



ADITYA ENGINEERING COLLEGE

An Autonomous Institution
Approved by AICTE - Permanently Affiliated to JNTUK - Accredited by NAAC with 'A' Grade
Recognised by UGC under sections 2(f) and 12(B) of UGC Act, 1956
Aditya Nagar, ADB Road, Surampalem - 533437, Near Kakinada, E.G.Dt., Ph:99498 76662

Program Name : B.Tech. in Mining Engineering

Syllabus Revision for the Academic Year 2020-2021

S.No	Semester	Course Code	Course Name	% of content revised for the existing year
1	1	201HS1T01	Communicative English	0
2	1	201BS1T01	Differential equations and Linear algebra	0
3	1	201BS1T02	Engineering Physics	0
4	1	201ES1T03	Essential Electrical and Electronics Engineering	0
5	1	201ES1T05	Engineering Graphics	30
6	1	201HS1L01	Communicative English Lab	0
7	1	201BS1L01	Engineering Physics Lab	0
8	1	201ES1L03	Essential Electrical and Electronics Engineering Lab	0
9	1	201MC1T01	Environmental Science	0
10	2	201BS2T05	Partial Differential Equations and Vector Calculus	0
11	2	201BS2T08	Chemistry of Materials	0
12	2	201ES2T06	Engineering Mechanics	0
13	2	201ES2T08	Programming for Problem Solving Using C	0
14	2	201ES2L07	Engineering Workshop	0
15	2	201ES2L12	Computer Aided Drafting Lab	100
16	2	201HS2L02	Professional Communications Skills Lab	0
17	2	201BS2L05	Engineering Chemistry Lab	0
18	2	201ES2L10	Programming for Problem Solving Using C Lab	0
19	2	201MC2T02	Constitution of India	0
20	3	191BS3T15	Numerical Methods and Integral Transforms	20
21	3	191ES3T10	Internet of Things	100
22	3	191ES3T14	Basic Mechanical Engineering	0
23	3	191MI3T01	Mining Geology	15
24	3	191MI3T02	Mine Surveying-I	0
25	3	191MI3T03	Development of Mineral Deposits	40
26	3	191MI3L01	Geology Lab	20
27	3	191MI3L02	Basic Mechanical Engineering Lab	0
28	3	191MC3A03	Employability Skills - I	0
29	3	191MC3A04	Essence of Indian Traditional Knowledge	100
30	4	191BS4T19	Complex Variables and Statistical Methods	45
31	4	191MI4T04	Mine Surveying-II	0
32	4	191MI4T05	Surface Mining	0
33	4	191MI4T06	Underground Coal Mining Technology	0
34	4	191MI4T07	Fundamentals of Rock Mechanics	0
35	4	191MI4T08	Geo-statistics	100
36	4	191MI4L03	Rock Mechanics Lab	0
37	4	191ES4L18	Mine Surveying Lab	0
38	4	191MC4A05	Employability Skills - II	0
39	4	191MC4A06	Biology for Engineers	100
40	5	171MI5T09	Under Ground Coal Mining Technology	0

