GEOLOGY, GENERAL GEOLOGY EMPHASIS, COMPREHENSIVE MAJOR

Liberal Arts (Code 160-010)

University Requirements

GRADUATION REQUIREMENTS FOR BACCALAUREATE DEGREE

Credit Requirements

Minimum total for graduation 1 120
Upper division credits (courses numbered 300 and higher) 39
Liberal Education Core 36

Academic Concentrations

Grade Point Requirements 2

<table>
<thead>
<tr>
<th>Total</th>
<th>2.00 average</th>
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<tbody>
<tr>
<td>Resident</td>
<td>2.00 average</td>
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<tr>
<td>Major</td>
<td>2.00 average</td>
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<tr>
<td>Minor</td>
<td>2.00 average</td>
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<tr>
<td>Certificate</td>
<td>2.00 average</td>
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University Residency Requirements

Minimum total 30
Senior year 23
Major, Standard, upper division in residence 12
Major, Comprehensive, upper division in residence 21

Certificate 25 percent of credits

Procedures Required for Graduation

Obtain admission to the degree program and/or the College offering it.
Apply for graduation on CampS.

1 Certain programs exceed this minimum.
2 See special requirements in each College.

Applicability of Credits Toward Graduation

Junior College or Two-Year College Credits. A maximum of 72 semester credits earned in a junior college or two-year college will be accepted as degree credits at UW-Eau Claire.

Extension Credits. Credits earned in credit outreach courses offered by UW-Eau Claire are treated as resident credits. Credits earned in extension courses offered by other units of the University of Wisconsin System are treated as transfer credits. All other (non-UW) extension and correspondence credits are normally limited to one-fourth of the total required for graduation from any curriculum.

WTCS Credits. A maximum of 72 semester credits earned in college parallel programs at Madison Area Technical College, Milwaukee Area Technical College, Nicolet Area Technical College, or Chippewa Valley Technical College may be accepted as degree credits at UW-Eau Claire. A set number of general education courses will be accepted from other technical schools. Occupational and technical courses may also be considered for transfer if the quality and content of the course work from the technical college is judged to be comparable to course work at UW-Eau Claire. Refer to the Transfer Credit Wizard (https://my.uwec.edu/psp/PUBLIC/EMPLOYEE/HRMS/c/EAU_SS_CUSTOM.EAU_TRNCRDWZ.GBL) or contact the UW-Eau Claire Admissions Office for information about the current transfer policy.

USAFI Credit. UW-Eau Claire will accept up to 32 semester credits for work done through the United States Armed Forces Institute, under the provision for non-UW correspondence credit (see Extension Credits above).

Activity Credit (band, chorus, drama, KINS 100-184 courses) Students may count toward graduation no more than one credit of KINS 110-184 courses. Students may count toward graduation no more than four credits earned in any single activity course and no more than 12 credits resulting from any combination of activity courses (excluding KINS 110-184 courses).

Other Restricted Credits. For other University restrictions, see the following: Cooperative Education; Credit by Examination; Satisfactory/Unsatisfactory Registration; Transfer of Credits. College or departmental restrictions may also be placed on Independent Study (399-499 courses), Directed Study (395-495), and other types of credits.

APPLICABILITY OF CREDITS TOWARD GRADUATION

<table>
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<tr>
<th>Credit Restrictions</th>
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<tr>
<td>Satisfactory/Unsatisfactory</td>
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<tr>
<td>Total degree credit</td>
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<td>Major, Standard</td>
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<td>Major, Comprehensive</td>
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<td>Credit by Examination</td>
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<td>Total degree credit</td>
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<tr>
<td>Major or minor</td>
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<tr>
<td>Two-Year College Credits</td>
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<tr>
<td>Total degree credit</td>
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<tr>
<td>Activity credit (band, chorus, drama, KINS 100-184)</td>
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<tr>
<td>Total KINS 100-184</td>
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<tr>
<td>Total Band, chorus, drama</td>
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<td>Single course band, chorus, drama</td>
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<td>Extension credits</td>
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<td>UW-System</td>
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<tr>
<td>Other extension/ correspondence</td>
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<td>USAFI</td>
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Liberal Education Core

