Mining Engineering Emphasis 2017-18  
(minimum of 131 credits)  
Career questions: E-mail  jsgierke@mtu.edu  
Academic questions: E-mail  efadvise@mtu.edu  

1. Senior Design Ready:  
a. Senior Design Prerequisite courses:  
EE3010, ENG1101, ENG1102, ENG2120, ENG3200, ENG3830, GE2020, GE2320.  
b. Core Competency Check test - Take and pass the test; test topics include all ENG4905 prerequisite courses except ENG3830 & GE2020.  

2. See table below for General Education Requirements:  

<table>
<thead>
<tr>
<th>General Education Requirements</th>
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<tbody>
<tr>
<td>I. Core Courses (12 credits)</td>
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<tr>
<td>___ UN1015 Composition</td>
</tr>
<tr>
<td>___ UN1025 Global Issues or 3000+ Modern Language</td>
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<tr>
<td>___ Critical/Creative Think List</td>
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<tr>
<td>___ Social Resp./Ethical Reason List</td>
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| II. HASS Courses Requirements (12 credits)  
(www.admin.mtu.edu/em/documents/HASS Distribution List.pdf)  
- 6 credits 3000- or 4000- level  
- 3 credits from each listed below  
  ___ Communication/Composition                                        |
  ___ Humanities/Fine Arts List (HU/FA)                                |
  ___ Social & Behavioral Science List (EC/PSY/SS)                    |
| ___ 3 credits from any list                                           |

* EC2001 is recommended for students considering an MBA at MTU.  
** EC3400 is required by the degree and may NOT be counted as a HASS.  

3. Mining Minor Requirements:  

<table>
<thead>
<tr>
<th>Minor in Mining</th>
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<tbody>
<tr>
<td>EMGM</td>
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</table>
| Department of Geological and Mining Engineering and Sciences*  

Required Course (3 credits)  
___ X ___ GE2020 Intro to Mining Engineering and Mining Methods (3)  

Elective Courses – Select at least (9 credits)  
___ X ___ GE3400 Drilling and Blasting (3)  
___ X ___ GE3860 Engineering Geology & Geoinformatics (3)  
___ X ___ GE3870 Resource and Reserve Estimation (3)  
___ X ___ GE3880 Mine Planning and Design (3)  
___ X ___ GE4290 Mine Ventilation, Health, and Safety Engineering (3)  
___ X ___ GE4360 Materials Handling (3)  
___ X ___ GE4680 Operations Research for Mining Engineers (3)  
___ X ___ GE4690 Discrete Event Simulation and Animation for Engineers (3)  

Additional Electives – (0-6 credits)**  
___ X ___ GE_______ ___________________________ (3)  
___ X ___ GE_______ ___________________________ (3)  

* Students must consult with a departmental advisor to select any sequence of upper-division courses from Geological and Mining Engineering Department.  Students are responsible for satisfying all prerequisites.  
** Additional minor requirements may be fulfilled using Technical Electives or Free Electives.