



GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY

(AUTONOMOUS)
Approved by AICTE, Accredited by NBA & NAAC 'A+' Grade, Recognized under 2(f) and 12(b) of UGC, Permanently Affiliated to JNTUK,
Kakinada.

GRBT-19

DEPARTMENT OF MINING ENGINEERING

4 Years B.Tech. (Mining Engineering) Course Structure : GRBT-19

I YEAR I SEMESTER

S. No.	Course Code	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19198101	BSC	Mathematics-I	3	0	0	3	30	70	100
2	19198102	HSMC	Communicative English I	3	0	0	3	30	70	100
3	19198103	BSC	Engineering Chemistry	3	0	0	3	30	70	100
4	1919894	MC	Professional Ethics & Human Values	2	0	0	0	100	-	-
5	19192105	ESC	Basic Electrical & Electronics Engineering	3	0	0	3	30	70	100
6	19193176	ESC	Engineering Graphics	1	0	3	2.5	30	70	100
7	19198111	HSMC	Communicative English Laboratory	0	0	3	1.5	50	50	100
8	19198112	BSC	Engineering Chemistry Laboratory	0	0	3	1.5	50	50	100
9	19198113	ESC	Basic Electrical & Electronics Engineering Lab	0	0	3	1.5	50	50	100
TOTAL				15	0	12	19	300	500	800
BSC = 7.5				ESC=7			HSMC=4.5			MC=0

L – Lecture T- Tutorial P – Practical C– Credits Int. – Internal Ext. - External

BOS- Chairman (MINING)
(Dr. D. Venkateswarlu)

University Nominee
(Dr. B. Suryannarayana Sastry)

Subject Expert
(Dr. S. Jayanthu)

Industrial Expert
(Mr. J. Charan Sainath)

BOS Member
(Mr. Prashant Kumar Nayak.)

BOS Member
(Mr. Niraj Kumar)

BOS Member
(Mr. A. Sandeep Kumar)

BOS Member
(Mr. Taviti Naidu)

BOS Member
(Mr. M.V. Krishna)

BOS Member
(Ms. P.N.V.L. SAILAJA)



DEPARTMENT OF MINING ENGINEERING

4 Years B.Tech. (Mining Engineering) Course Structure : GRBT-19

I YEAR II SEMESTER

S. No.	Course Code	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19198201	BSC	Mathematics-II	3	0	0	3	30	70	100
2	19198202	HSMC	Communicative English II	3	0	0	3	30	70	100
3	19198293	MC	Environmental Studies	2	0	0	0	100	-	-
4	19193204	ESC	Engineering Mechanics	2	1	0	3	30	70	100
5	19198205	BSC	Engineering Physics	3	0	0	3	30	70	100
6	19195206	ESC	Problem Solving & Programming in C	2	1	0	3	30	70	100
7	19198211	HSMC	Communicative English Laboratory -II	0	0	3	1.5	50	50	100
8	19198212	BSC	Engineering Physics Laboratory	0	0	3	1.5	50	50	100
9	19198213	ESC	Basic Engineering Workshop	0	0	3	1.5	50	50	100
10	19198214	ESC	Problem Solving & Programming Laboratory using C	0	0	3	1.5	50	50	100
TOTAL				15	2	12	21	350	550	900
BSC=7.5		ESC=9		HSMC=4.5		MC=0				

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(Dr. D. Venkateswarlu)

University Nominee
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DEPARTMENT OF MINING ENGINEERING

4 Years B.Tech. (Mining Engineering) Course Structure : GRBT-19

II YEAR I SEMESTER

S. No.	Course Code	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19169301	BSC	Mathematics-III	3	0	0	3	30	70	100
2	19169301	ESC	Fluid Mechanics & Hydraulic Machinery	2	1	0	3	30	70	100
3	19160303	PCC	Mine Surveying	2	1	0	3	30	70	100
4	19160303	PCC	Introductory Geology	3	0	0	3	30	70	100
5	19160303	PCC	Development of Mineral Deposits	3	0	0	3	30	70	100
6	19160303	PCC	Drilling & Blasting	2	1	0	3	30	70	100
7	19160387	MC	Design Thinking & Product Innovation	2	0	0	0	100	-	-
8	19163311	ESC	Fluid Mechanics & Hydraulic Machinery Laboratory	0	0	3	1.5	50	50	100
9	19163311	PCC	Mine Surveying Laboratory	0	0	3	1.5	50	50	100
TOTAL				17	3	6	21	380	520	800
BSC = 3				ESC = 4.5		PCC = 13.5		MC=0		
L – Lecture				T- Tutorial		P – Practical		C– Credits		Int. – Internal
										Ext. - External

