# PROGRAM STRUCTURE I SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
1	201HS1T01	Communicative English		<b>√</b>		Students are able to demonstrate communication skills to express fluently in both written as well as oral form of language which is very much essential for the career growth.
2	201BS1T01	Differential equations and Linear algebra		1		Students are able to demonstrate problem solving skills by modelling physical phenomenon using ordinary differential equations, system of linear equations in various engineering disciplines.
3	201BS1T02	Engineering Physics				
4	201ES1T03	Essential Electrical and Electronics Engineering	~			Students are able to acquire skills related to crop management practices adopted for increasing the crop productivity enabling them to be employed as agriculture field officer.
5	201ES1T05	Engineering Graphics		1		This subject helps the student to demonstrate technical skills as they have knowledge about engineering drawing and AutoCAD software for orthographic projections and isometric projection.
6	201HS1L01	Communicative English Lab		1		Students are able to demonstrate technical skills to express fluently in both written as well as oral form of language which is very much essential for the career growth.
7	201BS1L01	Engineering Physics Lab	1	•		

8	201ES1L03	Essential Electrical and Electronics Engineering Lab	~	Students are able to demonstrate technical skill of crop management practices adopted for increasing the crop productivity.
9	201MC1T01	Environmental Science	Waste 18.	

### II SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
10	201BS2T05	Partial Differential Equations and Vector Calculus		~		Students are able to demonstrate problem solving skills by modelling physical phenomenon using partial differential equations, Vector differentiation and integration, their applications in various engineering disciplines.
11	201BS2T08	Chemistry of Materials				
12	201ES2T06	Engineering Mechanics		1	4.00	Students are able to acquire skills related to principles of friction, kinetics, kinematics, resolving forces, trusses etc which forms the crux of design sciences.
13	201ES2T08	Programming for Problem Solving Using C	1			Students are able to acquire technical skills related to demonstrate fundamental algorithmic problems that enable them to be employed as software developers.
14	201ES2L07	Engineering Workshop	-		Version of	Students are able to acquire programming skills related to OOP's, and Basic Data structure like stacks, queues, linked lists, trees and tries which enable them to employed as a product developer.
15	201ES2L12	Computer Aided Drafting Lab		1		Students are able to acquire skills related to construction orthographic and isometric projection of machine parts using AUTOCAD software.
16	201HS2L02	Professional Communications Skills Lab		<b>✓</b>		Students are able to demonstrate communication skills to express fluently in both written as well as oral form of language which is very much essential for the career growth
17	201BS2L05	Engineering Chemistry Lab				

18	201ES2L10	Programming for Problem Solving Using C Lab			Students are able to demonstrate technical skill of identifying, specifications of various devices, their symbols. They can recognise and make use of various instruments, like CRO, FG etc
19	201MC2T02	Constitution of India	,	✓	Students are able to apply the knowledge of economic and financial management enabling them to become an entrepreneur in any domain of their choice.

#### III SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
20	201BS3T14	Numerical Methods and Integral Transforms		<b>√</b>		Students are able to demonstrate problem solving skills by modelling physical phenomenon using Numerical Methods and integral transforms in various engineering disciplines.
21	201ES3T17	Basic Mechanical Engineering	*			Students are able to acquire skills related to design, synthesize and evaluate the performance of electric circuits/networks enabling them to be employed for designing and manufacturing of electrical/ electronic equipment.
22	201MI3T01	Mining Geology		<b>√</b>		This subject helps the student to improve their skills as they will understand different equipment and compare accuracy levels and to study several experiments and conversant with it.
23	201MI3T02	Mine Surveying		✓		This subject helps the student to improve their skills as they will understand different equipment and compare accuracy levels and to study several experiments and conversant with it.
24	201MI3T03	Development of Mineral Deposits		√ ·		This subject improve the skills of the student as it helps the student to determination of different levels and level difference and computation of areas, volumes which includes determination of capacity of reservoirs, volumes of barrow pits. This subject help the student to make a career as surveyor or asst. surveyor in the mining field.
25	201MI3L01	Geology Lab	~			Students are able to acquire skills related to mechanical behaviour of materials under different

				loading conditions enabling them to be employed as a materials engineer.
26	201MI3L02	Basic Mechanical Engineering Lab		This subject helps the student to demonstrate their technical skills as students were able to know the properties of minerals, different faults of minerals and economic justification of minerals. This subject helps the mining students to have ample knowledge about minerals so that they can participate as an independent consultant in buying and selling of minerals.
27	201MI3L03	Mine Surveying Lab -I	~	This course helps the students to demonstrate their technical skills by making them learn the basic principles of fluid flow, measurement of pressure, discharge and velocity of fluid flow. It also help the students to have practical exposure on the performance evaluation methods of various flow
28	201SO3L09	Geo-Statistics through SURPAC	-	Students are able to apply technical skills related to HTML, HTML5, CSS and CSS3
29	201MC3T03	Biology for Engineers		