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41	5	171MI5T10	Mine Environment Engineering - I	0
42	5	171MI5T11	Basic Geo Mechanics	0
43	5	171MI5T12	Mine Surveying - II	0
44	5	171HS5T04	Managerial Economics and Financial Analysis	0
45	5	171MI5E01	Maintenance and Reliability Engineering	0
46	5	171MI5E02	Mine Construction and Management	0
47	5	171MI5E03	Industrial Management and Labor Relations	0
48	5	171HS5T06	Employability Skills – III	0
49	5	171MI5L03	Rock Mechanics Lab	0
50	5	171MI5S01	MOOCs-I	0
51	5	171MI5L04	Mine Surveying Lab	0
52	6	171MI6T13	Under Ground Metal Mining Technology	0
53	6	171MI6T14	Mineral Processing Technology	0
54	6	171MI6T15	Mine Environment Engineering - II	0
55	6	171MI6T16	Mining Machinery	0
56	6	171MI6E04	Advanced Geo Mechanics	0
57	6	171MI6E05	Mine Fire and Spontaneous	0
58	6	171MI6E06	Mineral Exploration	0
59	6	171MI6E07	Advance Surveying Technology	0
60	6	171MI6E08	Mine Subsidence Engineering	0
61	6	171MI6E09	Rock Fragmentation Engineering	0
62	6	171HS6T07	Employability Skills - IV	0
63	6	171MI6L05	Mineral Processing Technology Lab	0
64	6	171MI6L06	Environmental Engineering Lab	0
65	6	171MI6S02	MOOCs II	0
66	7	171MI7T17	Mine Economics	20
67	7	171MI7T18	Mine Health and Safety Engineering	20
68	7	171MI7T19	Mine Legislation and General Safety	0
69	7	171MI7T20	Mine Management	100
70	7	171MI7E10	Planning of UGMM Project	0
71	7	171MI7E11	Planning of UGCM Project	0
72	7	171MI7E12	Planning of Surface Mining Project	0
73	7	171MI7E13	Mine mechanization	0
74	7	171MI7E14	Advance Underground Coal Mining Technology	100
75	7	171MI7E15	Mine Blasting operation	10
76	7	171MI7L07	Mine Planning and Design Lab	0
77	7	171ES7L16	Mechanical Engineering Lab	100
78	7	171MI7P01	Industry Oriented (Internship) Minor Project	100
79	8	171MI8E16	Mine Systems Engineering	100
80	8	171MI8E17	Advance Surface Mining Technology	100
81	8	171MI8E18	Advanced Underground Metal Mining Technology	100
82	8	171EE8O05	Robotics	100
83	8	171MI8O01	Environmental Impact Assessment	100
84	8	171MI8O02	Mine Closure and Reclamation	100
85	8	171MI8O03	Fundamentals of Communication	100
86	8	171MI8O04	Remote Sensing and GIS	100
87	8	171MI8O05	Quantitative Decision Making	100

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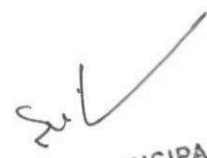
88	8	171MI8P02	Major Project	0
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Total number of courses in the academic year 2020-2021	88
Number of courses having revision in syllabus content $\geq 20\%$ in the academic year 2020-2021	25
Percentage of syllabus revision carried out in the academic year 2020-2021 = $(25/88)*100$	28.41


Program Coordinator


Head of the Department

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


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Department of Mining Engineering

Dt- 10/10/2020

Minutes of VI BoS meeting conducted on 03-10-2020

The VI meeting of the Board of Studies of Mining Engineering Department was held on 03-10-2020 at 10.00 AM through Microsoft Team. Mr. Satyajeet Parida, Chairperson presided over the meeting.

Agenda 6.1: Welcome address by Chairperson- BoS

Mr. Satyajeet Parida, Chairman of BoS, invited all the distinguished members of BoS to the VI BoS meeting.

Agenda 6.2: Discussion and ratification of the Vision and Mission of the department and Program Educational Objectives (PEOs), Program Outcomes (POs) and Program Specific Outcomes (PSOs) of the Programs under the Department.

The BoS members have ratified the Vision and Mission of the department and Program Educational Objectives (PEOs), Program Outcomes (POs) and Program Specific Outcomes (PSOs) of the Programs under the Min.E Department.

Agenda 6.3: Discussion on proposed AR19 B.Tech. (Min.E) Program – IV & V semester syllabus and ratification of the same.

The BoS members approved the AR19 B.Tech. (Min.E) IV & V semesters syllabus after making the following changes, and some minor rectifications in the courses, listed.

- The members discussed thoroughly and framed the syllabus of Geo-Statistics, which is introduced for the first time in B.Tech. (Min.E).
- The members suggested to change the course name Mine Environmental Engineering –I to Mine Environment & Ventilation Engineering.
- The course Social Relevant Project was introduced in V Semester.
- The title of the lab course Mine Environmental Engineering lab was changed to Mine Environment & Ventilation Engineering lab.
- The following courses were also undergone some minor rectifications
 - i. Mine Surveying-II
 - ii. Surface Mining
 - iii. Underground Coal Mining Technology
 - iv. Fundamentals of Rock Mechanics
 - v. Mine Systems Engineering
 - vi. Underground Metal Mining Technology

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Agenda 6.4: Discussion on proposed AR20 B.Tech. (Min.E) First Year Program structure and ratification of the same.

The BoS members have discussed and approved the course structure of AR20 B.Tech. (Min.E) First Year Program structure.

Agenda 6.5 Discussion on the courses having focus on employability/entrepreneurship/skill development in all the programs and ratification of the same.

The members of BoS ratified the courses having focus on employability/entrepreneurship/skill development in all B.Tech. (Min.E). program.

Agenda 6.6: Discussion on the new courses offered in all the B.Tech. (Min.E), programmes and ratification of the same.