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Niraj
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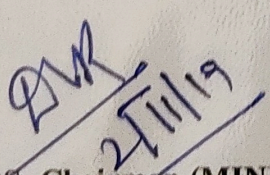
DEPARTMENT OF MINING ENGINEERING

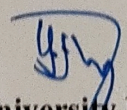
4 Years B.Tech. (Mining Engineering) Course Structure : GRBT-19

II YEAR II SEMESTER

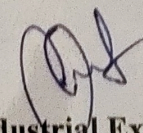
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				L	T	P		Int.	Ext.	Total
1	19169401	BSC	Mathematics-IV (Numerical Methods & Probability and Statistics)	3	0	0	3	30	70	100
2	19163466a	OEC	Open Elective-I	3	0	0	3	30	70	100
3	19160402	PCC	Adv. Mine Surveying	2	1	0	3	30	70	100
4	19160402	PCC	Surface Mining	2	1	0	3	30	70	100
5	19160402	PCC	Underground Coal Mining	3	0	0	3	30	70	100
6	19160402	PCC	Mining Geology	3	0	0	3	30	70	100
7	19160411	PCC	Adv. Mine Surveying Lab.	0	0	3	1.5	50	50	100
8	19160412	PCC	Mining Geology Lab.	0	0	3	1.5	50	50	100
TOTAL				16	2	6	21	280	520	800
BSC = 3 ESC = 0 PCC = 15 OEC = 3										

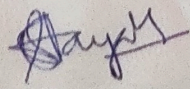
L – Lecture T- Tutorial P – Practical C– Credits Int. – Internal Ext. - External

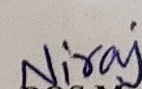

BOS- Chairman (MINING)
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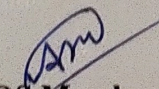

University Nominee
(Dr. B. Suryannarayana Sastry)

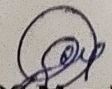
Subject Expert
(Dr. S. Jayanthu)

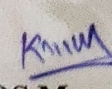

Industrial Expert
(Mr. J. Charan Sainath)

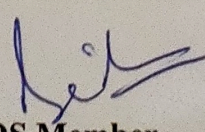

BOS Member
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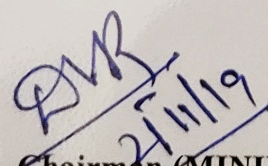
DEPARTMENT OF MINING ENGINEERING

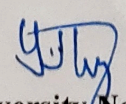
4 Years B.Tech. (Mining Engineering) Course Structure : GRBT-19

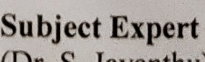
III YEAR I SEMESTER

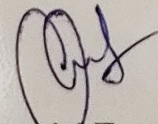
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				L	T	P		Int.	Ext.	Total
1	19160501	HSMC	Industrial Engineering Management	2	1	0	3	30	70	100
2	19163566a	OEC	Open Elective-2	3	0	0	3	30	70	100
3	19160501	PCC	Mine Systems Engineering	2	1	0	3	30	70	100
4		PEC	Professional Elective-1	3	0	0	3	30	70	100
5	19163566a	PCC	Mine Ventilation	2	1	0	3	30	70	100
6	19163566a	MC	Constitution of India	2	0	0	0	100	-	-
7	19160504	PCC	Mine Planning & Design	3	0	0	3	30	70	100
8	19160512	PCC	Mine Ventilation Laboratory	0	0	3	1.5	50	50	100
9	19160512	PCC	Mine Planning & Design Laboratory	0	0	3	1.5	50	50	100
10	19160504	PR	Internship	0	0	2	2	100	0	100
TOTAL				17	3	8	23	480	520	900
PEC = 3 HSMC = 3 PCC = 12 OEC = 3 PR=2										

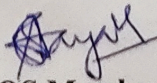
L – Lecture T- Tutorial P – Practical C– Credits Int. – Internal Ext. - External

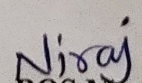

BOS-Chairman (MINING)
(Dr. D. Venkateswarlu)

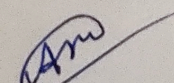

University Nominee
(Dr. B. Suryannarayana Sastry)

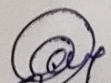

Subject Expert
(Dr. S. Jayanthu)

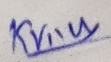

Industrial Expert
(Mr. J. Charan Sainath)

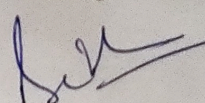

BOS Member
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DEPARTMENT OF MINING ENGINEERING