### IV SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
30	201BS4T17	Complex Variables and Statistical Methods		<b>~</b>		Students are able to demonstrate problem solving skills by analytical properties of functions of complex variables and their applications and also about random variables, sampling theory, test of hypothesis.
31	201MI4T04	Fundamentals of Rock Mechanics		<b>√</b>		This subject helps the students to improve technical skills as they were able to understand triangulation survey using theodolite, area using total station, distance, gradient, difference, height between two inaccessible points using total stations.
32	201MI4T05	Surface Mining		<b>√</b>		This subject demonstrate the technical skills of student by making them learn the basic principles of stress and strain, properties of rocks and their determination and also make them aware of failure theories of rock.
33	201MI4T06	Underground Coal Mining Technology		✓		This subject demonstrate the technical skills and knowledge of students as they get to know about Opencast Mining, Ground Water control, use of drilling machines, Smooth Blasting and Pre-splitting, Mining methods and selection of high angle conveyor and In-Pit Crusher Conveyor System. This subject helps them to get placed in the surface mines as drilling & blasting expert or a surface mining engineer.
34	201BS4T18	Managerial Economics and Financial Accountancy		~		This subject helps the student to acquire skills to understand managerial economic concept, Break even concept, profit & loss concept and balance sheet of an enterprise which enable them to be employed in the field

				of accounting and trading related jobs in the mines.	
35	201MI4L04	Rock Mechanics Lab	~	This course demonstrate the technical skills of the by giving them knowledge about life cycle of ventilation, lighting and permanent lining of under mines. It also gives knowledge about modern technical shaft sinking.	mines ground
36	201MI4L05	Mine Surveying Lab -II	~	This subject helps the students to improve their te skills as they will understand geotechnical enging which will provide an understanding for the assessing Rock mass characterization based on Rock mass pro	neering
37	201SC4L20	Data Analytics for Mining using Python	<b>✓</b>	Students area able to acquire technical skills rela JavaScript and XML	ated to
38	201MC4T04	Essence of Indian Traditional Knowledge			

### V SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
39	191MI5T09	Mine Systems Engineering		<b>*</b>		This subject helps the student to demonstrate technical skills as they will able to formulate real-world problems involving decision making, Linear programming problem, transportation and assignment problems also they were able to solve dynamic programming &simulation techniques in real-world problems.
40	191MI5T10	Underground Metal Mining Technology		*		This subject helps the student to demonstrate their technical skills as they will understand the peculiarities and limitations of metal mining, familiar with different stopping methods, design and planning of stopping methods. Students can be placed in different metal mining companies by possessing a depth knowledge in this subjects.
41	191MI5T11	Mine Environment & Ventilation Engineering		1		This subject enhance the skill of students to understand atmosphere and mine atmosphere conditions, heat and humidity levels in mines and controlling method. It also help students to know about ventilation standards planning and layout.
42	191MI5T12	Mine Machinery		1		This subject helps the student to demonstrate their technical skills as they will able to know surface and pit bottom layouts, various coal face machinery. It also upgrade the skills of students as they will able to know the design and construction details of excavating & transporting equipment's used in surface mines.
43	191MI5E02	Environmental Impact Assessment	1			Students are able to acquire skills related to assessment of the impact of any developmental activity in any sector of the environment and mitigation of negative impacts in the

