

BRANCH: MINING ENGINEERING

YEAR: 1

SEMESTER 1 (Common to all branches)

Sl No.	Course No.	Subject	Periods			Evaluation Scheme					Credits	Hours
			L	T	P	SESSIONAL EXAM			ESE	SUB TOTAL		
						TA	CT	TOT				
1	HU 1101	Professional Communication in English	3	1	0	20	10	30	70	100	4	4
2	CH 1101	Engineering Chemistry	3	1	0	20	10	30	70	100	4	4
3	PH 1101	Engineering Physics-I	3	1	0	20	10	30	70	100	4	4
4	MA 1101	Mathematics-I	3	1	0	20	10	30	70	100	4	4
5	ME 1101	Engineering Mechanics	3	1	0	20	10	30	70	100	4	4
6	EE 1101	Basic Electrical Engineering	3	1	0	20	10	30	70	100	4	4
	Total									600	24	24
		PRACTICALS/ DRAWING/DESIGN										
1	CH 1201 PH 1201	Chemistry/Physics Lab. (To be taken in alternate weeks)	0	0	3	30	-	30	20	50	2	3
2	ME 1201 EE 1201	Engineering Mechanics/ Electrical Laboratory	0	0	3	30	-	30	20	50	2	3
3	ME 1202	Engineering Graphics-I	0	0	3	30	-	30	20	50	2	3
4	ME 1203	Workshop Practice-1	0	0	3	30	-	30	20	50	2	3
5	MN 1301	General Proficiency	-	-	-	-	-	-	-	50	1	-
	Total									250	9	12

TA-Teacher Assessment
Total Credits: 33

CT-Class Test

Total Hours: 36 (Rest 6 hours is to be utilized for co-curricular activities)

ESE- End semester Examination

Total Marks: 850

BRANCH: MINING ENGINEERING

YEAR: 1

SEMESTER 2 (Common to all branches)

Sl No.	Course No.	Subject	Periods			Evaluation Scheme					Credits	Hours
			L	T	P	SESSIONAL EXAM			ESE	SUB TOTAL		
						TA	CT	TOT				
1	IT 2101	Programming Language - C++	3	1	0	20	10	30	70	100	4	4
2	CH 2102	Environment & Ecology	3	1	0	20	10	30	70	100	4	4
3	PH 2102	Engineering Physics-II	3	1	0	20	10	30	70	100	4	4
4	MA 2102	Mathematics-II	3	1	0	20	10	30	70	100	4	4
5	ME 2102	Engineering Thermodynamics	3	1	0	20	10	30	70	100	4	4
6	EC 2101	Basic Electronics	3	1	0	20	10	30	70	100	4	4
Total										600	24	24
PRACTICALS/ DRAWING/DESIGN												
1	EC 2201	Basic Electronics Lab.	0	0	3	30	-	30	20	50	2	3
2	IT 2201	Computer Programming Lab.	0	0	3	30	-	30	20	50	2	3
3	ME 2204	Engineering Graphics-II (M/C drawing)	0	0	3	30	-	30	20	50	2	3
4	ME 2205	Workshop Practice II	0	0	3	30	-	30	20	50	2	3
5	MN 2302	General Proficiency	-	-	-	-	-	-	-	50	1	-
Total										250	9	12

TA-Teacher Assessment
Total Credits: 33

CT-Class Test
Total Hours: 36 (Rest 6 hours is to be utilized for co-curricular activities)

ESE- End semester Examination

Total Marks: 850

BRANCH: MINING ENGINEERING

YEAR: 2

SEMESTER 3

Sl No.	Course No.	Subject	Periods			Evaluation Scheme					Credits	Hours
			L	T	P	SESSIONAL EXAM			ESE	SUB TOTAL		
						TA	CT	TOT				
		THEORY										
1	MA 3103	Numerical Analysis & Programming	3	1	0	20	10	30	70	100	4	4
2	ML 3101	Material Science (A)	3	1	0	20	10	30	70	100	4	4
3	MA 3104	Mathematics-III	3	1	0	20	10	30	70	100	4	4
4	ME 3103	Mechanics of Solids-I	3	1	0	20	10	30	70	100	4	4
5	GE 3101	Engineering Geology-I	3	1	0	20	10	30	70	100	4	4
6	ME 3106	Fluid Mechanics	3	1	0	20	10	30	70	100	4	4
	Total									600	24	24
	PRACTICALS/ DRAWING/DESIGN											
1	ME 3208	Mechanics of Solids	0	0	3	30	-	30	20	50	2	3
2	GE 3201	Engineering Geology-I	0	0	3	30	-	30	20	50	2	3
3	MA 3201	Numerical Analysis & Programming	0	0	3	30	-	30	20	50	2	3
4	ME 3209	Fluid Mechanics	0	0	3	30	-	30	20	50	2	3
5	MN 3303	General Proficiency	-	-	-	-	-	-	-	50	1	-
	Total									250	9	12