4 Years B.Tech. (Mining Engineering) Course Structure : GRBT-19

III YEAR II SEMESTER

S. No.	Course Code	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19160601	PCC	Rock Mechanics	2	1	0	3	30	70	100
2	19160602	PCC	Mineral Processing	2	1	0	3	30	70	100
3		PEC	Professional Elective-2	2	1	0	3	30	70	100
4	19160603	PCC	Mine Transportation	2	1	0	3	30	70	100
5	19169686	HSMC	Soft Skills	0	0	3	1.5	50	50	100
6	19160621	PR	Community Service Oriented Project	0	0	1	0.5	100	--	--
7	19163665a	OEC	Open Elective - 3	3	0	0	3	30	70	100
8	19160611	PCC	Rock Mechanics Laboratory	0	0	3	1.5	50	50	100
9	19160611	PCC	Mineral Processing Laboratory	0	0	3	1.5	50	50	100
TOTAL				11	4	10	20	400	500	800
PEC = 3		HSMC = 1.5	PCC = 12	OEC = 3	PR = 0.5					
L – Lecture		T- Tutorial	P – Practical	C– Credits	Int. – Internal		Ext. - External			

BOS- Chairman (MINING)
(Dr. D. Venkateswarlu)

Industrial Expert
(Mr. J. Charan Sainath)

BOS Member
(Mr. A.Sandeep Kumar)

IV YEAR I SEMESTER
University Nominee
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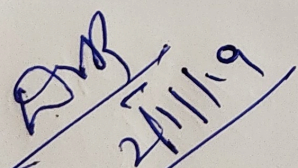
DEPARTMENT OF MINING ENGINEERING

4 Years B.Tech. (Mining Engineering) Course Structure : GRBT-19

IV YEAR I SEMESTER

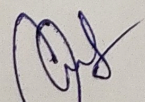
S. No.	Course Code	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19160701	PCC	Mine Legislation	3	0	0	3	30	70	100
2		PEC	Professional Elective-3	3	0	0	3	30	70	100
3	19160702	PCC	Mining Machinery	2	1	0	3	30	70	100
4	19160703	PCC	Computer Applications in Mining	3	0	0	3	30	70	100
5	19169765_	OEC	Open Elective-4	3	0	0	3	30	70	100
6	19169765_	MC	Intellectual Property Rights	2	0	0	0	100	-	-
7	19169765_	PCC	Computer Applications in Mining Laboratory	0	0	3	1.5	50	50	100
8	19160712	PCC	Mining Machinery Laboratory	0	0	3	1.5	50	50	100
9	19160721	PR	Mini Project- Technical seminar & report	0	0	2	2	100	-	100
TOTAL				16	1	8	20	450	450	800
PEC = 3 MC = 0 PCC = 12 OEC = 3 PR=2										

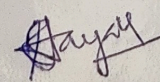
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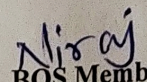

BOS- Chairman (MINING)
(Dr. D. Venkateswarlu)

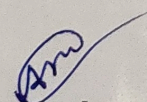

University Nominee
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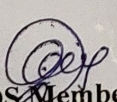
Subject Expert
(Dr. S. Jayanthu)

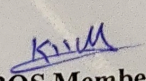

Industrial Expert
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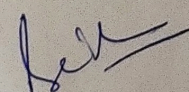

BOS Member
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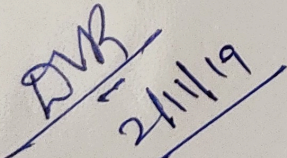
DEPARTMENT OF MINING ENGINEERING

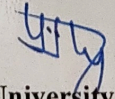
4 Years B.Tech. (Mining Engineering) Course Structure : GRBT-19

IV YEAR II SEMESTER

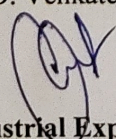
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				L	T	P		Int.	Ext.	Total
1	19160861	PEC	Professional Elective-IV	3	0	0	3	30	70	100
2	19160862	PEC	Professional Elective-V	2	1	0	3	30	70	100
3	19160841	PR	Project	0	0	18	9	80	120	200
TOTAL				5	1	18	15	140	260	400
PEC = 03		PCC = 03	PR = 09							

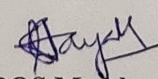
L – Lecture T- Tutorial P – Practical C– Credits Int. – Internal Ext. - External

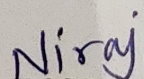

BOS- Chairman (MINING)
(Dr. D. Venkateswarlu)

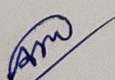

University Nominee
(Dr. B. Suryannarayana Sastry)

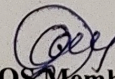
Subject Expert
(Dr. S. Jayanthu)

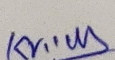

Industrial Expert
(Mr. J. Charan Sainath)

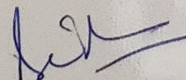

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BOS Member
(Mr. Taviti Naidu)


BOS Member
(Mr. M.V. Krishna)