						environment enabling them to be employed in as environmental managers/engineers.
44	191MI5E03	Planning of Underground Coal Mining Project		~		This subject helps the students to understand different methods of coal mining, advantages and disadvantages which is analyzed the logical application of choice of mining methods can be evaluated in the mines.
45	191MI5E04	Sustainable Mining		~		This subject helps the student to demonstrate technical skills as they were able to know about different stages of EIA, special methods and components of EIA and assessment of impacts air, water, soil, noise biological, socio & cultural environments.
46	191MI5E01	Drilling & Blasting		~		This subject helps the students to demonstrate their technical skills as they will get to know the theory of rock breaking, and its applications by using various types of rock drilling and blasting methods.
47	191CE5O01	Basic Concrete Technology	✓			Students are able to acquire cognitive skills related to properties of concrete, design and test the concrete useful in constructional activities enabling them to be employed in constructional sector.
48	191EE5O01	Electrical Safety		·		Students are able to demonstrate safety skills by providing knowledge on hazards with growing penetration of electrical devices in strategic areas including Space, mining and Nuclear energy.
49	191EE5O02	Electrical Materials		-		Students are able to demonstrate technical skills in manufacturing of the electrical components depending on the application.
50	191EE5O03	Basic Electrical Measurements	<b>~</b>		•	Students are able to acquire skills related to various types of electrical parameters that enable them to get employed in core (electrical) industry/company related to measurements of electrical parameters.

51	191ME5O01	Renewable Energy Sources	<b>✓</b>		Students are able to acquire skills related to solar, wind and bio-mass energy resources and conversion principles and techniques of various renewable resources.
52	191ME5O02	Fundamentals of Mechanical Engineering	<b>√</b>		Students are able to acquire skills related to concepts of fundamentals of thermal, manufacturing and design fields in mechanical engineering.
53	191ME5O03	Supply Chain Management	<b>*</b>		The students are able to acquire skills related to cost benefit analysis of different supply chains, designs which enable them to be employed in Marketing department of manufacturing and service based companies
54	191ME5O04	3D Printing	<b>*</b>		Students are able to acquire skills on basic knowledge of various additive manufacturing processes and enabling them to be employed in manufacturing companies.
55	191ME5O05	Entrepreneurship Development and Incubation	✓		Students are able to acquire skills on basic knowledge on concepts of entrepreneurship development.
56	191EC5O01	Signals and Systems		-	Students are able to acquire skills related to mathematics of signal processing that aids them in getting jobs in industries that use X-rays, MRIs and CT scans, allowing medical images to be analysed and deciphered by complex data processing techniques.
57	191EC5O02	Digital Electronics and Logic Design	<b>*</b>		Students are able to acquire skills related to design, and synthesize basic of digital ckts enabling them to be employed for designing and manufacturing of electronic equipment.
58	191EC5O03	Semi conductor devices	✓ .		Students are able to acquire skills related to the various power electronic drives which enables them to get employed in semiconductor based industries such as in communications, computing, health care, military systems, transportation, clean energy, etc.

59	191CS5001	Data Structures	<b>✓</b>		Students are able to acquire technical skills related to demonstrate fundamental algorithmic problems that enable them to be employed as software developers
60	191CS5001	Object Oriented Programming through C++	<b>√</b>		Students are able to acquire skills related to concepts of object-oriented programming and process of data file manipulations using C++, enabling them to be employed as software developers.
61	191CS5O03	Java Programming	<b>~</b>		Students are able to acquire skills related to java programming enabling them to be employed as software developers.
62	191CS5O04	R Programming	<b>√</b>		Students are able to acquire skills related to R commands, Graphical representation of data sets, and visualization Techniques and also enabling them to be employed for Data analyst
63	191IT5O01	Database Management Systems	<b>√</b>		Students are able to acquire skills related to Writing SQL Queries, implement normalization techniques and apply transaction processing techniques enabling them to be employed as a Database Administrator.
64	191IT5O02	Computer Graphics	<b>✓</b>		Students are able to demonstrate technical skill to develop graphical applications using line, polygon, curve drawing and clipping algorithms, design 2d and 3d applications.
65	191PT5O01	Process Intensification in Petroleum Industry		1	Students are able to demonstrate technical skill of characterizing different intensifications, modelling and analysis of process in Petroleum Industry.
66	191PT5O02	Fundamentals of Petroleum Industry		1	Students are able to demonstrate technical skill of characterizing different streams, modelling and analysis of petroleum industry.
67	191AG5O01	Basic Crop Production Practices	. 🗸		Students are able to acquire skills related to production practices and management techniques of agricultural and horticultural crops enabling them to be employed as

		4				agricultural field manager
68	191MI5L04	Mine Environment & Ventilation Engineering Lab		· •		This subject demonstrate students to improve technical skills as students will familiar with detection of different gases using deferent methods detectors and multi gas detector, to find flammable index of coal dust and understand the rescue and recovery operations using different rescue apparatus.
69	191HS5T16	Employability Skills – III	~			This subject helps the students to acquire skills to be placed in a company as it will impart employability skills in students, which will enable the students to feel comfortable to face several competitive examinations with confidence and competence.
70	191PR5P02	Socially Relevant Project	~			Students will be able to demonstrate problem identification, analysis, design solutions or applications in electronics and communication domain through the acquired technical, cognitive, communication and creative skills to address societal needs.
71	191MC5A08	Intellectual Property Rights and Patents	in the second		<b>*</b>	It helps the graduates safe guard the IP and innovations at their place of work.

