

COURSE SCHEME														
BATCH 2022-2026														
BTECH IN MINING ENGINEERING														
SEMESTER I														
S. No	CATEGORY	CODE	COURSE TITLE	Periods			Evaluation Scheme				Subject Total	Credit		
				L	T	P	Assignment	TA	Total	ESE				
1	Basic Science Course	8BSC101	Physics I	3	1	0	20	10	30	70	100	4		
2	Basic Science Course	8BSC102	Mathematics I	3	1	0	20	10	30	70	100	4		
3	Engineering Science Course	8ESC101	Basic Electrical Engineering	3	1	0	20	10	30	70	100	4		
4	Engineering Science Course	8ESC102	Engineering Graphics & Design	1	0	0	20	10	30	70	100	1		
5	Humanities and Social Sciences	8HSMC101	English	2	0	2	20	10	30	70	100	3		
PRACTICAL /SESSIONAL														
1	Basic Science Course	8BSC101P	Physics I Lab	0	0	3			30	20	50	1.5		
2	Engineering Science Course	8ESC101P	Basic Electrical Engineering Lab	0	0	2			30	20	50	1		
3	Engineering Science Course	8ESC102P	Engineering Graphics & Design Lab	0	0	4			30	20	50	2		
									TOTAL		650	20.5		

BATCH 2022-2026														
BTECH IN MINING ENGINEERING														
SEMESTER II														
S.No.	CATEGORY	CODE	COURSE TITLE	Periods			Evaluation Scheme				Subject Total	Credit		
				L	T	P	Assignment	TA	Total	ESE				
1	Basic Science Course	8BSC103	Chemistry I	3	1	0	20	10	30	70	100	4		
2	Basic Science Course	8BSC104	Mathematics II	3	1	0	20	10	30	70	100	4		
3	Engineering Science Course	8ESC103	Programming for Problem Solving	3	0	0	20	10	30	70	100	3		
4	Engineering Science Course	8ESC104	Workshop Practice	1	0	0	20	10	30	70	100	1		
5	Mandatory Course	8MC101	**Environmental Science	3	0	0	20	10	30	70	100	0		
6	Humanities and Social Sciences	8HSMC102	**Life Skills	2	0	0	20	10	30	70	100	0		
PRACTICAL /SESSIONAL														
1	Basic Science Course	8BSC103P	Chemistry I Lab	0	0	3			30	20	50	1.5		
2	Engineering Science Course	8ESC103P	Programming for Problem Solving Lab	0	0	4			30	20	50	2		
3	Engineering Science Course	8ESC104P	Workshop Practice Lab	0	0	4			30	20	50	2		
									TOTAL		750	17.5		

** NOTE: Qualifying Non Credit Course

BATCH 2022-2026												
BTECH IN MINING ENGINEERING												
SEMESTER III												
S.No.	CATEGORY	CODE	COURSE TITLE	Period			Evaluation Scheme				Subject Total	Credit
				L	T	P	Assignment	T A	Total	ESC		
1	Basic Science Course	8BSC201	Mathematics III	3	1	0	20	10	30	70	100	4
2	Engineering Science Courses	8ESC201	Engineering Mechanics	3	0	0	20	10	30	70	100	3
3	Professional Core Courses	8PCCMiE201	Introduction to Mining	3	0	0	20	10	30	70	100	3
4	Professional Core Courses	8PCCMiE202	Mining Geology	3	0	0	20	10	30	70	100	3
5	Professional Core Courses	8PCCMiE203	Mine Surveying I	3	0	0	20	10	30	70	100	3
6	Humanities and Social Sciences	8HSMC201	Effective Technical Communication	3	0	0	20	10	30	70	100	3
7	University Mandatory Courses	8UMC102	Community Engagement and Social Responsibility	1	0	2	40	10	50	50	100	2
PRACTICAL/ SESSIONAL												
1	Professional Core Courses	8PCCMiE202P	Mining Geology Lab	0	0	2			30	20	50	1
2	Professional Core Courses	8PCCMiE203P	Mine Surveying I Lab	0	0	2			30	20	50	1
										TOTAL	800	23