The University of Wisconsin-Eau Claire measures learning outcomes to ensure that its graduates have achieved a liberal education and prepared themselves to contribute to a complex society. Upon graduation, each undergraduate will have met the four learning goals of our liberal education core and the 11 learning outcomes they comprise.
**LIBERAL EDUCATION CORE REQUIREMENTS**

**Knowledge Goal**
- Knowledge Outcome 1 (K1): Natural Sciences
  - Two (2) learning experiences
  - One experience in laboratory science must be selected from either K1 or K2.
- Knowledge Outcome 2 (K2): Social Sciences
  - Two (2) learning experiences
  - One experience in laboratory science must be selected from either K1 or K2.
- Knowledge Outcome 3 (K3): Humanities
  - Two (2) learning experiences

**Skills Goal**
- Skills Outcome 1 (S1): Written and Oral Communication
  - One (1) learning experience
  - One S1 must meet the University Writing Requirement
- Skills Outcome 2 (S2): Mathematics
  - One (1) learning experience
  - One S2 to meet the University Mathematics Requirement
- Skills Outcome 3 (S3): Creativity
  - One (1) learning experience

**Responsibility Goal**
- Responsibility Outcome 1 (R1): Equity, Diversity, and Inclusivity
  - Two (2) learning experiences
  - One R1 must satisfy Design for Diversity
- Responsibility Outcome 2 (R2): Global Perspectives
  - One (1) learning experience
- Responsibility Outcome 3 (R3): Civic and Environmental Issues
  - One (1) learning experience

**Integration Goal**
- Integration Outcome 1 (I1): Integration
  - Two (2) learning experiences

**Service-Learning Goal**
- Service-Learning
  - 30 hours

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**College Degree Requirements**

**Bachelor of Arts or Bachelor of Science Degree (B.A./B.S.)**

**University Graduation Requirements.** All candidates for degrees must fulfill the requirements for credits, curriculum, GPA, and University residency as specified in the section of this catalog titled University Graduation Requirements.

**College Graduation Requirements: Grade Point Averages.** All candidates for degrees in the College of Arts and Sciences must earn minimum resident and total GPAs of 2.00 in the major, the minor, and the certificate. The resident and total GPAs for the major are computed using all attempted credits applicable to the major including those offered by departments other than the major department. The resident and total GPAs for the minor and the certificate are computed similarly.

**Major-Minor and Major-Certificate Requirements.** A standard major (a minimum of 36 credits) must be supplemented by a minor (a minimum of 24 credits) or by a certificate (12 to 18 credits) to meet graduation requirements for completing a first and second degree program. No minor or certificate is required with a Comprehensive Major (60 or more credits) or with two majors of 36 or more credits each.

Certain degree programs, which include Comprehensive Majors, may require more than the minimum of 120 credits for graduation. Acceptable academic program combinations are determined at the college level. A major and a minor or a major and certificate or two majors (if available) may not be elected in the same department or program, except in the approved combinations listed here.

**College Credits.** Earn at least 90 credits in courses offered by the College of Arts and Sciences.

**Bachelor of Arts Degree in the College of Arts and Sciences (B.A.)**

Fulfillment of all University Graduation Requirements (which includes the Liberal Education Core); all College-level degree requirements (major and minor/certificate emphases, GPAs, earning at least 90 credits in Arts and Sciences course work); foreign language competency at the 102 level. Foreign language competency may be met in one of two ways: (1) Achieve a score on the foreign language placement test that qualifies the student to enter the 201-level course in a foreign language. (2) Earn a grade of at least C (not C-) or a mark of S in a 102-level foreign language course (or AIS 112 or AIS 122 / LANG 122 or CSD 103).

**Bachelor of Science Degree in the College of Arts and Sciences (B.S.)**

Fulfillment of all University Graduation Requirements (which includes the Liberal Education Core); all College-level degree requirements (major and minor/certificate emphases, GPAs, earning at least 90 credits in Arts and Sciences course work); mathematics competency at the MATH 111, MATH 112 or MATH 113 level. Mathematics competency can be met in one of three ways: (1) Achieve a score on the mathematics placement test that qualifies the student to enter MATH 114. (2) Earn a grade of at least C (not C-) or a mark of S in MATH 111, MATH 112, or MATH 113. (3) Achieve a satisfactory score on the MATH 112 competency test. This test may be attempted no more than two times.

