

**MINING ENGINEERING PROGRAM:
FIRST AND SECOND YEARS**

	SEMESTER I	SEMESTER II	SEMESTER III	SEMESTER IV
MATHEMATICS	MATH UN1101 (3) → or MATH UN1207 (4) →	MATH UN1102 (3) → MATH UN1208 (4) →	APMA E2000 (4) and E2001 (0) →	APMA E2101 (3) MATH UN2030 (3) ODE
PHYSICS	UN1401 (3) → or UN1601 (3.5) → or UN2801 (4.5) →	UN1402 (3) → UN1602 (3.5) → UN2802 (4.5) →	CHEM UN2443 (3.5) or PHYS UN1403 (3) or PHYS UN2601 (3.5) or BIOL UN2005 (4)	EACE E4252 (3) Foundations of environmental engineering
CHEMISTRY	UN1403 (3.5) → and Lab UN1500 (3) either semester or UN1604 (3.5) → or UN2045 (3.5) →	UN1404 (3.5) → UN1507 (3) → UN2046 (3.5) and Lab UN1507 (3) →		
REQUIRED NONTECHNICAL ELECTIVES	ENGL CC1010 (3) →		HUMA CC1001, COCI CC1101, or Global Core (3–4)	HUMA CC1002, COCI CC1102, or Global Core (3–4)
				ECON UN1105 (4) and UN1155 recitation (0)
				HUMA UN1121 or UN1123 (3)
REQUIRED PROFESSIONAL AND TECHNICAL ELECTIVES			EESC UN2100 (4.5) or EESC UN2200 (4.5)	STAT GU4001 (3)
			EAE E2100 (3) A better planet by design	
COMPUTER SCIENCE	ENGI E1006 (3) any semester			
PHYSICAL EDUCATION	UN1001 (1)	UN1002 (1)		
THE ART OF ENGINEERING	ENGI E1102 (4) either semester			

**MINING ENGINEERING:
THIRD AND FOURTH YEARS**

	SEMESTER V	SEMESTER VI	SEMESTER VII	SEMESTER VIII
REQUIRED COURSES	EAAE E3103 (3) Energy, minerals, and material systems	EAAE E4003 (3) Aquatic chemistry	EAAE E3998 (2) Undergraduate design project	EAAE E3999 (2) Undergraduate design project
	EAAE E3200 (3) Applied transport and chemical rate phenomena	EACE E3250 (3) Hydrosystems engineering	EAAE E4200 (3) Intro to sustainable production of earth mineral & metal resources	EACE E3255 (3) Environmental control and pollution reduction systems
	CHEE E3010 (3) Principles of chemical engineering thermodynamics	EAAE E3800 (4) Earth and environmental engineering lab, I		
		EAAE E3901 (3) Environmental microbiology		
TECHNICAL ELECTIVES		3 points	6 points	9 points
NONTECHNICAL ELECTIVES	3 points		3 points	6 points
TOTAL POINTS	12	16	14	20