TA-Teacher Assessment
Total Credits: 33

CT-Class Test
Total Hours: 36 (Rest 6 hours is to be utilized for co-curricular activities)

ESE- End semester Examination

Total Marks: 850

BRANCH: MINING ENGINEERING

YEAR: 2

SEMESTER 4

Sl No.	Course No.	Subject	Periods			Evaluation Scheme					Credits	Hours
			L	T	P	SESSIONAL EXAM			ESE	SUB TOTAL		
						TA	CT	TOT				
1	MA 4105	Mathematics - IV	3	1	0	20	10	30	70	100	4	4
2	MA 4106	Probability & Statistics	3	1	0	20	10	30	70	100	4	4
3	CE 3101	Surveying-I	3	1	0	20	10	30	70	100	4	4
4	EE 4108	Electrical Engineering for Mines	3	1	0	20	10	30	70	100	4	4
5	MN 4101	Introduction to Mining Technology	3	1	0	20	10	30	70	100	4	4
6	GE 4103	Engineering Geology - II	3	1	0	20	10	30	70	100	4	4
	Total									600	24	24
		PRACTICALS/ DRAWING/DESIGN										
1	CE 3201	Surveying-I	0	0	3	30	-	30	20	50	2	3
2	EE 4207	Electrical Engineering for Mines	0	0	3	30	-	30	20	50	2	3
3	MN 4201	Introduction to Mining Technology	0	0	3	30	-	30	20	50	2	3
4	GE 4203	Engineering Geology-II	0	0	3	30	-	30	20	50	2	3
5	MN 4304	General Proficiency	-	-	-	-	-	-	-	50	1	-
	Total									250	9	12

TA-Teacher Assessment

Total Credits: 33

CT-Class Test

Total Hours: 36 (Rest 6 hours is to be utilized for co-curricular activities)

ESE- End semester Examination

Total Marks: 850

Sl No.	Course No.	Subject	Periods			Evaluation Scheme					Credits	Hours
			L	T	P	SESSIONAL EXAM			ESE	SUB TOTAL		
						TA	CT	TOT				
1	MN 5102	Underground Coal Mining Methods	3	1	0	20	10	30	70	100	4	4
2	MN 5103	Surface Mining Methods	3	1	0	20	10	30	70	100	4	4
3	MN 5104	Mine Surveying	3	1	0	20	10	30	70	100	4	4
4	MN 5105	Mining Machinery – I	3	1	0	20	10	30	70	100	4	4
5	MN 5106	Mine Ventilation	3	1	0	20	10	30	70	100	4	4
	Total									500	20	20
		PRACTICALS/ DRAWING/DESIGN										
1	MN 5202	Mine Surveying	0	0	3	30	-	30	20	50	2	3
2	MN 5203	Mining Machinery – I	0	0	3	30	-	30	20	50	2	3
3	MN 5204	Mine Ventilation	0	0	3	30	-	30	20	50	2	3
4	MN 5205	Computer Application in Mining	0	0	3	30	-	30	20	50	2	3
5	MN 5305	General Proficiency	-	-	-	-	-	-	-	50	2	-
	Total									250	10	12

TA-Teacher Assessment
Total Credits: 30

CT-Class Test

Total Hours: 32 (Rest 10 hours is to be utilized for co-curricular activities)

ESE- End semester Examination

Total Marks: 750

Sl No.	Course No.	Subject	Periods			Evaluation Scheme					Credits	Hours
			L	T	P	SESSIONAL EXAM			ESE	SUB TOTAL		
						TA	CT	TOT				
1	MN 6107	Underground Metal Mining Methods	3	1	0	20	10	30	70	100	4	4
2	MN 6108	Mining Machinery – II	3	1	0	20	10	30	70	100	4	4
3	MN 6109	Rock Mechanics-I	3	1	0	20	10	30	70	100	4	4
4	MN 6110	Mine Environmental Engineering-I	3	1	0	20	10	30	70	100	4	4
5		Elective I (Any one of the followings)										
	MN 6111	Mineral Process Engineering	3	1	0	20	10	30	70	100	4	4
	MN 6112	Geographical Information System										
	MN 6113	Marine Exploration & Mining										
	MN 6114	Engineering Economics										
	MN 6115	Advance Mine Ventilation										
	Total									500	20	20
		PRACTICALS/ DRAWING/DESIGN										
1	MN 6206	Mining Machinery – II	0	0	3	30	-	30	20	50	2	3
2	MN 6207	Rock Mechanics-I	0	0	3	30	-	30	20	50	2	3
3	MN 6208	Mine Environmental Engineering-I	0	0	3	30	-	30	20	50	2	3
4	MN 6209	Tour, Training & Colloquium	0	0	3	30	-	30	20	50	2	3
5	MN 6306	General Proficiency	-	-	-	-	-	-	-	50	2	-
	Total									250	10	12