#### VI SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
72	191MI6T13	Mineral Processing Technology		<b>*</b>		This subject help the students to enhance the technical skills of mining engineering students as they will know different mineral processing techniques and also they will get to know about different type of fuel technology. This subject helps the mining student to get placed in different process related plants.
73	191MI6T14	Mine Hazards & Rescue		<b>*</b>		Subject will helps the student to demonstrate their technical skills as they were able to understand the fundamentals of mines fire, causes of mine explosion, reasons for inundation and rescue procedures in mining.
74	191MI6T15	Environmental Management in Mines		<b>√</b>		Subject helps the student to demonstrate technical skills as they able to understand environmental issues in mining, causes of air and water pollution, mine reclamation and environmental impact due to mining
75	191MI6E06	Mine Health & Safety Engineering		1		This subject demonstrates the technical skills of different aspects of mine health and safety related problems also it create awareness of the hazardous effect of mining in mining workers health.
76	191MI6E07	Planning of Underground Metal Mining Project		<b>√</b>		This subject helps the student to understand different mining methods in underground metal mining that will help them to know what types of stopping methods can be adopted to different types of mineral deposits.
77	191MI6E05	Green Mining				Subject helps the student to demonstrate technical skills as they were able to understand importance of green mining, mine waste management, mine closure planning and usage of renewable energy in mines.

78	191MI6E08	Rock Fragmentation Engineering	~		This subject demonstrate technical skills of the students by making them know the estimation of rock mass strength, its behaviour during excavation, types of drilling and blasting methods depend on the rock mass characterization.
79	191MI6E10	Environmental Pollution and Control	<b>√</b>		Subject demonstrate technical skills of the student as they will able to understand the environmental issues in mining, various causes of air and water pollution, mine reclamation and environmental impact assessment.
80	191MI6E11	Planning of Surface Mining Project	✓		This subject helps the student to improve their skills as here entire phasing and sequencing of equipment planning, selection components are discussed for the optimization of the production and increasing the production cycle coupled with financial analysis.
81	191MI6E09	Deep Sea Mining	· ·		Subject demonstrate technical skills as they were able to understand marine environment and profile of sea, marine sediments and continental slope, methods of off shore exploration of oil and gas and deep sea bed mining.
82	191MI6E12	Rock Excavation Engineering	~		This subject demonstrate technical skills of the students by making them know the estimation of rock mass strength, its behaviour during excavation, types of drilling and blasting methods depend on the rock mass characterization.
83	191CE6O02	Disaster Management	· /		Students are able to demonstrate technical skill of characterizing various disasters occurring in the environment and apply them in various disciplines of day to day life
84	191EE6O04	Energy Audit and Conservation Management		-	The course focuses on the loss and profit studies and other company maintenance actives, creates the intrust among the students to have own company.

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85	191EE6O05	Non-Conventional Energy Sources	<b>√</b>			Students are able to acquire skills related to various types of pivotal role in the development of a sustainable energy supply enabling the students to get employed in renewable energy generation sector.
86	191EE6O06	Instrumentation	~			Students are able to acquire skills related to various types of electrical instruments that enable them to get employed in core (electrical) industry/company related to instrumentation of electrical parameters.
87	191ME6O06	Solar Energy Utilisation	<b>√</b>			Students are able to acquire skills to understand the concepts of robot kinematics, Dynamics and trajectory planning enabling them to be employed in robot manufacturing industries
88	191ME6O07	Basic Thermodynamics and Heat Transfer		✓		Students are able to acquire skills to understand the concepts of bio medical instrumentation and can be employed in fabrication of bio medical instruments.
89	191ME6O08	Introduction to Hydraulics and Pneumatics	¥	✓ .	*	Students are able to demonstrate problem solving skills in analyzing the hydraulic and pneumatic systems
90	191ME6O09	3D Printing	·			Students are able to acquire skills on basic knowledge of various additive manufacturing processes and enabling them to be employed in manufacturing companies.
91	191ME6O10	Robotics	·			Students are able to acquire skills to understand the concepts of robot kinematics, Dynamics and trajectory planning enabling them to be employed in robot manufacturing companies
92	191ME6O11	Management Science			1	Students are able to apply the knowledge of economic and financial management enabling them to become an entrepreneur in any domain of their choice.
93	191ME6O12	Entrepreneurship Development and	y .	- 2	· ·	Students are able to acquire skills to understand and apply the business plan for preparation and evaluation of project and

