Bachelor of Science in Geology

2017-2018

Year 1
Fall
- MA 1160/1161: Calculus W/ Tech I (4/5 credits)
- PH 1100: Physics Lab I (1 credit)
- CH 1150: Univ. Chemistry I (3 credits)

Spring
- MA 2160: Calculus W/ Tech II (4 credits)
- PH 2100: Univ. Physics I (1 credit)
- CH 1160: Univ. Chemistry II (3 credits)

Year 2
Fall
- MA 2720: Statistical Methods (4 credits)
- MA 2200: Univ. Physics II - Elec/Mag (1 credit)
- CH 1161: Chemistry Lab II (1 credit)
- GE 2000: Understanding the Earth (3 credits)
- CH 1151: Chemistry Lab I (1 credit)

Spring
- MA 2270: Structural Geology (4 credits)
- GE 2320: Earth History (3 credits)
- GE 2310: Intro to Petrology (3 credits)
- HASS Elective (3 credits)
- GE 2200: Univ. Physics Lab II (1 credit)

Summer
- GE 2310: Earth History (3 credits)
- GE 2000: Understanding the Earth (3 credits)
- GE 2320: Earth History (3 credits)

Year 3
Fall
- MA 3160: Multivariable Calculus W/ Tech (4 credits)
- GE 3040: Fundamentals of Geophysics (3 credits)
- GE 3160: Depositional Systems (3 credits)
- HASS Elective (3 credits)

Spring
- MA 2160: Calculus W/ Tech II (4 credits)
- GE 3050: Geohydrology (3 credits)
- GE 3040: Fundamentals of Geophysics (3 credits)
- HASS Elective (3 credits)

Year 4
Fall
- MA 2720: Statistical Methods (4 credits)
- GE 3400: Econ Decision Analysis (3 credits)
- GE 3910: Field Geology w/ Eng App (5 credits)
- HASS Elective (3 credits)

Spring
- MA 1161: Calculus W/ Tech II (4 credits)
- GE 3200: Geochemistry (3 credits)
- GE 3850: Geohydrology (3 credits)
- HASS Elective (3 credits)

This is not an official list of degree requirements. Adjustments may be required due to curriculum changes.
BS in Geology 2017-2018
(Minimum of 128 Credits)

Geology Approved Electives (Minimum of 17 credits)
Geo Approved Electives can be from any GE course, but not more than 6 credits at the 2000 level. Courses outside of the department can be used with the permission of the advisor.

Second Degree Policy: Candidates for a second degree must meet all the coursework requirements for the major in the second degree with a minimum of 25% of the credit hours required for the degree, beyond the primary degree.

Advanced Geophysics Electives

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Offered</th>
<th>Prerequisite(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE 4250 Fundamentals of Remote Sensing</td>
<td>Spring</td>
<td>PH 2200, MA 2160</td>
</tr>
<tr>
<td>GE 4500 Plate Tectonics and Global Geophysics</td>
<td>Fall</td>
<td>GE 2000, PH 2200, MA 3160</td>
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<tr>
<td>GE 4530 Planetary Geology and Geophysics</td>
<td>Fall</td>
<td>GE 2000, PH 2200, MA 3160</td>
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<tr>
<td>GE 4560 Earthquake Seismology</td>
<td>Fall</td>
<td>GE 3050, PH 2100, MA 3160</td>
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<tr>
<td>GE 4600 Reflection Seismology</td>
<td>Spring</td>
<td>GE 3040</td>
</tr>
<tr>
<td>GE 4610 Formation Eval. &amp; Petroleum Engineering</td>
<td>Fall</td>
<td>GEGE 3040</td>
</tr>
<tr>
<td>GE 4933 Special Topics in Geophysics*</td>
<td>On Demand</td>
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<tr>
<td>GE 4962 Ind. Geophysics Research Project**</td>
<td>On Demand</td>
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* GE 4610 Restrictions: Permission of instructor required

**GE 4962 Restrictions: Permission of instructor required; May not be enrolled in one of the following Classes: Freshman, Sophomore

BS Geology Curriculum Overview (130 Total Credits)

General Education Requirements
(http://www.mtu.edu/registrar/pdfs/core-and-hass-list-17-18-v2.pdf)

I. Core Courses (6 Credits)
   ___UN 1015
   ___UN 1025*
   * Or one semester of a 3000 level or higher modern language.

II. Sophomore Core Courses (6 Credits)
   Creative and Critical Thinking (HU/FA) __________
   Social Responsibility and Ethical Reasoning (SS) __________

III. Hass Course Requirements (12 Credits)
(http://www.mtu.edu/registrar/pdfs/core-and-hass-list-17-18-v2.pdf)
   - 6 credits 3000- or 4000- level
   - 3 credits required from each of these 3 lists:
     Communication and Composition, Humanities and Fine Arts (HU/FA),
     and Social and Behavioral Sciences (EC/PSY/SS)
   - No more than 3 credits on the Restricted HASS List
   A. 6 credits 3000- or 4000- level:
      1. __________  2. __________
   B. 6 credits at any level:
      1. __________  2. __________

IV. Co-curricular activities (3 units)
   The co-curricular requirement consists of three semester units of physical education activities. These units are required for graduation, but are not included in the overall degree-credit requirement.
   Note: Most physical education activities will last for 7 ½ weeks or ½ semester. A student would need six of these ½-semester units to fulfill the 3-semester unit co-curricular requirement.
   PE __________ PE __________ PE __________
   PE __________ PE __________ PE __________