

Course Suggestions for Graduate Students in Mining Engineering

MASC students

Required Courses:

Courses selected in consultation with your supervisor	16 credits
MINE 599C- M.A.Sc. Thesis	12 credits
MINE 598**- Graduate Student Seminar	2 credits
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	30 credits

PHD Students

Required Courses:

MINE 698- Graduate Student Seminar	2 credits
MINE 699- Doctoral Dissertation	
Any courses required by your supervisory committee	

- Graduate students can take a maximum of 6 credits of 300 and 400 level courses for credit towards degree.
- 60% is the passing grade for graduate students in every course. There is a limit of 6 credits with grades between 60 and 67%. More than 6 credits and you will need to retake courses or take additional courses.
- MINE 396 is recommended for all students with an international undergrad degree who are hoping to apply for P.ENG. status in Canada.

Mineral Processing:

<input type="checkbox"/> MINE 331- Physical Mineral Processes	(3) T1
<input type="checkbox"/> MINE 520- Advanced Coal Preparation	(3) T1
<input type="checkbox"/> MINE 465- Materials Handling	(3) T1
<input type="checkbox"/> MINE 333 or 521- Flotation	(3) T2
<input type="checkbox"/> MINE 434/524- Processing of Precious Metal Ores	(3) T2
<input type="checkbox"/> MINE 590X- Advanced Mine Water Management	(3) T2
<input type="checkbox"/> MINE 590W- Heavy Metal: Earth's Minerals and the Future of Sustainable Societies	(3) T2
<input type="checkbox"/> MINE 590P- Urban Mining	(3) Not offered 2022/23
<input type="checkbox"/> MINE 547/432- Industrial Expert Systems	(3) T1
<input type="checkbox"/> MINE 522- Processing of Mineral Fines	(2/4) T1
<input type="checkbox"/> MINE 508- Integrated Mining and Processing Systems	(3) T2
<input type="checkbox"/> MINE 529- Rheology of Mineral Suspensions	(3) alternate years

Mine Economics and Finance

<input type="checkbox"/> MINE 396- Engineering Economics*	(3) T1
<input type="checkbox"/> APSC 541- Technology Entrepreneurship**	(3) T2
<input type="checkbox"/> MINE 554/406- Mine Project Valuation and Risk Assessment	(3) T2
<input type="checkbox"/> MINE 555- Mining and Society	(3) T1
<input type="checkbox"/> MINE 404/590E- Strategic Issues in Mining	(3) T2
<input type="checkbox"/> MINE 515- The Future of Mining	(3) T2

*MINE 396 is recommended for students with international credentials to qualify for P.ENG. status in Canada.

**APSC 541 requires separate application <http://blogs.ubc.ca/baen506apsc541techentrepreneurship/>

Course Suggestions for Graduate Students in Mining Engineering

Mining/ Mining Geotechnics:

- MINE 590C- Advanced Surface Mining & Design (3) T1
- Rock Mechanics Course (one of the following) (3) T1 or T2
 - MINE 590M/303- Rock Mechanics Fundamentals T2
 - MINE 403/590D- Rock Mechanics Design (prereq: intro to rock mech) T2
 - MINE 505- Advanced Topics in Rock Engineering (prereq MINE 303) T1
- MINE 552- Mining Geostatistics (3) T2
- MINE 302/506- Advanced UG Mine Design (3) T2
- MINE 485/507- Block Caving Systems- Design & Planning (3) T2
- MINE 509- Mine Ventilation (3) T1
- MINE 432/547- Industrial Expert Systems (3) T1
- MINE 465- Materials Handling (3) T1
- MINE 553- Modeling of Industrial Systems (3) T2

Mining Environment and Sustainability:

- MINE 559- Indigenous Peoples and Mining in Canada (3) T1
- MINE 555- Mining and Society (3) T1
- MINE 590X- Advanced Mine Water Management (3) T2
- MINE 590W- Heavy Metal: Earth's Minerals and the Future of Sustainable Societies (3) T2
- MINE 380/ 590Q- Advanced Mine Waste Management (3) T2
- MINE 581- Safety of Tailings Storage Facilities (3) T1
- MINE 585- Risk Management of Tailings Storage Facilities (3) T2
- MINE 590P- Urban Mining (3) T2

Mine Waste Management:

- MINE 581- Safety of Tailings Storage Facilities (3) T1
- MINE 380/ 590Q- Advanced Mine Waste Management (3) T2
- CIVL 418 - Engineering Hydrology (3) T1
- MINE 555 - Mining and Society (3) T1
- MINE 585 - Risk Management of Tailings Storage Facilities (3) T2
- MINE 590X- Advanced Mine Water Management (3) T2
- CIVL 413 - Design of Earth Dams and Containment Structures (3) T2
- CIVL 570 - Advanced Soil Mechanics (3) T1
- CIVL 575 - Constitutive Models for Soils (3) T2
- CIVL 579 - Geosynthetics (3) T1
- EOSC 329 - Groundwater Hydrology (3) T1
- EOSC 429 - Groundwater Contamination (3) T1
- EOSC 433 - Geological Engineering Practice II - Soil Engineering (3) T2
- EOSC 533 - Advanced Groundwater Hydrology (3) T1