The BoS members have discussed and approved the new courses introduced in all the B.Tech. (Min.E), programmes. The Percentage of new courses introduced in the academic year 2020-2021 for B. Tech (Min. E) is 19.32 %. The list of new courses is enclosed as Annexure-I.

Agenda 6.7: Discussion on all the B.Tech. (Min.E), programmes in which Choice Based Credit System (CBCS)/elective course system is being implemented and ratification of the same.

- The members discussed and approved the choice-based credit system for all the B.Tech. (Min.E), programme.

Agenda 6.8: Discussion on the value-added courses offered for students and ratification of the same.

- The BoS members approved the list of value-added courses offered to students and ratified the same.

Agenda 6.9: Discussion on the percentage of syllabus revision done in all the B.Tech. (Min.E) programs and ratification of the same.

The percentage change in syllabus was discussed and approved by the BoS members. The percentage of courses revised in the academic year 2020-2021 for B.Tech (Min. E) is 28.41%. The list of courses revised is enclosed as Annexure-II.

Agenda 6.10: Analysis of Results

The BoS chairperson presented the results. The BoS members appreciated the faculty for achieving better pass percentages.

Agenda 6.11: Analysis of Students Feedback & Action Taken Report

BoS chairperson has expressed that the student feedback and action taken report process is done at the end of each semester. The BoS members were pleased to know the average feedback for the faculty in even and odd semesters.


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Agenda 6.12: Analysis of Stakeholder's Feedback on Curriculum

The stakeholder's feedback on curriculum was discussed and applicable considerations were incorporated. The BOS members noted the same and advised to incorporate the suggestions as per the feasibility. The Action Taken Report is enclosed as Annexure-III.

Agenda 6.13: Any other item/s

BoS members suggested to extend the period of internships for the students.

Agenda 6.14: Scheduling of the next BoS meeting.

- The next BoS meeting is tentatively scheduled in the month of October 2021.

Agenda 6.15: Vote of Thanks

- Mr. Satyajeet Parida, BoS Chairperson thanked the members for the successful completion of BoS VI.



BoS Chairperson

Head of the Department
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Annexure-I

List of New Courses in the Academic Year 2020-2021

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (Min.E)	II	201ES2L12	Computer Aided Drafting Lab
2	B. Tech (Min.E)	III	191MC3A04	Essence of Indian Traditional Knowledge
3	B. Tech (Min.E)	III	191ES3T10	Internet of Things
4	B. Tech (Min.E)	IV	191MC4A06	Biology for Engineers
5	B. Tech (Min.E)	IV	191MI4T08	Geo-statistics
6	B. Tech (Min.E)	VII	171MI7T20	Mine Management
7	B. Tech (Min.E)	VII	171MI7E14	Advance Underground Coal Mining Technology
8	B. Tech (Min.E)	VII	171ES7L16	Mechanical Engineering Lab
9	B. Tech (Min.E)	VII	171MI7P01	Industry Oriented (Internship) Minor Project
10	B. Tech (Min.E)	VIII	171MI8E16	Mine Systems Engineering
11	B. Tech (Min.E)	VIII	171MI8E17	Advance Surface Mining Technology
12	B. Tech (Min.E)	VIII	171MI8E18	Advanced Underground Metal Mining Technology
13	B. Tech (Min.E)	VIII	171MI8O01	Environmental Impact Assessment
14	B. Tech (Min.E)	VIII	171MI8O02	Mine Closure and Reclamation
15	B. Tech (Min.E)	VIII	171MI8O03	Fundamentals of Communication
16	B. Tech (Min.E)	VIII	171MI8O04	Remote Sensing and GIS
17	B. Tech (Min.E)	VIII	171MI8O05	Quantitative Decision Making

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BoS Chairperson

Head of the Department
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Annexure-II

List of Courses Revised in the Academic Year 2020-2021

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (Min.E)	I	201ES1T05	Engineering Graphics
2	B. Tech (Min.E)	III	191BS3T15	Numerical Methods and Integral Transforms
3	B. Tech (Min.E)	III	191MI3T03	Development of Mineral Deposits
4	B. Tech (Min.E)	III	191MI3L01	Geology Lab
5	B. Tech (Min.E)	IV	191BS4T19	Complex Variables and Statistical Methods
6	B. Tech (Min.E)	VII	171MI7T17	Mine Economics
7	B. Tech (Min.E)	VII	171MI7T18	Mine Health and Safety Engineering

BoS Chairperson

Head of the Department

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