

(Mining Engineering) PROGRAMME (w.e.f. 2014-15)

Semester-III

Course Code	Course Name	Contact Hours (L-T-P)	Credits
THEORY			
MN2101	Mining Geology – I	4	4
MN2102	Mine Surveying – I	3	3
MN2103	Underground Mine Environment – I	3	3
MN2104	Mining Machinery – I	3	3
MN2105	Mine Development	4	4
EC2108A	Electronics and Instrumentation	3	3
TOTAL OF THEORY		20	20
PRACTICAL			
MN2301	Mining Geology – I	3	2
MN2302	Mine Surveying – I	3	2
MN2303	Underground Mine Environment – I	3	2
TOTAL OF PRACTICAL		9	6
TOTAL FOR SEMESTER – III		29	26

Semester- IV

Course Code	Course Name	Contact Hours (L-T-P)	Credits
THEORY			
MN2201	Mining Geology –II	3	3
MN2202	Rock Mechanics	4	4
MN2203	Mining Machinery –II	3	3
AM2208A	Numerical Methods	3	3
EE2208A	Electrical Engineering –I	3	3
TOTAL OF THEORY		16	16
PRACTICAL			
MN2401	Mining Geology –II	3	2
MN2402	Rock Mechanics	3	2
EE2408A	Electrical Engineering	3	2
MN2403	Tour Report & Viva-Voce	-	2
TOTAL OF PRACTICAL		9	8
TOTAL FOR SEMESTER- IV		25	24
TOTAL FOR PART –II 50			

Semester-V

Course Code	Course Name	Contact Hours (L-T-P)	Credits
THEORY			
MN3101	Ground Control	3	3
MN3102	Underground Mine Environment – II	3	3
MN3103	Mine Surveying – II	3	3
MN3104	Underground Coal Mining – I	4	4
MN3105	Surface Mining – I	3	3
EE3108A	Electrical Engineering – II	3	3
TOTAL OF THEORY		19	19
PRACTICAL			
MN3301	Ground Control	3	2
MN3302	Underground Mine Environment –II	3	2
MN3303	Mine Surveying -II	3	2
TOTAL OF PRACTICAL		9	6
TOTAL FOR SEMESTER- V		28	25

Semester-VI

Course Code	Course Name	Contact Hours (L-T-P)	Credits
THEORY			
MN3201	Mineral Processing	4	4
MN3202	Environmental Management in Surface Mines	4	4
MN3203	Underground Coal Mining -II	3	3
MN3204	Surface Mining –II	3	3
MN3205	Computer Applications in Mining	3	3
	*Open Electives (Humanities)	3	3
TOTAL OF THEORY		20	20
PRACTICAL			
MN3401	Mineral Processing	3	2
MN3402	Environmental Management in Surface Mines	3	2
MN3403	Mining Machinery	3	2
TOTAL OF PRACTICAL		9	6
TOTAL FOR SEMESTER- VI		29	26
TOTAL FOR PART- III 51			

*** Open Electives**

HU3208A : History of Science and Technology HU3208B : Industrial and Organisational Psychology
 HU3208C : Environment and Ecology HU3208D : Energy Management HU3208E : Industrial Sociology
 HU3208F : Human Value

NB: Six weeks of training will be undertaken after VI semester, which will be evaluated in VII semester

Semester-VII

Course Code	Course Name	Contact Hours (L-T-P)	Credits
THEORY			
MN4103	Mining Machinery – III	3	3
MN4104	Mine Disasters	3	3
MN5103	Project Management	3	3
	*Elective – 1	3	3
	**Elective – 2	4	4
TOTAL OF THEORY		16	16
PRACTICAL			
MN4301	Computer Application in Mine Planning	3	2
MN4303	Seminar / Group Discussion	3	2
MN4304	Training Report and Viva-Voce	-	2
MN4331	***UG Project	6	4
TOTAL OF PRACTICAL		12	10
TOTAL FOR SEMESTER – VII		28	26

Note: ***Under graduate project will complete in VII Semester.

* Elective – 1 (From B. Tech.) ** Elective – 2 (From M.Tech.)

1. MN4102: Mine Economics
2. MN4106: Drilling & Blasting of Rock
1. MN5104: Eco-friendly Mining
2. MN5106: Geo-informatics
3. MN4107: Technology of Underground Excavation 3. MN5107: Reliability Engineering
4. MN4108: Numerical Methods in Geomechanics 4. MN5108: Safety and Risk Management in Mines

Semester – VIII

Course Code	Course Name	Contact Hours (L-T-P)	Credits
THEORY			
MN4201	Underground Metalliferous Mining	3	3
MN4202	Mine Legislation	4	4
MN5201	Underground Mine Planning	3	3
	* Elective – 1	3	3
	** Elective – 2	3	3
TOTAL OF THEORY		16	16
PRACTICAL			
MN4401	Underground Metalliferous Mining	3	2
MN5411	Rock Mechanics	3	2
MN4431	***PG Project / Dissertation	6	4
MN4432	Comprehensive Viva-Voce	-	2
TOTAL OF PRATICAL		12	10
TOTAL FOR SEMESTER – VIII		28	26
TOTAL FOR PART – IV 52			

Semester-IX

Course Code	Course Name	Contact Hours (L-T-P)	Credits
THEORY			
MN5101	Operations Research	3	3
	*Elective – I	3	3
	*Elective – II	3	3
	*Elective – III	3	3
TOTAL OF THEORY		12	12
PRACTICAL			
MN5301	Operations Research	3	2
MN5331	Seminar on Dissertation	-	5
MN5332	Dissertation Interim Evaluation	9	5
TOTAL OF PRACTICAL		12	12
TOTAL FOR SEMESTER – IX		24	24

Electives (From M.Tech.)

1.	MN5203:	Planning for Underground Mechanization
2.	MN5215:	Rockmass Structures
3.	MN5218:	Drilling Technology
4.	MN5224:	Global Environmental Issues
5.	MN5225:	Clean Coal Technology