

## Master of Engineering (M.Eng.)

The requirement for completion of the M.Eng. degree is eight (8) term length courses. Two of the courses can be at the 400 undergraduate level. Students are eligible to take any relevant courses listed in the Graduate Calendar, as long as at least four (4) of the courses are taken from their home department. Students generally take a set of courses that fit their background and interest.

In Mining Engineering, students have the option to take MINE-898\*, a project-based courses that counts as one course towards the required eight courses total.

All students must take CHEM-801\*, a non-credit course in laboratory safety, at the first opportunity after their initial registration. Students who have previously completed MINE-462 or MINE-862 as part of their regular undergraduate or graduate programs at Queen's University, are exempt from this requirement. Master of Engineering (M.Eng.)

	Mining Engineering Background (B.Sc.)		Non-Mining Background		Non-Engineering Background	
Stream	Mining	Processing	Mining	Processing	Mining	Processing
<b>Core Course List</b>	MINE 862	MINE 451 MINE 821/838 MINE 839 MINE 832 MINE 836	MINE 800 MINE 812 MINE 818 MINE 820 <i>MINE 822</i> MINE 862	MINE 451 MINE 800 MINE 821/838 MINE 832 MINE 836 MINE 839	MINE 800 MINE 812 MINE 818 MINE 820 <i>MINE 822</i> MINE 862	MINE 451 MINE 800 MINE 821/838 MINE 832 MINE 836 MINE 839
<b>Additional Selected Courses</b>	MINE 812 MINE 814 MINE 818 MINE 819 MINE 820 MINE 822 MINE 828 MINE 851 MINE 853 MINE 860 MINE 898 MINE 4XX* External**	MINE 812 MINE 814 MINE 818 MINE 819 MINE 820 <i>MINE 822</i> MINE 828 MINE 851 MINE 853 MINE 860 MINE 862 MINE 898 MINE 4XX* External**	MINE 814 MINE 819 MINE 828 MINE 851 MINE 853 MINE 860 MINE 898 MINE 4XX* External**	MINE 812 MINE 814 MINE 818 MINE 819 MINE 820 <i>MINE 822</i> MINE 828 MINE 851 MINE 853 MINE 860 MINE 862 MINE 898 MINE 4XX* External**	MINE 814 MINE 819 MINE 828 MINE 851 MINE 853 MINE 860 MINE 898 MINE 4XX* External**	MINE 812 MINE 814 MINE 818 MINE 819 MINE 820 <i>MINE 822</i> MINE 828 MINE 851 MINE 853 MINE 860 MINE 862 MINE 898 MINE 4XX* External**

MINE 4XX\* - Fourth year Mining courses can be selected from an approved list (2 maximum)

External\*\* - Graduate level courses from Chemical, Civil, Electrical, Mechanical and/or Geological Engineering calendar listings can be taken with the approval of the graduate coordinator.

### **MINE 4XX Level Courses Acceptable for the M.Eng. Program**

<u>Course</u>	<u>Term</u>
MINE 422 – Mining and Sustainability	Fall
MINE 451 - Chemical Extraction of Metals	Fall
MINE 455 - Design, Analysis and Operation of Mineral Processes	Fall
MINE 462 - Occupational Health and Safety in Mining Practice	Fall
MINE 469 - Stability Analysis in Mine Design	Fall
MINE 458 - Process Investigations	Winter
MINE 459 - Reliability, Maintenance and Risk Assessment	Winter
MINE 472 - Mining Systems, Automation and Robotics	Winter

### **\*\*Graduate Level Courses from Other Engineering Departments**

(all external courses are subject to annual availability and require external permission to take)

<u>Course</u>	<u>Term</u>
GEOL 803 - Basin Analysis and Economic Deposits - module	Fall
GEOL 804 - Focused Topics in Geological Engineering - module	Fall
GEOL 811 - Introduction to GIS -= module	Fall
GEOL 817 - Presenting Science - module	Fall
GEOL 849 - Economic Guidelines for Exploration Planning	Fall
GEOL 888 - Geological Evolution of North America	Fall
MECH 810 - Advanced Topics in Manufacturing Engineering	Fall
CIVL 840 - Advanced Soil Mechanics (offered in alternating years)	Fall
GEOL 809 - Mine Waste Geochemistry - module	Winter
GEOL 812 - Resources and Sustainability - module	Winter