BATCH 2022-2026												
BTECH IN MINING ENGINEERING												
SEMESTER IV												
S.No.	CATEGORY	CODE	COURSE TITLE	Period			Evaluation Scheme				Subject Total	Credit
				L	T	P	Assignment	T A	Total	ESC		
1	Engineering Science Courses	8ESC202	Mechanical Engineering	3	0	0	20	10	30	70	100	3
2	Professional Core Courses	8PCCMiE204	Drilling & Blasting	3	0	0	20	10	30	70	100	3
3	Professional Core Courses	8PCCMiE205	Geology for Mining Engineers	3	0	2	20	10	30	70	100	3
4	Professional Core Courses	8PCCMiE206	Mine Development	3	0	0	20	10	30	70	100	3
5	Professional Core Courses	8PCCMiE207	Mine Surveying II	3	0	2	20	10	30	70	100	3
6	Humanities and Social Sciences	8HSMC202	Professional Practices, Laws & Ethics	3	0	0	20	10	30	70	100	3
7	Mandatory Courses	8MC201	**Disaster Management	3	0	0	20	10	30	70	100	0
PRACTICAL/ SESSIONAL												
1	Professional Core Courses	8PCCMiE205P	Geology for Mining Engineers Lab	0	0	2			30	20	50	1
2	Professional Core Courses	8PCCMiE207P	Mine Surveying II Lab	0	0	2			30	20	50	1
										TOTAL	800	20

Vocational Training in a Surface / Underground Mine of minimum 30 (Thirty) days to be taken at the end of IVth Semester Will be Credited in Vth Semester.

**** NOTE: Qualifying Non Credit Course**

BATCH 2022-2026												
BTECH IN MINING ENGINEERING												
SEMESTER V												
S.No.	CATEGORY	CODE	COURSE TITLE	Period			Evaluation Scheme				Subject Total	Credit
				L	T	P	Assignment	T A	Total	ESC		
1	Professional Core Courses	8PCCMiE301	Mining Machinery I	3	0	0	20	10	30	70	100	3
2	Professional Core Courses	8PCCMiE302	Surface Mining	3	0	0	20	10	30	70	100	3
3	Professional Core Courses	8PCCMiE303	Underground Coal Mining	3	0	0	20	10	30	70	100	3
4	Professional Core Courses	8PCCMiE304	Rock Mechanics	3	0	0	20	10	30	70	100	3
5	Professional Core Courses	8PCCMiE305	Numerical & Statistical Methods	3	0	0	20	10	30	70	100	3
6	Professional Core Courses	8PCCMiE306	Remote Sensing & GIS	3	0	0	20	10	30	70	100	3
7	Humanities and Social Sciences	8HSMC301	**Professional Skills	2	0	0	20	10	30	70	100	0
8	Mandatory Courses	8MC301	**Constitution of India	2	0	0	20	10	30	70	100	0
PRACTICAL / SESSIONAL												
1	Professional Core Courses	8PCCMiE304P	Rock Mechanics Lab	0	0	2			30	20	50	1
2	Project	8PROJMiE301	Vocational Training Report I	0	0	0			50	50	100	2
										TOTAL	950	21

Vocational Training in a Surface / Underground Mine of minimum 30 (Thirty) days to be taken at the end of Vth Semester Will be Credited in VII th Semester.

****NOTE: Qualifying Non Credit Course.**

BATCH 2022-2026												
BTECH IN MINING ENGINEERING												
SEMESTER VI												
S.No.	CATEGORY	CODE	COURSE TITLE	Period			Evaluation Scheme				Subject Total	Credit
				L	T	P	Assignment	T A	Total	ESC		
1	Professional Core Courses	8PCCMiE308	Underground Metal Mining	3	0	0	20	10	30	70	100	3
2	Professional Core Courses	8PCCMiE309	Advanced Underground Mining	3	0	0	20	10	30	70	100	3
3	Professional Core Courses	8PCCMiE310	Mine Ventilation	3	0	0	20	10	30	70	100	3
4	Professional Core Courses	8PCCMiE311	Mine Planning	3	0	0	20	10	30	70	100	3
5	Professional Core Courses	8PCCMiE312	Ground Control	3	0	0	20	10	30	70	100	3
6	Humanities and Social Sciences	8HSMC302	**Soft Skills & Interpersonal Communication	2	0	0	20	10	30	70	100	0
PRACTICAL / SESSIONAL												
1	Professional Core Courses	8PCCMiE310P	Mine Ventilation Lab	0	0	2			30	20	50	1
2	Professional Core Courses	8PCCMiE312P	Ground Control Lab	0	0	2			30	20	50	1
3	Professional Core Courses	8PCCMiE313P	Mine Planning & Design Exercise	0	0	2			30	20	50	1
										TOTAL	750	18

