

Mining Engineering Curriculum - Fall 2010

Non-CEGEP Entry

1st Semester (Fall)		15 Credits	Pre-requisites/Co-requisites Required
CHEM 110	General Chemistry 1	4	-
FACC 100	Introduction to the Engineering Profession	1	-
MATH 133	Linear Algebra and Geometry	3	-
MATH 140	Calculus 1	3	-
PHYS 131	Mechanics and Waves	4	C - MATH 140
2nd Semester (Winter)		15 Credits	Pre-requisites/Co-requisites Required
CHEM 120	General Chemistry 2	4	-
MATH 141	Calculus 2	4	P - MATH 140
PHYS 142	Electromagnetism and Optics	4	P - PHYS 131 / C - MATH 141
CS	Complementary Studies Group B (HSSML) - 1	3	-
3rd Semester (Fall)		19 Credits	Pre-requisites/Co-requisites Required
CCOM 206	Communication in Engineering	3	-
EPSC 221	General Geology	3	-
EPSC 225	Properties of Minerals	1	-
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	-
MIME 200	Introduction to the Minerals Industry	3	-
4th Semester (Winter)		15 Credits	Pre-requisites/Co-requisites Required
CIVE 205	Statics	3	-
COMP 208	Computers in Engineering	3	P - MATH 140, MATH 141
MATH 264	Advanced Calculus for Engineers	3	P - MATH 262 / C - MATH 263
MIME 209	Mathematical Applications	3	-
MIME 310	Engineering Economy	3	-
5th Semester (Summer)		4 Credits	Pre-requisites/Co-requisites Required
MIME 203	Mine Surveying	2	P - MIME 200
MIME 290	Industrial Work Period 1	2	P - MIME 200 or MIME 203
6th Semester (Fall)		16 Credits	Pre-requisites/Co-requisites Required
CIVE 207	Solid Mechanics	4	P - CIVE 205 or MECH 210
ECSE 461	Electric Machinery	3	-
MIME 260	Material Science and Engineering	3	-
MIME 340	Applied Fluid Dynamics	3	P - CIVE 205
CS	Complementary Studies Group B (HSSML) - 2	3	-
7th Semester (Winter)		15 Credits	Pre-requisites/Co-requisites Required
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 - MIME 310
MIME 333	Materials Handling	3	P - MIME 200
MIME 341	Introduction to Mineral Processing	3	P - MIME 200 or MIME 250
8th Semester (Summer)		2 Credits	Pre-requisites/Co-requisites Required
MIME 291	Industrial Work Period 2	2	P - MIME 290
9th Semester (Fall)		14 Credits	Pre-requisites/Co-requisites Required
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
MIME xxx	Technical Complementary	3	-
10th Semester (Winter)		2 Credits	Pre-requisites/Co-requisites Required
MIME 392	Industrial Work Period 3	2	P - MIME 291, 75 program credits
11th Semester (Summer)		15 Credits	Pre-requisites/Co-requisites Required
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	-
12th Semester (Fall)		2 Credits	Pre-requisites/Co-requisites Required
MIME 494	Industrial Work Period 4	2	P - MIME 419, MPMC 328, MPMC 421
13th Semester (Winter)		16 Credits	Pre-requisites/Co-requisites Required
FACC 400	Engineering Professional Practice	1	P - FACC 100, 60 program credits
MIME 420	Feasibility Study	3	P - MIME 333, MIME 419, MPMC 421
MIME 426	Development and Services	3	P - MIME 337 or ECSE 461
MIME 484	Mining Project	3	P - MPMC 328, MPMC 421 / C - MIME 419, MIME 426
MIME xxx	Technical Complementary	3	-
CS	Complementary Studies Group A (Impact)	3	-

Technical 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 in the *Programs, Courses and University Regulations Calendar* (www.mcgill.ca/study/2010-2011/faculties/engineering/undergraduate/ug_engineering_academic_programs) under "Complementary Studies."

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

Technical Complementaries

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
MIME 320	Extraction of Energy Resources	3
MIME 442	Modelling and Control: Mineral Processing	3
MIME 513	Mine Planning Optimization Under Uncertainty.	3
MIME 520	Stability of Rock Slopes	3
MIME 521	Stability of Underground Openings	3
MIME 525	Stochastic Orebody Modelling	3
MIME 526	Mineral Economics	3
MIME 528	Mining Automation	3
MIME 544	Analysis: Mineral Processing Systems 1	3
MIME 545	Analysis: Mineral Processing Systems 2	3
MPMC 320	CAO et informatique pour les mines	3
MPMC 327	Hydrogéologie appliquée	3

July 20, 2010