		Incubation				enabling them to be employed as a project engineer in various organizations.
94	191EC6O04	Biomedical Instrumentation	~			Students are able to acquire skills to understand and apply the biomedical instrumentation enabling them to be employed in various organizations, which developed and fabricate biomedical instruments like ECG etc.
95	191EC6O05	ECAD Tools	<b>/</b>			Students are able to acquire skills related to ECAD tools, enabling them to be employed as Design engineers
96	191CS6O05	Python Programming	·			Students are able to acquire skills related to python programming, enabling them to be employed as software developers.
97	191IT6O03	Computer Organization	~			Students are able to acquire technical skills which help them to work with the internal organization and functioning of Computer System and enabling them to get employed in the hardware sectors of computers.
98	191IT6O04	AI Tools & Techniques	1		*	Students are able to demonstrate technical skill of searching techniques used in AI, Expert systems, Knowledge representation and fuzzy logic.
99	191IT6O05	Robotic Process Automation	1			Students are able to demonstrate technical skill to develop applications using UI Path Programming and extraction techniques to deploy robot configurations
100	191PT6O03	Unconventional Hydrocarbon Resources		✓		Students are able to demonstrate technical skill of characterizing different unconventional resources, modelling and analysis of reserves.
101	191PT6O04	Asset Management			1	Students are able to demonstrate Competency in the domain of Integrated asset management enabling them to become an entrepreneur.
102	191AG6O02	Weather forecast in Agriculture				Students are able to acquire skills related to biomass and agrochemical conversion techniques, biomass production and

			✓		bio-diesel production enabling them to be employed in any bio mass energy sector.
103	191AG6O03	Bio-energy systems design and applications	<b>✓</b>		Students are able to acquire skills related to biomass and agrochemical conversion techniques, biomass production and bio-diesel production enabling them to be employed in any bio mass energy sector.
104	191MI6L05	Mine Planning & Design Lab		~	This subject demonstrate technical skills of students by letting them know creation and utilization of data base for various studies and applications of the same for planning & design of mining projects.
105	191MI6L06	Mineral Processing Lab		<b>✓</b>	Mineral Processing lab helps the students to demonstrate technical skills by giving them hands-on experience to the various laboratory techniques and procedures of mineral processing such as sampling, screening, crushing, grinding, etc which helps them to get placed in different process industry.
106	191HS6T07	Employability Skills – IV	~		This subject helps the students to acquire skills to be placed in a company as it will impart employability skills in students, which will enable the students to feel comfortable to face several competitive examinations with confidence and competence.
107	191MC6A09	Professional Ethics and Human Values		<b>V</b>	This subject help the students to demonstrate their skills as they inculcate human values to grow as responsible human beings with proper personality and helps them to maintain ethical conduct and discharge their professional duties.

### VII SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
108	171MI7T17	Mine Economics		1		This subject helps the student to demonstrate technical skills as they are able to understand the estimation and valuation of mineral deposits and they will possess knowledge about project appraisal, finance and accounting.
109	171MI7T18	Mine Health and Safety Engineering		~		This subject demonstrates the technical skills of different aspects of mine health and safety related problems also it create awareness of the hazardous effect of mining in mining workers health.
110	171MI7T19	Mine Legislation and General Safety		~		This subject is vital and important subject of mining as it demonstrate the technical skills by provides an insight to various laws, rules and Acts related to Mines Safety and mining legislation. This subject will help the students to qualify different DGMS certification exam of Mines Manager.
111	171MI7T20	Mine Management	1			This subject helps the students to acquire skills related to mine management, project management and total quality management enabling them to place in different mining company.
112	171MI7E10	Planning of UGMM Project		<b>√</b>		This subject helps the student to understand different mining methods in underground metal mining that will help them to know what types of stopping methods can be adopted to different types of mineral deposits.
113	171MI7E11	Planning of UGCM Project		✓		This subject helps the students to understand different methods of coal mining, advantages and disadvantages which is analysed the logical application of choice of mining methods can be evaluated in the mines.

