# BACHELOR OF SCIENCE GEOLOGICAL SCIENCES <br> <br> EARTH RESOURCES CONCENTRATION 

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GENERAL EDUCATION REQUIREMENTS

## Competencies


*General Education Categories (34-35 credits total)

| -FYS | First Year Seminar |  |  |  | 3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -W-I | Written Communication - Level I |  |  |  | 3 |  |
| -OC | Oral Communication |  |  |  | 3 |  |
| PGR | Personal Growth \& Responsibility |  |  |  | 3 |  |
| CEA | Creative Expression \& Appreciation |  |  |  | 3 |  |
| WC | World Cultures |  |  |  | 3 |  |
| HP | The Human Past |  |  |  | 3 |  |
| CS | Contemporary Society |  |  |  | 3 |  |
| SR | Scientific Reasoning: | \# Any SR course |  |  | 3-4 |  |
|  |  | \# SR Lab course |  |  | 4 |  |
| QR | Quantitative Reasoning |  |  |  | 3 |  |

$\ddagger$ Written Communication (Level II and Level III)

| W-II | Written Communication - Level II |  |  | $\square$ |
| :---: | :--- | :--- | :---: | :---: |
| W-III | Written Communication - Level III |  |  | $\square$ |

Free Electives ( 15 credits minimum)
May be necessary to take additional credits to attain the minimum 120 credits required for graduation depending on choices made for general education or


COURSES IN MAJOR (49-50 credits total)
Major Core Courses ( $\mathbf{3 1}$ credits)

| GLS | 100 | Dynamic Earth | 4 |  |  |
| :---: | :---: | :--- | :--- | :--- | :---: |
| GLS | 102 | Evolving Earth | 4 |  |  |
| GLS | 210 | Geomorphology | 4 |  |  |
| GLS | 221 | Mineralogy | 4 |  |  |
| GLS | 253 | Geochemistry | 3 |  |  |
| GLS | 322 | Petrology | 4 |  |  |
| GLS | 334 | Sedimentation \& Stratigraphy | 4 |  |  |
| GLS | 341 | Structural Geology \& Tectonics | 4 |  |  |
| Major Concentration Courses (9-10 credits) |  |  |  |  |  |
| Choose three courses from the following list: |  |  |  |  |  |
| GLS | 222 | Gemology | 3 |  |  |
| GLS | 231 | Earth System Cycles | 3 |  |  |
| GLS | 351 | Energy \& Natural Resources in <br> the Earth | 3 |  |  |
| GLS | 352 | Petroleum Geology | 3 |  |  |
| GLS | 356 | Hydrology | 4 |  |  |
| IDS | 366 | Energy and the Environment | 3 |  |  |
| Major Capstone Courses (9 credits) |  |  |  |  |  |
| TGLS | 470 | Field Geology I | 3 |  |  |
| TGLS | 485 | Field Geology II | 3 |  |  |
| GLS | 500 | Senior Research in Geology | 3 |  |  |

## - Required Support Courses (17-20 credits total)

| Choose one course from the following list: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| MAT | 110 | Pre-calculus | 3 |  |
| MAT | 220 | Calculus I | 4 |  |
| MAT | 147 | Statistics | 3 |  |

- And required lab sequence

|  | Lab Sequence I | 4 |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Lab Sequence II | 4 |  |

And choose two courses from BIO, CHE, PHS, MAT, or IGPH:


- Students may choose to use support courses to satisfy general education categories, but may not be required to do so. Note: If a course is used to satisfy two or more requirements (for example, a support course and Scientific Reasoning requirement), the credits are counted in only one place. Using a course to satisfy more than one requirement does not reduce the credit total required for graduation.

Courses used to satisfy the general education requirements of the university must be taken from a minimum of six different academic disciplines. First Year * Seminar and Level I Written Communications courses are exempt from this restriction. Courses may not be used to fulfill both major discipline and general education requirements.
\# These Scientific Reasoning General Education Category courses do not have to be a sequence or be from the same discipline.
$\ddagger \quad$ Level II and Level III Written Communications Courses may be used to satisfy requirements anywhere else in a student's program of study where they may apply. The credits are counted only in one area.
$\dagger 6$ credits must be earned in any combination of GLS 470 or GLS 485.

- Science sequence must be chosen from the following list: BIO121/BIO122, BIO131/BIO132, BIO115H/BIO116H, CHE120/CHE121, CHE130/CHE131,

CHE130/CHE212, PHS101/PHS102, PHS211A/PHS212A, PHS221/ PHS222
\| Acceptable GPH courses include: 340, 343, or 446

