Mining Engineering Co-op Curriculum - FALL 2023

Non-CEGEP Entry

1st Term (Fall)		**15 credits**	**Prerequisites/Co-requisites**
CHEM 110	General Chemistry 1	4	P - College level mathematics and physics or permission of instructor
FACC 100	Introduction to the Engineering Profession	1	-
MATH 133	Linear Algebra and Geometry	3	P - A course in functions
MATH 140	Calculus 1	3	P - High school calculus
PHYS 131	Mechanics and Waves	4	C - Calculus course [MATH 140]
		15 credits	**Prerequisites/Co-requisites**
CHEM 120	General Chemistry 2	4	P - College level mathematics and physics or permission of instructor
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	-
		18 credits	**Prerequisites/Co-requisites**
WCOM 206	Communication in Engineering	3	-
EPSC 221	General Geology	3	-
MATH 262	Intermediate Calculus	3	P - MATH 133, MATH 141
MATH 263	Ordinary Differential Equations for Engineers	3	C - MATH 262
MECH 289	Design Graphics	3	-
MIME 200	Introduction to the Minerals Industry	3	-
		16 credits	**Prerequisites/Co-requisites**
CIVE 205	Statics	3	-
COMP 208	Computer Programming for Physical Sciences and Engineering	3	P - MATH 141 / C - MATH 133
EPSC 225	Properties of Minerals	1	-
FACC 250	Responsibilities of the Professional Engineer	0	P - FACC 100 or BREE 250
FACC 300	Engineering Economy	3	-
MATH 264	Advanced Calculus for Engineers	3	P - MATH 262 / C - MATH 263
MIME 209	Mathematical Applications	3	-
		4 credits	**Prerequisites/Co-requisites**
MIME 203	Mine Surveying	2	P - MECH 289
MIME 290	Industrial Work Period 1	2	P - MIME 200 and MIME 203
6th Term (Fall)		**18 credits**	**Prerequisites/Co-requisites**
CIVE 207	Solid Mechanics	4	P - CIVE 205 or MECH 210
ECSE 209	Electrotechnology	3	P - PHYS 142 or equivalent
MIME 260	Materials Science and Engineering	3	-
MIME 329	Mining Geology	2	P - EPSC 221, MIME 200 and instructor permission
MIME 340	Applied Fluid Dynamics	3	-
CS	Complementary Studies Group B (HSSML) - 2*	3	-
		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 333	Materials Handling	3	P - MIME 200
MIME 341	Introduction to Mineral Processing	3	P - MIME 200 or MIME 250
		2 credits	**Prerequisites/Co-requisites**
MIME 291	Industrial Work Period 2	2	P - MIME 290
		16 credits	**Prerequisites/Co-requisites**
CIVE 208	Civil Engineering System Analysis	3	P - COMP 208 / C - MATH 264
FACC 400	Engineering Professional Practice	1	P - FACC 100, FACC 250**, and 60 program credits
MIME 330	Mining Geotechnics	3	P - MIME 323
MIME 421	Rock Mechanics	3	P - MIME 323, instructor permission
MIME 425	Applied Stochastic Orebody Modelling	3	P - MPMC 326 and MPMC 329
MIME xxx	Technical Complementary	3	-
		2 credits	**Prerequisites/Co-requisites**
MIME 392	Industrial Work Period 3	2	P - MIME 291, 75 program credits
11th Term (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
MIME 424	Underground Mining Methods	3	P - MIME 322, MIME 325, MIME 333
MIME 428	Environmental Mining Engineering	3	P - CIVE 205 and MIME 323
MIME xxx	Technical Complementary	3	-
		15 credits	**Prerequisites/Co-requisites**
MIME 413	Strategic Mine Planning With Uncertainty	3	P - MIME 325, MIME 419, MPMC 326, and MPMC 329
MIME 426	Mine Design and Prefeasibility Study	6	P - MIME 333, MIME 325, MIME 421 or MPMC 321
MIME xxx	Technical Complementary	3	-
CS	Complementary Studies Group A (Impact)*	3	-

**FACC 250 is not yet indicated as a prerequisite in the eCalendar course information (www.mcgill.ca/study) but it will be before FACC 400 is taken.