



# MINING MASTERS OF ENGINEERING PROGRAM- PROGRAM OF STUDIES WORKSHEET

- Original
- Revision

Name: \_\_\_\_\_  
Family Given

Student #: \_\_\_\_\_ Start Date: \_\_\_\_\_

- Specialization:
- Mining/ Mining Geotechnics
  - Mineral Processing
  - Mine Environment and Sustainability
  - Mine Economics and Finance
  - Other \_\_\_\_\_

### All Specializations are required to take the following courses:

#### Required Courses:

MINE 501A & B*- Topics for Engineers in the Mining Industry	(4)
MINE 559*- Indigenous Peoples and Mining in Canada	(3)
MINE 598**- Graduate Student Seminar	<u>(2) (sect. 001)</u>
	<b>9 credits</b>

**Recommended Specialization Courses: (see attached)** **9- 13 credits**

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**Electives: (see attached)** **5- 9 credits**

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**MINE 597- Engineering Project (register in final term-T3)** **6 credits**

**Total: (minimum of 30 with 24 at 500- level)** **30- 34 credits**

**Notes:** \_\_\_\_\_

**Approved:** \_\_\_\_\_ **Date:** \_\_\_\_\_

(Supervisor or Graduate Advisor)

MINE 396 is recommended for all students with an international undergrad degree who are hoping to apply for PENG status in Canada.

\*Graduates of a Mining Engineering Degree from a North American University may be granted an exemption.

\*\* All graduate students are expected to attend the seminar. To receive credit for the seminar a presentation must be made at the seminar. If you elect not to do the presentation, you will need an additional 2 credits of coursework.

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## Mineral Processing:

**Recommended Courses and Engineering Project:** 15

### **Specialization Courses: (Select 3 courses)**

- MINE 331- Physical Mineral Processes (3) T1
- MINE 520- Advanced Coal Preparation (3) T1
- MINE 333 or 521- Flotation (3) T2
- MINE 524- Processing of Precious Metal Ores (3) T2

9

### **Electives: (Select 2 courses)**

- Additional Specialization Course from above ?
- MINE 455 Mine Water Management (3) T2
- MINE 465 Materials Handling (3) T2
- MINE 590P- Advanced Process Mineralogy (3) T2
- MINE 488- Heavy Oil Sand Mining and Processing (3) T2
- MINE 547- Industrial Expert Systems (3) T1
- MINE 522- Processing of Mineral Fines (2/4) T2
- MINE 508- Integrated Mining and Processing Systems (3) n/a
- MINE 529- Rheology of Mineral Suspensions (3) T2
- Other Electives Selected with Approval: \_\_\_\_\_ (?)

6

**Total Credits: (minimum of 30 with 24 at 500- level)** 30

## Mine Economics and Finance

**Recommended Courses and Engineering Project:** 15

### **Specialization Courses: (Select all 3 courses)**

- MINE 396- Mine Economics and Finance\* (3) T1
- MINE 554- Mine Project Valuation and Risk Assessment (3) T2
- MINE 404- Mine Management (3) T2

9

### **Electives: (Select 2 courses)**

- MINE 553 Modeling of Industrial Systems (3) (online)
- APSC 541- Tech Entrepreneurship (3) T2
- MINE 555- Mining and Society (3) T2
- COMM 457- Financial Accounting (with approval from Director) (3) T1
- COMM 458- Managerial Accounting (with approval from Director) (3) T2
- Other Electives Selected with Approval: \_\_\_\_\_ (?)

6

**Total Credits: (minimum of 30 with 24 at 500- level)** 30

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<b><u>Mining/ Mining Geotechnics:</u></b>	
<b>Recommended Courses and Engineering Project:</b>	<b>15</b>
<b>Specialization Courses: (Select 3 courses)</b>	
<input type="checkbox"/> MINE 505- Advanced Topics in Rock Engineering(Pre-req: Intro Rock Mech)	(3)T1
<input type="checkbox"/> MINE 506- Advanced Underground Mining	(3)T2
<input type="checkbox"/> MINE 310/590C- Surface Mining & Design	(3) T1
<input type="checkbox"/> MINE 304/504- Advanced Rock Fragmentation	<u>(3/2) T2</u>
	<b>9</b>
<b>Electives: (Select 2 courses)</b>	
<input type="checkbox"/> Additional Specialization Course from above	?
<input type="checkbox"/> MINE 507- Block Caving Systems- Design & Planning	(3) T2
<input type="checkbox"/> MINE 509- Mine Ventilation	(2) T1
<input type="checkbox"/> MINE 515- Mining in the Future	(3) T2
<input type="checkbox"/> MINE 396- Engineering Economics	(3) T1
<input type="checkbox"/> MINE 465- Materials Handling	(3) T2
<input type="checkbox"/> MINE 552- Mining Geostatistics	(3) ?
<input type="checkbox"/> MINE 554- Mine Project Valuation and Risk Assessment	(3) T2
<input type="checkbox"/> MINE 488- Heavy Oil Sand Mining and Processing	(3) T2
<input type="checkbox"/> Other Electives Selected with Approval: _____	(?) .
	<b>6</b>
<b>Total Credits: (minimum of 30 with 24 at 500- level)</b>	<b>31/32</b>

<b><u>Mining Environment and Sustainability:</u></b>	
<b>Recommended Courses and Engineering Project:</b>	<b>15</b>
<b>Specialization Courses: (Select 3 courses)</b>	
<input type="checkbox"/> MINE 541- Environmental Technologies and Issues in Mining	(3) T1
<input type="checkbox"/> MINE 555- Mining and Society	(3) T2
<input type="checkbox"/> MINE 455- Mine Water Management	<u>(3) T2</u>
	<b>9</b>
<b>Electives: (Select 2 courses)</b>	
<input type="checkbox"/> Additional Specialization Course from above	?
<input type="checkbox"/> MINE 590Q- Mine Waste Management	(3) T2
<input type="checkbox"/> MINE 515- Mining in the Future	(3) T1
<input type="checkbox"/> MINE 396- Engineering Economics	(3) T1
<input type="checkbox"/> MINE 554- Mine Project Valuation and Risk Assessment	(3) T2
<input type="checkbox"/> Other Electives Selected with Approval: _____	(?) .
	<b>6</b>
<b>Total Credits: (minimum of 30 with 24 at 500- level)</b>	<b>30</b>