TA-Teacher Assessment

CT-Class Test

ESE- End semester Examination

Total Marks: 750

Total Credits: 30

Total Hours: 32 (Rest 10 hours is to be utilized for co-curricular activities)

Sl No.	Course No.	Subject	Periods			Evaluation Scheme					Credits	Hours
			L	T	P	SESSIONAL EXAM			ESE	SUB TOTAL		
						TA	CT	TOT				
		THEORY										
1	MN 7116	Mine Planning and Design	3	1	0	20	10	30	70	100	4	4
2	MN 7117	Rock Mechanics-II	3	1	0	20	10	30	70	100	4	4
3	MN 7118	Mine Environmental Engineering-II	3	1	0	20	10	30	70	100	4	4
4		Elective II (Any one of the followings)										
	MN 7119	Design of Open Pit Mines	3	1	0	20	10	30	70	100	4	4
	MN 7120	Advanced Coal Mining Methods										
	MN 7121	Advanced Metal Mining Methods										
	MN 7122	In-situ Exploitation of Minerals										
5		Elective III (Any one of the followings)										
	MN 7123	Mine Disaster and Rescue	3	1	0	20	10	30	70	100	4	4
	MN 7124	Mine Reclamation and Closure										
	MN 7125	Bulk Material Handling										
	MN 7126	Heavy Earth Moving Machines										
	MN 7127	Reliability of Mining Systems										
	Total									500	20	20
		PRACTICALS/ DRAWING/DESIGN										
1	ME 7210	Mine Planning and Design	0	0	3	30	-	30	20	50	2	3
2	ME 7211	Tour, Training & Colloquium	0	0	3	30	-	30	20	50	2	3
3	ME 7212	Rock Mechanics-II	0	0	3	30	-	30	20	50	2	3
4	ME 7213	Project Part – I	0	0	3	30	-	30	20	50	2	3
5	ME 7307	General Proficiency	-	-	-	-	-	-	-	50	2	-
	Total									250	10	12

TA-Teacher Assessment
Total Credits: 30

CT-Class Test

Total Hours: 32 (Rest 10 hours is to be utilized for co-curricular activities)

ESE- End semester Examination

Total Marks: 750

BRANCH: MINING ENGINEERING

YEAR: 4

SEMESTER 8

Sl No.	Course No.	Subject	Periods			Evaluation Scheme					Credits	Hours
			L	T	P	SESSIONAL EXAM			ESE	SUB TOTAL		
						TA	CT	TOT				
1	MN 8128	Mine Economics and Resource Management	3	1	0	20	10	30	70	100	4	4
2	MN 8129	Mine Legislation and safety Engineering	3	1	0	20	10	30	70	100	4	4
3		Elective IV (Any one of the followings)										
	MN 8130	Quantitative Decision Making	3	1	0	20	10	30	70	100	4	4
	MN 8131	Reliability & Quality Engineering										
	MN 8132	Geostatistics										
	PE 8133	Industrial Management										
	PE 8134	Personnel Management & Industrial Relations										
	ME 8144	Marketing Management										
4		Elective V (Any one of the followings)										
	MN 8133	Rock Slope Engineering	3	1	0	20	10	30	70	100	4	4
	MN 8134	Rock Fragmentation Technology										
	MN 8135	Tunneling & Drivages										
	MN 8136	Drilling Technology										
	MN 8137	Rock Excavation Engineering										
	MN 8138	Dimensional Stone Mining										
5		Elective VI (Any one of the followings)										
	MN 8139	Design of Mine Supports										
	MN 8140	Mine System Engineering	3	1	0	20	10	30	70	100	4	4
	MN 8141	Numerical Techniques in Geo-mechanics										
	MN 8142	Remote Sensing and Geo-Informatics										
	MN 8143	Mine Ventilation Planning										
	MN 8144	Small Scale Mining										
	Total									500	20	20
		PRACTICALS/ DRAWING/DESIGN										
6	MN 8214	Project Part - II	0	0	12	30	-	120	80	200	8	12
7	MN 8308	General Proficiency	-	-	-	-	-	-	-	50	2	-
	Total									250	10	12

TA-Teacher Assessment

Total Credits: 30

CT-Class Test

Total Hours: 32 (Rest 10 hours is to be utilized for co-curricular activities)

ESE- End semester Examination

Total Marks: 750