURSES: 12 CREDITS AMONG THE FOLLOWING 3 AREAS, WITH AT LEAST 3 CREDITS IN EACH AREA** | | | | | | | | | | | | | | | | | | | | | | | |  |  |  |  |  |  | |
| **BIOSPHERE** | | | | | | | | | | | | | | | | | | | | | | | |  |  |  |  |  |  | |
| Course | | Title | | | | | | | Credits | | Prerequisites | | | | Offered | | | | | | | Taking When | |  |  |  |  |  |  | |
| GEO 3180 | | PALEOBIOLOGY | | | | | | | 3 | | GEO 1110 | | | | SPRING | | | | | | |  | |  |  |  |  |  |  | |
| ENVST 2050 | | Intro to Environmental and Sustainability Science | | | | | | | 4 | | N/A | | | | FALL/SPRING | | | | | | |  | |  |  |  |  |  |  | |
| BIOL 1210 | | PRINCIPLES OF BIOLOGY | | | | | | | 4 | | N/A | | | | ALL | | | | | | |  | |  |  |  |  |  |  | |
| BIOL 2010 | | EVOLUTION & DIVERSITY OF LIFE | | | | | | | 3 | | BIOL 1210 | | | | FALL/SPRING | | | | | | |  | |  |  |  |  |  |  | |
| BIOL 2020 | | PRINCIPLES OF CELL BIOLOGY | | | | | | | 3 | | BIOL 1210 & CHEM 1210 | | | | FALL/SPRING | | | | | | |  | |  |  |  |  |  |  | |
| BIOL 3410 | | ECOLOGY AND EVOLUTION | | | | | | | 3 | | BIOL 1210 & MATH 1210 | | | | SPRING | | | | | | |  | |  |  |  |  |  |  | |
| **HYDROSPHERE** | | | | | | | | | | | | | | | | | | | | | | | |  |  |  |  |  |  | |
| Course | Title | | | | | | Credits | | | | Prerequisites | | | | | | Offered | | | | | Taking When | |  |  |  |  |  |  | |
| GEO 3300 | THE WATER PLANET | | | | | | 3 | | | | N/A | | | | | | SPRING | | | | |  | |  |  |  |  |  |  | |
| GEO 3800 | THE OCEANS | | | | | | 3 | | | | GEO 1010 or 1110 | | | | | | FALL | | | | |  | |  |  |  |  |  |  | |
| GEO 5350 | GROUNDWATER | | | | | | 3 | | | | MATH 1220 & GEO 1110 | | | | | | FALL | | | | |  | |  |  |  |  |  |  | |
| GEO 5370 | CONTAMINANT PARTITIONING FOR ENGINEERS AND SCIENTISTS | | | | | | 3 | | | | CHEM 1210, 1220 | | | | | | FALL EVEN YEARS | | | | |  | |  |  |  |  |  |  | |
| GEO 5390 | SOLUTE TRANSPORT AND SUBSURFACE REMEDIATION | | | | | | 3 | | | | GEO 3080, 3090, 5350, | | | | | | SPRING | | | | |  | |  |  |  |  |  |  | |
| **ATMOSPHERE** | | | | | | | | | | | | | | | | | | | | | | | |  |  |  |  |  |  | |
| Course | | | | Title | | | | | Credits | | Prerequisites | | | | Offered | | | | | | Taking When | | |  |  |  |  |  |  | |
| ATMOS 3200 | | | | MOUNTAIN WEATHER AND CLIMATE | | | | | 3 | | N/A | | | | SPRING EVEN YEARS | | | | | |  | | |  |  |  |  |  |  | |
| ATMOS 3100 | | | | ATMOSPHERIC CHEMISTRY AND AIR POLLUTION | | | | | 3 | | CHEM 1210 & MATH 1220 | | | | SPRING ODD YEARS | | | | | |  | | |  |  |  |  |  |  | |
| ATMOS 5400 | | | | THE CLIMATE SYSTEM | | | | | 3 | | MATH 1050 | | | | FALL | | | | | |  | | |  |  |  |  |  |  | |
