

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
(Established by Andhra Pradesh Act No.30 of 2008)
Kukatpally, Hyderabad – 500 085, Andhra Pradesh (India)

B.TECH. MINING ENGINEERING

I YEAR

Code	Subject	L	T/P/D	Credits
	English	2	-	4
	Mathematics – I	3	1	6
	Engineering Mechanics	3	-	6
	Engineering Physics	3	-	6
	Engineering Chemistry	3	-	6
	Computer Programming	3	-	6
	Engineering Drawing	2	3	6
	Computer Programming Lab.	-	3	4
	Engineering Physics & Engineering Chemistry Lab	-	3	4
	English Language Communication Skills Lab.	-	3	4
	Engineering Workshop / IT Workshop	-	3	4
	Total	19	16	56

II YEAR I SEMESTER

Code	Subject	L	T/P/D	C
	Environmental Studies	4	-	4
	Probability and Statistics	4	-	4
	Elements of Electrical and Electronics Engineering	4	-	4
	Mechanical Technology	4	-	4
	Fundamentals of Geology	4	-	4
	Development of Mineral Deposits	4	-	4
	Electrical and Electronics Engineering Lab	-	3	2
	Geology Lab	-	3	2
	Total	24	6	28

II YEAR II SEMESTER

Code	Subject	L	T/P/D	C
	Mathematics-II	4	-	4
	Mechanics of Fluids and Hydraulic Machines	4	-	4
	Machine Drawing and Computer Aided Graphics	-	6	4
	Mechanics of Solids	4	-	4
	Mining Geology	4	-	4
	Drilling and Blasting	4	-	4
	Mechanics of Fluids and Hydraulic Machines Lab	-	3	2
	Mechanics of Solids Lab	-	3	2
	Total	20	12	28

III YEAR I SEMESTER

Code	Subject	L	T/P/D	C
	Managerial Economics and Financial Analysis	4	-	4
	Mine Surveying-I	4	-	4
	Mine Environmental Engineering-I	4	-	4
	Surface Mining Technology	4	-	4
	Underground Coal Mining Technology	4	-	4
	Mine Mechanisation-I	4	-	4
	Mine Surveying-I Lab	-	3	2
	Mine Environmental Engineering Lab	-	3	2
	Total	24	6	28

III YEAR II SEMESTER

Code	Subject	L	T/P/D	C
	Industrial Management	4	-	4
	Mine Surveying-II	4	-	4
	Underground Metal Mining Technology	4	-	4
	Mine Environmental Engineering-II	4	-	4
	Mine Mechanisation-II	4	-	4
	Open Elective Human Values and Professional Ethics Intellectual Property Rights Disaster Management	4	-	4
	Mine Surveying –II Lab	-	3	2
	Advanced Communication Skills Lab	-	3	2
	Total	24	6	28

IV YEAR I SEMESTER

Code	Subject	L	T/P/D	C
	Mineral Processing	4	-	4
	Rock Mechanics	4	-	4
	Operations Research	4	-	4
	Mine Legislation	4	-	4
	<u>Elective-I</u> Rock Slope Engineering Mine Subsidence Engineering Rock Excavation Engineering Rock Fragmentation Engineering Mine Economics	4	-	4
	<u>Elective-II</u> Computer Applications in Mining Mine Construction Engineering Tunneling Engineering Strata Control Technology	4	-	4
	Mineral Processing Lab	-	3	2
	Rock Mechanics Lab	-	3	2
	Total	24	6	28

IV YEAR II SEMESTER

Code	Subject	L	T/P/D	C
	Mine Ground Control	4	-	4
	<u>Elective-III</u> Planning of Surface Mining Project Planning of Underground Coal Mining Project Planning of Underground Metal Mining Project Mine Electrical Engineering	4	-	4
	<u>Elective-IV</u> Geological & Technological factors of Coal Gasification CBM, Shale Gas Mine Health & Safety Engineering Maintenance & Reliability Engineering Deep Seam Mining	4	-	4
	Industrial Training	-	-	2
	Seminar	-	6	2
	Project work	-	15	10
	Comprehensive Viva	-	-	2
	Total	12	21	28

Note: All End Examinations (Theory and Practical) are of three hours duration.

T-Tutorial L – Theory P – Practical/Drawing C – Credits