**Major Requirements**

**Liberal Arts (Code 160-010)**

The objective of the comprehensive major in geology is to prepare students for graduate programs in geological sciences or for careers as professional geologists, hydrogeologists, or geological engineers. The liberal arts comprehensive major requires completion of the Core and one of the five Emphases listed below.
NOTE: Communication classes, both written and oral, are strongly recommended to fulfill liberal education requirements in any of the following emphases.

**Core Requirements for all Liberal Arts and Teaching Emphases in the Comprehensive Geology Major**

23-25 credits

Select one of the following: 4

- GEOL 106  Earth Science
- GEOL 110  Physical Geology
- GEOL 115  Environmental Geology
- GEOL 118  Societal Issues in Earth Science

Required:

- GEOL 312  Mineralogy and Petrology I  5
- GEOL 320  Sedimentology and Stratigraphy  4
- GEOL 468  Computers in Geology  1
- GEOL 470  Field Geology I  3
- CHEM 115  Chemical Principles (or equivalent)  6

Capstone Experience  1

0-2

1  Each major is required to complete a capstone experience.

For liberal arts majors, the capstone options may include: GEOL 395 (for a minimum of two credits) or GEOL 471. The capstone will consist of student selection of one of the following options: faculty/student collaborative research, preparation and presentation of a department seminar, internship, field experiences, or other approved experiences. Students working with their adviser will submit a proposal to the department faculty outlining their choice of the capstone experience and explicitly stating how the capstone fits into their personal career goals. The proposal for a capstone experience must be submitted to the chair of the department no later than the second week of the first semester of the senior year.

For teaching majors, the capstone may be satisfied by successful completion of the professional semester in the College of Education and Human Sciences.

**General Geology Emphasis**

Recommended for students planning careers in geology, especially those planning to attend graduate school in geology or engineering. This emphasis comprises the Core, plus the required and elective credits as listed below.

**Sixty semester credits, including:**

### Required Courses

- GEOL 313  Mineralogy and Petrology II  4
- GEOL 315  Hydrogeology I  4
- GEOL 330  Structural Geology  4
- GEOL 418  Earth History  4
- GEOL 471  Field Geology II  3
- MATH 215  Calculus II  4
- PHYS 211  General Physics  5
  or PHYS 231  University Physics I
- CS 170  Computing for the Sciences and Mathematics  3
  or GEOG 335  Geographic Information Systems I

### Electives

At least two courses selected from:

- GEOL 336  Introduction to Geochemistry
- GEOL 345  Geomorphology and Aerial Photography Interpretation
  or GEOL 420  Glacial Geology
- GEOL 365  Economic Mineral Deposits
- GEOL 416  Hydrogeology II
- GEOL 445  Engineering Geology and Geophysics
- BIOL 308  Evolution
- BIOL 338  Vegetation Ecology
- BIOL 345  Invertebrate Zoology
- BIOL 356  Wisconsin Wildlife
- CHEM 213  Quantitative Analysis
- CHEM 218  Introduction to Inorganic Chemistry
- CHEM 433  Physical Chemistry I
- CHEM 434  Physical Chemistry II
- GEOG 338  Remote Sensing of the Environment
- GEOG 345  Quaternary Environments
- GEOG 350  Soils and the Environment
- GEOG 363  Watershed Analysis
- GEOG 364  Fluvial Processes and Landforms
- GEOG 435  Geographic Information Systems III
- MSE 315  Materials Characterization
- Any Geology course numbered 300 or above
- MATH 216  Calculus III
- MATH 246  Elementary Statistics
- MATH 311  Differential Equations
- MATH 324  Linear Algebra
- PHYS 212  General Physics
  or PHYS 232  University Physics II
- PHYS 226  Astronomy-Solar System
- PHYS 229  Astronomy-Stars and Galaxies
- PHYS 350  Electric and Electronic Circuits
- PHYS 375  Electromagnetic Fields

1  Students should be advised that a second semester of physics is usually required for entrance to graduate school.

NOTE: No degree credit may be earned under the Satisfactory/Unsatisfactory option in any required courses in a geology major or minor.