Mining Engineering (2010-11)

Below is the *advised sequencing* of courses for this degree, the <u>official degree requirements</u> are found in the University General Catalog.

FRES	YEAR	SOPHOMORE YEAR					
First Semester		Second Semester		First Semester		Second Semester	
Course	Units	Course	Units	Course	Units	Course	Units
ENGR 102	3	MATH 129	3	MNE 200	3	MNE 210	2
MATH 125 or 124 [#]	3/5	CHEM 152	4	MNE 296a###	1	MNE 296a ^{###}	(0)
CHEM 151	4	PHYS 141	4	CE 214	3	CE 215	3
ENGL 101	3	ENGL 102	3	MATH 223	4	MATH 254	3
Tier 1 INDV##	3	Tier 1 INDV##	3	GEOS 251	4	PHYS 241	4
				Tier 1 TRAD##	3	Tier 1 TRAD##	3
						TOTAL	15
						Summer Pre-session	
						MNE 412 ⁺⁺⁺	2
						MNE 419**	0-1
TOTAL	16/18	TOTAL	. 17	TOTAL	. 18	TOTAL	2-3

J	YEAR	SENIOR YEAR					
First Semester		Second Semester		First Semester		Second Semester	
Course	Units	Course	Units			Course	Units
MNE 396a###	1	MNE 396a###	(0)	MNE 407 ⁺⁺⁺		MNE 434	2
MNE 427	4	MNE 406a ⁺⁺⁺	2	MNE 422		MNE 438	3
CE 218	3	GEOS 304	4	MNE 426 ⁺⁺⁺		Tech Elect ⁺⁺⁺	3
ENGR 211k, m, and p	3	MNE 402, SIE 305, or CE 310 ⁺⁺	3	MNE 498	1	Tech Elect ⁺	3
Tier 2 Art/Hum##	3	Tech Elect ⁺ ,***	3-4	Tech Elect ^{+,+++}	3	MNE 498*	1-2
Tech Elect ^{+,+++}		Tier 2 INDV##	3-4	Tech Elect ⁺ ,****	3-5		
TOTAL	. 16	TOTAL	16- 17	TOTAL	14-16	TOTAL	12-13

TOTAL UNITS = 128

MATH 124 is a 5 unit version of MATH 125. Students taking MATH 124 should consider delaying the Tier 1 INDV course to maintain a reasonable academic load.

INDV/TRAD/Art/Hum courses must meet University general education requirements. ECON 210 is highly recommended. One course must be recognized by the University as focusing on non-western culture, race, gender or ethnicity. TRAD 101 satisfies this requirement. Check with department for alternate sequencing of

Tier 2 Art/Hum depending on track.

Register for course in fall semester and receive credit at the end of spring semester.

- + Technical electives are selected from engineering and science courses as outlined below.
- ++ Probability & Statistics elective: MNE 402, SIE 305, or CE 310.
- +++ Important. Courses may be offered alternate years. They must be taken in appropriate junior or senior year: consult MNE adviser.
- * Geomechanics track requires 1 unit of MNE 498 in spring semester.
- ** Only the mine operations track takes this elective.
- *** The sustainable development track takes a 4-unit elective.
- **** The geomechanics track takes a 5-unit soil mechanics elective.

Technical Electives - complete as indicated for the following three tracks:

Mine Operations track - complete:

- 1. MNE 411(3), 415(3), 419(1), 430(3), 447(3)
- 2. Technical Electives 6 units (Upper Division / Advisor Approved)
- 3. MNE 498(3)

Geomechanics track - complete:

- 1. CE 343(4), CE 349(1), MNE 447(3), MNE 415(3)
- 2. MNE 498(2)
- 3. Technical Electives 9 units (GEOS 322, 432, 434A, GEN 448, HWR 443, 450, CE 333, 335, MNE 430, 484, RNR 416A, 417, 422, GEOG 330, ABE 320 or Advisor Approved)

Sustainable Resource Development track - complete:

- 1. MNE 430(3), 484(3), 411(3)
- 2. Biology/Chem Technical Electives 4 units (MCB 181R,L or CHEM 241A, 243A or Advisor Approved)
- 3. Technical Electives 6 units (MNE 430, HWR 423, 431, 443, 450, ABE 447 or Advisor Approved)
- 4. MNE 498(3)