

Course Suggestions for Graduate Students in Mining Engineering

General:

Graduate students can take a maximum of 6 credits of 300 and 400 level courses for credit towards degree.

Masters: 60% is the passing grade 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 the course and achieve at least 74%.

PHD: 68% is the passing grade in every course. Below 68% is considered a fail. For failed courses the student must retake the same course (or a course approved by grad advisor) and achieve at least 74%.

The policies for Academic Progress are outlined on this page:

<https://www.grad.ubc.ca/faculty-staff/policies-procedures/academic-progress-grading-practices>

All students should be familiar with the policy.

You cannot TA for a course which you are taking

MASc students

Required Courses:

Courses selected in consultation with your supervisor	16 credits
MINE 599C – MASc Thesis	12 credits
MINE 598** – Graduate Student Seminar	<u>2 credits</u>
	30 credits

PhD Students

Required Courses:

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

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Mineral Processing:

- ☐ MINE 331/590F – Physical Mineral Processes (3) T1
- ☐ MINE 447 – Dewatering of Fine Tailing (3) T1
- ☐ MINE 520 – Advanced Coal Preparation (3) T1
- ☐ MINE 434/524- Processing of Precious Metal Ores (3) T2
- ☐ MINE 465/590Y – Materials Handling (3) T1
- ☐ MINE 333/521 – Flotation (3) T2
- ☐ MINE 432/547- Industrial Expert Systems-Data Science for Mining (3) T1
- ☐ MINE 508- Integrated Mining and Processing Systems (3) T2
- ☐ MINE 590P- Urban Mining (3) T2
- ☐ MINE 529- Rheology of Mineral Suspensions (3) alternate years
- ☐ MINE 522 – Processing of Mineral Fines (4) T1

Mine Economics and Finance

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

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

Mining/ Mining Geotechnics:

- ☐ MINE 310/590C – Advanced Surface Mining & Design (3)T1
- ☐ Rock Mechanics Course (one of the following) (3)T1or T2
 - MINE 303/590M – Rock Mechanics Fundamentals (3)T2
 - MINE 403/505- Rock Mechanics Design (prereq: intro to rock mech) (3) T2
- ☐ MINE 420/552 – Mining Geostatistics (3) T2
- ☐ MINE 302/506 – Advanced UG Mine Design (3)T2
- ☐ MINE 485/507 – Block Caving Systems- Design & Planning (3) T2
- ☐ MINE 402/509 – Mine Ventilation (3) T1
- ☐ MINE 432/547- Industrial Expert Systems-Data Science for Mining (3) T1
- ☐ MINE 465/590Y – Materials Handling (3) T1

Mining Environment and Sustainability:

- ☐ MINE 447 – Dewatering of Fine Tailings (3) T1
- ☐ MINE 470/559 – Indigenous Peoples and Mining in Canada (3) T1
- ☐ MINE 555 – Mining and Society (3) T1
- ☐ MINE 455/590X – Advanced Mine Water Management (3) not offered 2025W
- ☐ 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 Fac (3) not offered 2025W

Course Suggestions for Graduate Students in Mining Engineering

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| ☐ MINE 444/590P – Urban Mining Recovering Value from E-waste | (3) T2 |
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Mine Waste Management:

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| ☐ MINE 447 – Dewatering of Fine Tailings | (3) T1 |
| ☐ 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 444/MINE 590P – Urban Mining | (3) T2 |
| ☐ MINE 555 - Mining and Society | (3) T1 |
| ☐ MINE 585 - Risk Management of Tailings Storage Fac | (3) not offered 2025W |
| ☐ MINE 455/590X- Advanced Mine Water Management | (3) not offered 2025W |

The following are offered by other departments. You will need your supervisor's permission and the instructor's permission to enroll:

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| ☐ 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 |