Department of Mining Engineering

NEP courses for the batch admitted from AY 2024-25

Details of Departmental Compulsary (DC) Courses

S. No.	Course Code	Course Name	L-T-P	Credit	Course Type
		Departmental Compulsary (DC) Courses			
1	NMNC501	Computational Geomechanics and Ground Control	3-1-0	4	Theory
2	NMNC502	Computational Subsurface Ventilation and Environment	3-1-0	4	Theory
3	NMNC503	Risk and Workplace Safety Management	3-1-0	4	Theory
4	NMNC504	Computational Geomechanics and Ground Control Lab	0-0-3	1.5	Practical
5	NMNC505	Computational Subsurface Ventilation and Environment Lab	0-0-3	1.5	Practical
6	NMNC506	Numerical Modelling Lab	0-0-3	1.5	Practical
7	NMNC507	Geomechanics for Underground Space	3-1-0	4	Theory
8	NMNC508	Geomechanics Lab	0-0-3	1.5	Practical
9	NMNC509	Mine Surveying Techniques	3-1-0	4	Theory
10	NMNC510	Geographical Information System	3-1-0	4	Theory
11	NMNC511	Remote Sensing and Digital Image Processing	3-1-0	4	Theory
12	NMNC512	Remote Sensing and Image Processing Lab	0-0-3	1.5	Practical
13	NMNC513	GIS Lab	0-0-3	1.5	Practical
14	NMNC514	Advanced Surveying Lab	0-0-3	1.5	Practical
15	NMNC515	Mine Planning and Design	3-1-0	4	Theory
16	NMNC516	Mining Equipment Reliability, Maintainability, and Availability	3-1-0	4	Theory
17	NMNC517	Mass Production Mining Technology	3-1-0	4	Theory
18	NMNC518	Mine Simulation and Data Analytics lab	0-0-3	1.5	Practical
19	NMNC519	Computer Aided Mine Planning and Design Lab	0-0-3	1.5	Practical
20	NMNC520	Safety Health and Ergonomics Lab	0-0-3	1.5	Practical
21	NMNC521	Planning and Design for Tunnels and Caverns	3-1-0	4	Theory
22	NMNC522	Excavation Methods for Tunnels and Caverns	3-1-0	4	Theory
23	NMNC523	NATM and TBM Tunneling	3-1-0	4	Theory
24	NMNC524	Rock Excavation Lab	0-0-3	1.5	Practical
25	NMNC525	Geodesy and GNSS Survey	3-1-0	4	Theory
26	NMNC526	Microwave Remote Sensing	3-1-0	4	Theory
27	NMNC527	Computer Aided Mine Planning and Design	3-1-0	4	Theory
28	NMNC528	Microwave Remote Sensing Lab	0-0-3	1.5	Practical
29	NMNC529	Geospatial Data Modelling Lab	0-0-3	1.5	Practical
30	NMNC530	Mine Surveying Camp	0-0-3	1.5	Practical
31	NMNC595	Research Methodology	3-0-0	3	Theory
32	NMNC596	Research Methodology	3-0-0	3	Audit
33	NMNC597	Thesis	0-0-0	20	Non-contact
34	NMNC598	Thesis	0-0-0	20	Non-contact
35	NMNC599	Thesis	0-0-0	20	Audit

Details of Departmental Elective (DE) Courses

S. No.	Course Code	Course Name	L-T-P	Credit	Course Type
Departmental Elective (DE) Courses					
1	NMND501	Managerial Decision Making	3-0-0	3	Theory
2	NMND502	Geospatial Technologies for Natural Resources	3-0-0	3	Theory
3	NMND503	Modern Blasting Technology in Mining	3-0-0	3	Theory
4	NMND504	Analysis and Design of Slopes	3-0-0	3	Theory
5	NMND505	Design of Supports for Underground Excavations	3-0-0	3	Theory
6	NMND506	Elements of Mining Engineering	3-0-0	3	Theory
7	NMND507	UAV Data Mapping and Applications	3-0-0	3	Theory
8	NMND508	Mine Automation	3-0-0	3	Theory
9	NMND509	Mine Simulation and Data Analytics	3-0-0	3	Theory
10	NMND510	Modelling and Analysis of Geospatial data	3-0-0	3	Theory