120	171MI7P01	Industry Oriented	<b>✓</b>	Students will be able to demonstrate problem identification,
119	171ES7L16	Mechanical Engineering Lab		This course helps the students to demonstrate their technical skills by making them learn the basic principles of fluid flow, measurement of pressure, discharge and velocity of fluid flow. It also help the students to have practical exposure on the performance evaluation methods of various flow measuring equipment, hydraulic turbines and pumps.
118	171MI7L07	Mine Planning and Design Lab		This subject demonstrate technical skills of students by letting them know creation and utilization of data base for various studies and applications of the same for planning & design of mining projects.
117	171MI7E15	Mine Blasting operation	*	This subject demonstrate technical skills as students were able to understand blasting methods and the design related to it.
116	171MI7E14	Advance Underground Coal Mining Technology		This subject demonstrate skills that help the student to understand the extraction of thick seam mining methods, problems and issues on multiple seam mine workings, design of underground workings and extraction of locked up pillars
115	171MI7E13	Mine mechanization		This subject helps the student to demonstrate their technical skills as they will able to know surface and pit bottom layouts, various coal face machinery. It also upgrade the skills of students as they will able to know the design and construction details of excavating & transporting equipment's used in surface mines.
114	171MI7E12	Planning of Surface Mining Project	~	This subject helps the student to improve their skills as here entire phasing and sequencing of equipment planning, selection components are discussed for the optimization of the production and increasing the production cycle coupled with financial analysis.

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(Internship) Minor Project	analysis, design solutions or applications in electronics and
	communication domain through the acquired technical,
	cognitive, communication and creative skills to address
	societal needs.

## VIII SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
121	171MI8E16	Mine Systems Engineering		<b>*</b>		This subject helps the student to demonstrate technical skills as they will able to formulate real-world problems involving decision making, Linear programming problem, transportation and assignment problems also they were able to solve dynamic programming &simulation techniques in real-world problems.
122	171MI8E17	Advance Surface Mining Technology		1		This subject helps the student to demonstrate technical skills as they will able to understand modern surface mining technology, design large surface mines, simulation of mining operation, and able to prepare feasibility report.
123	171MI8E18	Advanced Underground Metal Mining Technology		1		This subject helps the student to demonstrate technical skills as they will able to understand different advanced metal mining techniques, design underground metal mines, analyse development of feasibility report & detailed mining report, case studies.
124	171EE8O05	Robotics		1		Students are able to acquire skills related to the measurement of linear and angular measuring instruments, working of measuring instruments and control systems.
125	171MI8O01	Environmental Impact Assessment	✓			Students are able to acquire skills related to assessment of the impact of any developmental activity in any sector of the environment and mitigation of negative impacts in the environment enabling them to be employed in as environmental managers/engineers.
126	171MI8O02	Mine Closure and Reclamation		<b>/</b>		This subject helps the student to demonstrate technical skills as they were able to understand strategies and principle of mine reclamation, challenges of mine planning and mine

						closure plan, handling of waste dumps and closure risk assessment.
127	171MI8O03	Fundamentals of Communication		~		This subject helps the student to demonstrate technical skills as they were able to understand types of signal and its relation, concepts of continuous wave modulation, concepts of digital modulation techniques and different advanced communication networks.
128	171MI8O04	Remote Sensing and GIS		<b>✓</b>		This subject helps the student to demonstrate technical skills as they were able to understand elements of photogrammetry, concept of remote sensing and false colour composite, principal components and image classification.
129	171MI8O05	Quantitative Decision Making		~		This subject helps the student to demonstrate technical skills as they were able to understand data using histograms, scatter diagrams and summary statistics, models of decision making spreadsheet simulation models.
130	171MI8P02	Major Project	✓		(A)	Students will be able to demonstrate problem identification, analysis, design solutions or applications in electronics and communication domain through the acquired technical, cognitive, communication and creative skills to address societal needs.
	TOTAL	130	43	75	6	

Program Coordinator

Head of the Department

Head of the Department
DEPARTMENT OF MINING ENGINEERING
ADITYA ENGINEERING COLLEGE (A9)