

Intake:		2020 onwards		Specialization:		Earth Resources Engineering					
Details of the Curriculum				Stream:		Mining and Mineral Engineering					
Module Code	Module Name	Category C/E/O	Time allocation [Hours/Week]		Credits offered		Norm		Evaluation %		
			Lecture	Lab / Tute	GPA	NGPA	GPA	NGPA	CA	WE	
Semester 1			Specialization requirement				15.0				
CE1023	Fluid Mechanics	C	2	2/4	2.0		15.0		20	80	
CS1033	Programming Fundamentals	C	2	2	3.0				20	80	
EE1040	Electrical Fundamentals	C	2	2/4	2.0				20	80	
EL1030	Language Skills Enhancement [S1 & S2]	C	0	2	1.0				100	0	
MA1014	Mathematics	C	5/2	1	3.0				20	80	
ME1033	Mechanics	C	2	2/4	2.0				20	80	
MT1023	Properties of Materials	C	3	2/4	2.0				20	80	
			Total		15.0	0.0	15.0	0.0			
Semester 2			Specialization requirement				18.0				
HM-1	Humanities Elective I	C	2	0	2.0		16.0	2.0	100	0	
EL1030	Language Skills Enhancement [S1 & S2]	C	0	2	1.0				100	0	
ER1014	Geology	C	2	2	3.0				30	70	
ER1040	Introduction to Mining & Mineral Engineering	C	2	0	2.0				30	70	
MA1024	Methods of Mathematics	C	5/2	1	3.0				30	70	
ER1050	Basic Mine Thermodynamics	C	2	0	2.0				30	70	
ME1091	Engineering Drawing & Computer Aided Modeling	C	1	4	3.0				100	0	
ER1902	Introduction to Engineering Design & Workshop Technology	C	1	2		2.0			60	40	
			Total		16.0	2.0	16.0	2.0			
Semester 3			Specialization requirement				14.0				
CE1813	Mechanics of Materials	C	2	0	2.0		14.0		30	70	
CE2063	Surveying I	C	2	2	3.0				30	70	
CS2813	Visual Programming	C	1	2	2.0				60	40	
MA2014	Differential Equations	C	2	0	2.0				30	70	
MA2024	Calculus	C	2	0	2.0				30	70	
ER2110	Rock Blasting and Explosives Engineering	C	5/2	2/2	3.0				30	70	
ER2420	Introduction to Ocean Resources Engineering	E	2	0	2.0				30	70	
ER2631	Elementary Gemmology	E	3/2	2/2	2.0				30	70	
ER2034	Principles of RS and GIS	E	3/2	2/2	2.0				30	70	
ER2054	Introduction to Petroleum Engineering	E	2	0	2.0				30	70	
			Total		22.0	0.0	14.0	0.0			
Semester 4			Specialization requirement				22.0				
CE2143	Surveying II	C	2	2	3.0		22.0		30	70	
HM-2	Humanities Elective II	C	2	0	2.0				100	0	
ER2611	Petrology and Structural Geology	C	2	2	3.0				30	70	
ER2643	Analytical Methods and Environmental Engineering Concepts	C	5/2	2/2	3.0				40	60	
ER2084	Mineral Processing Engineering	C	7/2	2/2	4.0				30	70	
ER2031	Mining Method & Mine Development	C	3	0	3.0				40	60	
MA2034	Linear Algebra	C	2	0	2.0				30	70	
MA3014	Applied Statistics	C	2	0	2.0				30	70	
			Total		22.0	0.0	22.0	0.0			
Semester 5			Specialization requirement				20.0				
CE2813	Soil Mechanics	C	5/2	2/2	3.0		20.0		30	70	
ER3014	Extraction Metallurgy	C	5/2	2/2	3.0				30	70	
ER3070	Economic Mineral and Mineral Exploration	C	5/2	2/2	3.0				30	70	
ER4104	Mine Safety and Legislation	C	2	0	2.0				30	70	
MA3024	Numerical Methods	C	2	0	2.0				30	70	
MN3043	Business Economics and Financial Accounting	C	3	0	3.0				30	70	
MN3053	Industrial Management and Marketing	C	3	0	3.0				30	70	
ER3880	Engineer and Society [S5 & S6]	C	0	2	1.0				100	0	
ER3320	Plant Design and Value Addition to Minerals	E	1	2	3.0				30	70	
ER4714	Construction Engineering Practice	E	5/2	2/2	3.0				30	70	
ER3704	Digital Image Processing and Photogrammetry	E	2	2	3.0				30	70	
ER3714	Jewellery Products Development	E	2	2	3.0				50	50	
ER3701	Petroleum Exploration and Drilling Engineering	E	5/2	2/2	3.0				30	70	
ER3520	Coastal Hydrodynamics	E	2	2	3.0		30	70			
			Total		38.0	0.0	20.0	0.0			
Industrial Training			Specialization requirement				6.0				
ER3993	Industrial Training	C			6.0		6.0		100	0	
			Total		0.0	6.0	0.0	6.0			
Semester 6			Specialization requirement				12.0				
ER3203	Design Project [S6 & S7]	C	0	4	2.0		8.0	4.0	100	0	
ER4084	Mine Surveying, Planning and Design [S6 & S7]	C	1/2	2/2	1.0				40	60	
ER4024	Mine Ventilation	C	2	2	3.0				30	70	
ER3880	Engineer and Society [S5 & S6]	C	1	2	2.0				100	0	
ER3913	Geology Field Visits and Camp	C				2.0			100	0	
ER3923	Mine Surveying and Ventilation Field Camp	C				2.0			100	0	
			Total		8.0	4.0	8.0	4.0			

