## Mining Engineering Curriculum - Fall 2015

**CEGEP Entry** 

1st Term (Fall)		18 credits	Prerequisites/Co-requisites
CCOM 206	Communication in Engineering	3	-
EPSC 221	General Geology	3	
MATH 262	Intermediate Calculus	3	P - MATH 141, MATH 133
MATH 263	Ordinary Differential Equations for Engineers	3	C - MATH 262
MECH 289	Design Graphics	3	- WATT 202
MIME 200	0 1	3	•
MIME 200 Introduction to the Minerals Industry  2nd Term (Winter)		17 credits	Prerequisites/Co-requisites
CIVE 205	Statics	3	Fierequisites/Co-requisites
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COMP 208	Computers in Engineering	3	P - MATH 140, MATH 141
EPSC 225	Properties of Minerals	1	<u>.                                      </u>
FACC 100	Introduction to the Engineering Profession	1	-
FACC 300	Engineering Economy	3	B MATH 200 / O MATH 200
MATH 264	Advanced Calculus for Engineers	3	P - MATH 262 / C - MATH 263
MIME 209	Mathematical Applications	3	-
3rd Term (S	•	4 credits	Prerequisites/Co-requisites
MIME 203	Mine Surveying	2	P - MECH 289
MIME 290	Industrial Work Period 1	2	P - MIME 200 or MIME 203
4th Term (F	all)	16 credits	Prerequisites/Co-requisites
CIVE 207	Solid Mechanics	4	P - CIVE 205 or MECH 210
MIME 260	Material Science and Engineering	3	-
MIME 340	Applied Fluid Dynamics	3	P - CIVE 205
MIME xxx	Technical Complementary	3	-
CS	Complementary Studies Group B (HSSML)	3	-
5th Term (Winter)		15 credits	Prerequisites/Co-requisites
MIME 322	Rock Fragmentation	3	P - MIME 200
MIME 323	Rock and Soil Mass Characterization	3	P - EPSC 221, MIME 200
MIME 325	Mineral Industry Economics	3	P - FACC 300/MIME 310
MIME 333	Materials Handling	3	P - MIME 200
MIME 341	Introduction to Mineral Processing	3	P - MIME 200 or MIME 250
6th Term (Summer)		2 credits	Prerequisites/Co-requisites
MIME 291	Industrial Work Period 2	2	P - MIME 290
7th Term (F	all)	14 credits	Prerequisites/Co-requisites
MIME 413	Strategic Mine Planning with Uncertainty*	3	P - MIME 325, MIME 419, MPMC 326, and MPMC 329
MPMC 321	Mécanique des roches et contrôle des terrains	3	P - MIME 323
MPMC 326	Recherche opérationnelle I	3	P - MATH 262
MPMC 329	Géologie minière	2	P - EPSC 221, MIME 200, MIME 209
MPMC 330	Géotechnique minière	3	P - MIME 323
8th Term (V	•	2 credits	Prerequisites/Co-requisites
MIME 392	Industrial Work Period 3	2	P - MIME 291, 75 program credits
9th Term (S		15 credits	Prerequisites/Co-requisites
MIME 419	Surface Mining	3	P - MIME 322, MIME 325, MIME 333
MIME 422	Mine Ventilation	3	P - MIME 340
MPMC 328	Environnement et gestion des rejets miniers	3	P - MIME 200, MIME 291
MPMC 421	Exploitation en souterrain	3	P - MIME 322, MIME 325, MIME 333
MIME xxx	Technical Complementary	3	- WHIVE OZZ, WHIVE OZO, WHIVE OOO
10th Term (		19 credits	Prerequisites/Co-requisites
ECSE 461	Electric Machinery	3	- 1 Toroquianea/00-requianea
FACC 400	Engineering Professional Practice	<u> </u>	P - FACC 100, 60 program credits
MIME 425	Applied Stochastic Orebody Modelling*	3	P - MPMC 326, MPMC 329
MIME 425	Mine Design and Feasibility Study Project	6	P - MIME 333, MIME 325, MIME 421 or MPMC 321
MIME xxx	Technical Complementary	3	-
CS	Complementary Studies Group A (Impact)	3	-
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<sup>\*</sup>Either MIME 413 or MIME 425 (offered in alternate years) can be taken in the 7th and 10th term.

 $\label{thm:complementary courses are selected from an approved list given on the next page.$ 

The Complementary Studies (CS) courses are Impact of Technology courses (Group A) and Humanities & Social Sciences, Management Studies and Law courses (Group B). These must be chosen from an approved list of courses/departments, found in the program list under "Complementary Studies" in the Faculty of Engineering Undergraduate section of the Programs, Courses and University Regulations publication (www.mcgill.ca/study) (see the Academic Programs section).

Students are responsible for satisfying pre-/co-requisites and verifying with their department that they are meeting the requirements of their program.

## **Technical Complementary Courses - Mining Engineering**

Courses selected from those listed below or any other approved technical course(s) in Engineering, Management or Science. Note: not all courses are given annually; verification with course instructor is advised.

	Credits	Prerequisites/Co-requisites
Extraction of Energy Resources	3	-
Extractive Metallurgical Engineering	3	P - MIME 200 or MIME 250, MIME 212
Modelling and Control: Mineral Processing	3	P - MIME 341
Mining Project	3	P - MPMC 328, MPMC 421 / C - MIME 419, MIME 426
Industrial Work Period 4	3	P - MIME 419, MPMC 328 and MPMC 421
Stability of Rock Slopes	3	P - Permission of instructor
Stability of Underground Openings	3	P - Permission of instructor
Selected Topics in Mineral Resource Engineering	2	P - 65 credits (admitted as Yr 1) or 85 credits (admitted as
	3	Yr 0)
Analysis: Mineral Processing Systems 1	3	P - MIME 341
Analysis: Mineral Processing Systems 2	3	P - MIME 341
Reliability Analysis of Mining Systems	3	P - Permission of instructor
CAO et informatique pour les mines	3	P - MIME 341
	Extractive Metallurgical Engineering  Modelling and Control: Mineral Processing  Mining Project  Industrial Work Period 4  Stability of Rock Slopes  Stability of Underground Openings  Selected Topics in Mineral Resource Engineering  Analysis: Mineral Processing Systems 1  Analysis: Mineral Processing Systems 2  Reliability Analysis of Mining Systems	Extraction of Energy Resources       3         Extractive Metallurgical Engineering       3         Modelling and Control: Mineral Processing       3         Mining Project       3         Industrial Work Period 4       3         Stability of Rock Slopes       3         Stability of Underground Openings       3         Selected Topics in Mineral Resource Engineering       3         Analysis: Mineral Processing Systems 1       3         Analysis: Mineral Processing Systems 2       3         Reliability Analysis of Mining Systems       3

## Last update: March 18, 2015

For the official program listing, see the Programs, Courses and University Regulations publication (www.mcgill.ca/study).