| GEOG 3210 | | | | GLOBAL CLIMATE CHANGE | | | | | 3 | | N/A | | | | SPRING | | | | | |  | | |  |  |  |  |  |  | |
| **ALLIED SCIENCES COMPLETE 9 COURSES** | | | | | | | | | | | | | | | | | | | | | | | |  |  |  |  |  |  | |
| Course | | | Title | | Credits | | | Prerequisites | | | | | Offered | | | | | | | | Taking When | | |  |  |  |  |  |  | |
| CHEM 1210 | | | GENERAL CHEMISTRY I | | 4 | | | CHEM 1200 OR MATH 1050, 1080, 1210, 1220, 1250, 1260, 1310, 1320 | | | | | ALL | | | | | | | |  | | |  |  |  |  |  |  | |
| CHEM 1215 | | | GENERAL CHEMISTRY I LAB | | 1 | | | CHEM 1210 OR 1211 | | | | | ALL | | | | | | | |  | | |  |  |  |  |  |  | |
| CHEM 1220 | | | GENERAL CHEMISTRY II | | 4 | | | CHEM 1210 OR 1211 | | | | | ALL | | | | | | | |  | | |  |  |  |  |  |  | |
| CHEM 1225 | | | GENERAL CHEMISTRY II LAB | | 1 | | | CHEM 1070 OR 1215, 1240 | | | | | ALL | | | | | | | |  | | |  |  |  |  |  |  | |
| MATH 1210 | | | CALCULUS I | | 4 | | | MATH 1050 & 1060 OR MATH 1080 | | | | | ALL | | | | | | | |  | | |  |  |  |  |  |  | |
| MATH 1220 | | | CALCULUS II | | 4 | | | MATH 1210 OR 1250, 1270, 1311, 1310 | | | | | ALL | | | | | | | |  | | |  |  |  |  |  |  | |
| METE 3070  OR  MATH 3070 | | | STATISTICAL METHODS IN EARTH SCIENCES AN ENGINEERING (3) OR APPLIED STATISTICS (4) | | 3 OR 4 | | | MATH 1220 OR 1250, 1270, 1311, 1320 | | | | | FALL  OR  ALL | | | | | | | |  | | |  |  |  |  |  |  | |
| PHYS 2210 | | | PHYSICS FOR SCIENTISTS AND ENGINEERS I | | 4 | | | MATH 1210 | | | | | ALL | | | | | | | |  | | |  |  |  |  |  |  | |
| PHYS 2220 | | | PHYSICS FOR SCIENTISTS AND ENGINEERS II | | 4 | | | PHYS 2210 AND MATH 1220 | | | | | ALL | | | | | | | |  | | |  |  |  |  |  |  | |
| **COMPLETE 12 DEGREE PROGRAM ELECTIVE CREDIT HOURS: ANY UPPER DIVISION COURSE IN THE COLLEGE OF MINES AND EARTH SCIENCES, SCIENCE, OR ENGINEERING, OR OTHER UPPER DIVISION BY APPROVAL** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Course | | | | Title | Credits | | | Prerequisites | | | | | Offered | | | | | | | | Taking When | | |  |  |  |  |  |  | |
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| ***Note: An additional 7 credits of electives must be completed to reach the university’s minimum 122 credit requirement for a Bachelor’s degree.***  **Academic Advisor**  Michelle Tuitupou  [michelle.tuitupou@utah.edu](mailto:mark.a.campbell@utah.edu)  801-581-6553  383 FASB | | | | | | | | | **Faculty Advisor**  Prof. Brenda Bowen  [brenda.bowen@utah.edu](mailto:brenda.bowen@utah.edu)  801-585-5326  251 FASB | | | | | | | |  | | | |  | | |  |  |  |  |  |  | |
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