

Mining Engineering Curriculum - Fall 2014

Non-CEGEP Entry

1st Semester (Fall)		15 credits	Prerequisites/Co-requisites
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	Prerequisites/Co-requisites
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)		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	-
MIME 200	Introduction to the Minerals Industry	3	-
4th Semester (Winter)		16 credits	Prerequisites/Co-requisites
CIVE 205	Statics	3	-
COMP 208	Computers in Engineering	3	P - MATH 140, MATH 141
EPSC 225	Properties of Minerals	1	-
FACC 300	Engineering Economy	3	-
MATH 264	Advanced Calculus for Engineers	3	P - MATH 262 / C - MATH 263
MIME 209	Mathematical Applications	3	-
5th Semester (Summer)		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
6th Semester (Fall)		16 credits	Prerequisites/Co-requisites
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	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
8th Semester (Summer)		2 credits	Prerequisites/Co-requisites
MIME 291	Industrial Work Period 2	2	P - MIME 290
9th Semester (Fall)		18 credits	Prerequisites/Co-requisites
CIVE 208	Civil Engineering System Analysis	3	P - COMP 208 / C - MATH 264
CIVE 311	Geotechnical Mechanics	4	P - CIVE 207
MIME 329	Mining Geology	2	P - EPSC 221, MIME 200, instructor permission
MIME 413	Strategic Mine Planning with Uncertainty*	3	P - MIME 325, MIME 419, MPMC 326, and MPMC 329
MIME 421	Rock Mechanics	3	P - MIME 323, instructor permission
MIME xxx	Technical Complementary	3	-
10th Semester (Winter)		2 credits	Prerequisites/Co-requisites
MIME 392	Industrial Work Period 3	2	P - MIME 291, 75 program credits
11th Semester (Summer)		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	-
12th Semester (Fall)		16 credits	Prerequisites/Co-requisites
FACC 400	Engineering Professional Practice	1	P - FACC 100, 60 program credits
MIME 425	Applied Stochastic Orebody Modelling*	3	P - MPMC 326, MPMC 329
MIME 426	Mine Design and Feasibility Study Project	6	P - ECSE 461, MIME 333
MIME xxx	Technical Complementary	3	-
CS	Complementary Studies Group A (Impact)	3	-

*Either MIME 413 or MIME 425 (offered in alternate years) can be taken in the 9th and 12th semester.

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 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
MIME 320	Extraction of Energy Resources	3	-
MIME 350	Extractive Metallurgical Engineering	3	P - MIME 200 or MIME 250, MIME 212
MIME 442	Modelling and Control: Mineral Processing	3	P - MIME 341
MIME 484	Mining Project	3	P - MPMC 328, MPMC 421 / C - MIME 419, MIME 426
MIME 494	Industrial Work Period 4	3	P - MIME 419, MPMC 328 and MPMC 421
MIME 520	Stability of Rock Slopes	3	P - Permission of instructor
MIME 521	Stability of Underground Openings	3	P - Permission of instructor
MIME 526	Mineral Economics	3	P - FACC 300/MIME 310
MIME 527	Selected Topics in Mineral Resource Engineering	3	P - 65 credits (admitted as Yr 1) or 85 credits (admitted as Yr 0)
MIME 544	Analysis: Mineral Processing Systems 1	3	P - MIME 341
MIME 545	Analysis: Mineral Processing Systems 2	3	P - MIME 341
MIME 588	Reliability Analysis of Mining Systems	3	P - Permission of instructor
MPMC 320	CAO et informatique pour les mines	3	-

Last update: May 2, 2014

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