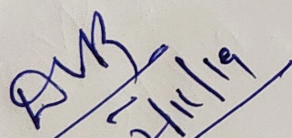

BOS Member
(Ms. P.N.V.L. SAILAJA)

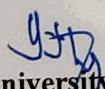
DEPARTMENT OF MINING ENGINEERING

4 Years B.Tech. (Mining Engineering) Course Structure : GRBT-19

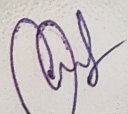
Professional Electives Courses

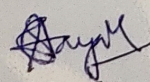
Professional Electives	Planning & Design	Economics	Ground Control	Method of Working	Safety and Environmental Science
ELECTIVE-I	Open Pit Slope Analysis and Design	Mine Valuation	Rock Excavation Engineering	Underground Metal Mining	Mine Safety Engineering
ELECTIVE-II	Planning of Surface Mines	Enterprise Resource Planning	Mine Strata Control	Innovative Mining Systems	Environmental Pollution & Control
ELECTIVE-III	Mine Construction Engineering	Geo statistics	Mine Subsidence Engineering	Tunneling Engineering	Environmental Impact Assessment in Mines
ELECTIVE-IV	Planning of Underground Metal Mines	Mineral Economics	Rock Slope Engineering	Dimensional Stone Mining	Environmental Management in Mines
ELECTIVE-V	Tailings & Overburden Management	Mine Management	Rock Fragmentation Engineering	Deep Sea Mining	Mine Hazards & Rescue

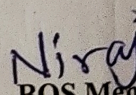

BOS- Chairman (MINING)
(Dr. D. Venkateswarlu)

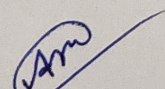

University Nominee
(Dr. B. Suryannarayana Sastry)

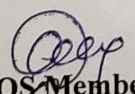
Subject Expert
(Dr. S. Jayanthu)

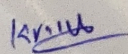

Industrial Expert
(Mr. J. Charan Sainath)

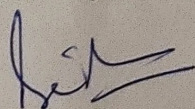

BOS Member
(Mr. Prashant Kumar Nayak.)


BOS Member
(Mr. Niraj Kumar)


BOS Member
(Mr. A. Sandeep Kumar)


BOS Member
(Mr. Taviti Naidu)


BOS Member
(Mr. M.V. Krishna)


BOS Member
(Ms. P.N.V.L. SAILAJA)



DEPARTMENT OF MINING ENGINEERING

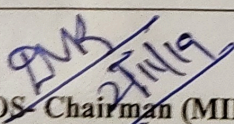
4 Years B.Tech. (Mining Engineering) Course Structure : GRBT-19

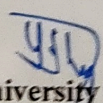
List of Open Elective Courses
(Common to all Branches)

Notes:

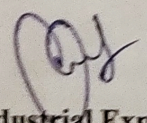
- Each branch shall have option to select any open elective course (OEC) from each column corresponding to the slot in Programme Structure of that particular branch.
- The OEC selected shall be other than that offered by the parent department.
- The OECs given in column 4 i.e. Open Elective – IV relates to courses of HSMC type.

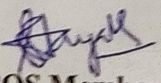
OPEN ELECTIVE-I	OPEN ELECTIVE-II	OPEN ELECTIVE-III	OPEN ELECTIVE-IV
MECH - Robotics	MECH - MEMS	MECH – Nano Technology	Management Economics & Financial Analysis
CSE- Operating Systems	CSE- Information Security	CSE – Human Computer Interaction	Entrepreneurship Qualities for Engineers
EEE- Utilization of Electrical Energy	EEE – Energy management	EEE – Renewable Energy Resources	Principles of Management
ECE- Internet of Things	ECE – Digital Image Processing	ECE – Data Communication	Financial Management for Engineers
CE- Environmental Pollution & Control	CE – Solid Waste Management	CE – Global Environment: Problems & Policies	Operations management
AME – Basic Automobile Engineering	AME – Hybrid and Electric Vehicles	AME – Modern Vehicle Technology	Digital Marketing
MM – Introductory mining	MM – Sustainable mining practices	MM- Remote sensing & GIS in Mining	Total Quality Management

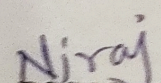

BOS- Chairman (MINING)
(Dr. D. Venkateswarlu)

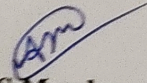

University Nominee
(Dr. B. Suryanarayana Sastry)

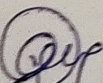
Subject Expert
(Dr. S. Jayanthu)

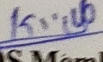

Industrial Expert
(Mr. J. Charan Sainath)

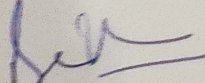

BOS Member
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