

TECHNICAL/CORE ELECTIVE COURSE OPTIONS

Students in the pre-2021 program can use these courses as TECH electives

Students in the emphasis program can use these courses as their CORE electives

Course Description	Course #	Credit Hours	Prerequisites	Semester Offered
Computational Intelligence	MG EN 5530	2	MG EN 1050	spring even years
Computer Programming for Engineers	COMP 5005	3	none	fall
Aggregate Mining	MG EN 3120	2	no prerequisites	fall even years
Mining Safety/Health MGNT	MG EN 5450	2	MG EN 5350	fall odd years
DISCRETE SIMULATION	MG EN 5520	3	prerequisites: Basic Statistics (knowledge of different distributions) and preferred: programming ability/MG EN 1050	spring odd years
SUSTAINABLE DEVELOPMENT	MG EN 5080	2	MG EN 3010	spring
Corrosion Fundamentals	MET E 5600	3	CHEM 1220	fall
Data Management for Eng. & Heavy Industry	MG EN 5370	2		fall odd years
Energy and Society	CH EN 5158	3		
Energy Choices for the 21st Century	GEO 3368	3	none	fall
Engineering Hydrology	CVEEN 5410	3		
Environmental and Naural Resource Economics	ECON 5250	3	MATH 1210	fall
Environmental Eng.	CVEEN 3610/3615	4	prereq CVEEN 2140 and CHEM 1210/1215	fall/spring
Environmental Partitioning for Eng. Sci	GEO 5370	3	CHEM1210	fall
Ergonomics and Human Factors	H EDU 3540	3	H EDU 3520 or consent	spring
Financial Management	FINAN 3040	3	prereq-ACCTG2600	Spring
Foundations in Leadership	LDRSP 2020	3	none	fall/spring
Geophysics	GEO 3010	3	Math 1220/Phys2220	spring
Geospatial Field Methods: GPS and Drones	GEOG 5170	3	none	fall
Global Environmental Issues	BIOL 3460	3		
Groundwater	GEO 5350	3	Math 1220	fall
Horizontal Construction	CVEEN 5740		Instructor approval	
Hydrology and Water Resources	GEO 5650	3	none	spring
Hydrotopia: Water Rights and the Environment	PHIL 5540	3		
Intro Occupational Safety and Health	H EDU 3520	3	none	fall
Intro to Atmospheric Science	ATMOS 5000	3		
Intro to Geological Engineering	GEO 3075	2	GEO1110/1115	spring
Machine Learning	DS 4350	3	CS3500/DS3190	spring
Managing Occupational Safety and Health Programs	H EDU 3560	3	H EDU 3520 or consent	spring
Mineral Processing I	MET E 5670	3	MET E 3500; MATH 2250	spring
Mineral Processing II	MET E 5680	3	MET E 5670	fall
Mineralogy	GEO 3020	3	none	fall
Operations Research	MG EN 5110	2		
Ore Genesis/Mineral Exploration	GEO 5450	3	not currently listed	
Other - advisor approved course		3		
Principles of Management	MGT 3000	3	none	fall/spring
Process Engineering Statistics	MET E 5690	2	MET E 3070	spring
Risk Management	MG EN 5360	2		
Seismology	GEO 5210	3	GEO 3010/MATH 2210	fall
Survey of Accounting	ACCTG 2600	3	none	spring even years
The Business of Entrepreneurship	ENGIN 5790	3	none	spring
The Climate System	ATMOS 5400	3		
The Earth from Space	GEOG 3310	3	none	fall
UAV Applications	MG EN 5510	2		fall odd years
Water in Utah	GEOG 3290	3		
Water Policy and Politics	POLS 5510	3	none	