****NOTE: Qualifying Non Credit Course.**

BATCH 2022-2026												
BTECH IN MINING ENGINEERING												
SEMESTER VII												
S.No.	CATEGORY	CODE	COURSE TITLE	Period			Evaluation Scheme				Subject Total	Credit
				L	T	P	Assignment	T A	Total	ESC		
1	Professional Core Courses	8PCCMiE401	Mine Environmental Engineering	3	0	0	20	10	30	70	100	3
2	Professional Core Courses	8PCCMiE402	Operational Research in Mining	3	0	0	20	10	30	70	100	3
3	Professional Core Courses	8PCCMiE403	Mining Machinery II	3	0	0	20	10	30	70	100	3
4	Professional Core Courses	8PCCMiE404	Mine Legislation & Safety I	3	0	0	20	10	30	70	100	3
5	PROFESSIONAL ELECTIVE (Any one of the following subjects)											
	Professional Elective Courses	8PECMiEEL401	Dimensional Stone Mining	3	0	0	20	10	30	70	100	3
	Professional Elective Courses	8PECMiEEL402	Rock Excavation Engineering									
	Professional Elective Courses	8PECMiEEL403	Design of Open Pit Mines									
	Professional Elective Courses	8PECMiEEL404	Mine Safety Engineering									
6	Humanities and Social Sciences	8HSMC401	**Seminar in Executive Communication	2	0	0	20	10	30	20	50	0
PRATICAL / SESSIONAL												
1	Professional Core Courses	8PCCMiE401P	Mine Environmental Engineering Lab	0	0	2			30	20	50	1
2	Project	8PROJMiE401	Vocational Trainee Report II	0	0	0			50	50	100	2
										TOTAL	700	18

****NOTE: Qualifying Non Credit Course.**

BATCH 2022-2026													
BTECH IN MINING ENGINEERING													
SEMESTER VIII													
S.No.	CATEGORY	CODE	COURSE TITLE	Period			Evaluation Scheme				Subject Total	Credit	
				L	T	P	Assignment	T A	Total	ESC			
1	Professional Core Courses	8PCCMiE405	Environmental Aspect of Mining	3	0	0	20	10	30	70	100	3	
2	Professional Core Courses	8PCCMiE406	Mine Legislation & Safety II	3	0	0	20	10	30	70	100	3	
3	Professional Core Courses	8PCCMiE407	Mine Management	3	0	0	20	10	30	70	100	3	
4	Professional Core Courses	8PCCMiE408	Fuel Technology & Mineral Processing	3	0	0	20	10	30	70	100	3	
5	Professional Core Courses	8PCCMiE409	Mine & Mineral Economics	3	0	0	20	10	30	70	100	3	
6	OPEN ELECTIVE (Any one of the following subjects)												
	Open Elective Courses	8OEEL401	Clean Coal Technology	3	0	0	20	10	30	70	100	3	
	Open Elective Courses	8OEEL402	Industrial Management										
	Open Elective Courses	8OEEL403	Coal Bed Methane Mining										
	Open Elective Courses	8OEEL404	Production & Operational Management										
7	Humanities and Social Sciences	8HSMC402	**Human Values & Ethics	2	0	0	20	10	30	70	100	0	
8	University Mandatory Course	8UMCI01	Managing Personal Finance	1	0	0					100	0	
PRATICAL / SESSIONAL													
1	Professional Core Courses	8PCCMiE408P	Fuel Technology & Mineral Processing Lab	0	0	2			30	20	50	1	
2	Project	8PROJMiE402	Mining Project Work	0	0	10			100	100	200	5	
										TOTAL	950	24	
										Total of All Semester		6350	162

****NOTE: Qualifying Non Credit Course.**

A student will be eligible to get Under Graduate degree with Honours , if he/she acquires an additional 20 credits through MOOCs.

COURSE CATEGORY (AICTE GUIDELINES)		
Core Category	Credit	% Credit
Basic Science Course	23	14.20
Engineering Science Course	22	13.58
Humanities and Social Sciences	9	5.56
Mandatory Course	0	0.00
University Mandatory Courses	2	1.23
Professional Core Courses	91	56.17
Departmental Elective Course	3	1.85
Open Elective Courses	3	1.85
Project	9	5.56
TOTAL	162	100

SEMESTER WISE CREDIT	
SEMESTER	Credit
Semester I	20.5
Semester II	17.5
Semester III	23
Semester IV	20
Semester V	21
Semester VI	18
Semester VII	18
Semester VIII	24
TOTAL	162