



ADITYA ENGINEERING COLLEGE

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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 2018-2019


S.No	Semester	Course Code	Course Name	% of content revised for the existing year
1	1	171HS1T01	English - I	0
2	1	171BS1T01	Mathematics - I	0
3	1	171HS1T02	Environmental Studies	0
4	1	171BS1T03	Engineering Chemistry	0
5	1	171ES1T02	Engineering Mechanics	0
6	1	171ES1T01	Computer Programming	0
7	1	171HS1L01	English Communication Skills Lab - I	0
8	1	171BS1L01	Engineering Chemistry Lab	0
9	1	171ES1L01	Computer Programming Lab	0
10	2	171HS2T03	English - II	0
11	2	171BS2T02	Mathematics - II	0
12	2	171BS2T06	Mathematics - III	0
13	2	171BS2T07	Engineering Physics	0
14	2	171ES2T03	Engineering Drawing	0
15	2	171ES2T05	Basic Electrical and Electronics Engineering	0
16	2	171HS2L02	English Communication Skills Lab - II	0
17	2	171BS2L02	Engineering Physics Lab	0
18	2	171ES2L02	Engineering Workshop and ITWorkshop	0
19	3	171MI3T01	Introduction To Mining Technology	20
20	3	171MI3T02	Basic Mechanical Engineering For Mines	60
21	3	171BS3T10	Probability and Statistics	100
22	3	171ES3T22	Material Engineering	0
23	3	171MI3T03	Mining Geology-I	15
24	3	171ME3T01	Computer Aided Engineering Drawing Practice	0
25	3	171ES3L12	Electrical and Electronics Lab	30
26	3	171ES3L13	Basic Mechanical Engineering Lab	100
27	3	171HS3A09	Professional Ethics and Human Values	0
28	3	171HS3A10	Employability Skills-I	100
29	4	171ES4T27	Kinematics Of Machinery	0
30	4	171MI4T04	Computer Application In Mining	0
31	4	171MI4T05	Mining Geology -II	0
32	4	171MI4T06	Mine Surveying - I	10
33	4	171MI4T07	Surface Mining	0
34	4	171MI4T08	Fundamentals Of Rock Mechanics	50
35	4	171MI4L01	Geology Lab	0
36	4	171MI4L02	Computer Application In Mining Lab	0
37	4	171HS4A08	Intellectual Property Rights and Patents	0
38	4	171HS4A11	Employability Skills-II	100
39	5	R1631261	Underground Coal Mining Technology	0
40	5	R1631262	Mine Environment Engineering - I	0
41	5	R1631263	Electrical Equipment in Mines	0
42	5	R1631264	Mine Surveying- II	0
43	5	R1631265	Mining Machinery & Mechanization - I	0
44	5	R1631266	Advanced English Communication Skills Lab	0
45	5	R1631267	Mine Surveying Lab	0
46	5	R1631268	Mechanical Engineering Lab	90

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47	5	R1631269	Mine Field visit(Mandatory)	
48	6	R1632261	Mine Systems Engineering	0
49	6	R1632262	Mineral Engineering and Fuel Technology	0
50	6	R1632263	Mine Environmental Engineering – II	0
51	6	R1632264	Mining Machinery & Mechanization – II	0
52	6	R1632035C	Industrial Robotics	0
53	6	R1632035A	Entrepreneurship	100
54	6	R1632265A	Quality and Reliability Engineering	0
55	6	R1632015D	Waste Water Management	100
56	6	R1632265B	Rock Excavation Engineering	0
57	6	R163226C	Mine Safety Engineering	30
58	6	R1632266	Mineral Engineering Lab	0
59	6	R1632267	Environmental Engineering Lab	0
60	6	R1632268	Mine Planning & Design Lab	0
61	6	R1632268	Industrial Training	0
62	7	RT41261	Mine Economics	0
63	7	RT41262	Computer Applications in Mining	0
64	7	RT41263	Rock Mechanics & Ground Control	0
65	7	RT41264	Mine Legislation & General Safety	0
66	7	RT41265	Industrial Robotics	0
67	7	RT41266	Environmental Impact Assesment	0
68	7	RT41267	Numerical Methods	0
69	7	RT41268	Industrial Management	0
70	7	RT4126L	Computer Applications in Mining Lab	0
71	7	RT4126M	Rock Mechanics & Ground Control Lab	0
72	7	RT4126N	Short Survey Camp (One Week)	0
73	8	RT42031	Production Planning and Control	0
74	8	RT42262A	Deep Sea Mining	0
75	8	RT42262B	Mine Construction	0
76	8	RT42262C	Tunneling Engineering	0
77	8	RT42263A	Planning of Under Ground Metal Mining Project	0
78	8	RT42263B	Planning of Under Ground Coal Mining Project	0
79	8	RT42263C	Planning of Surface Mining Projects	0
80	8	RT42264A	Maintenance & Reliability Engineering	0
81	8	RT42264B	Rock Excavation Engineering	0
82	8	RT42264C	Mine Health and Safety Engineering	0
83	8	RT42265	Project	0
Total number of courses in the academic year 2018-2019				83
Number of courses having revision in syllabus content >= 20% in the academic year 2018-2019				12
Percentage of syllabus revision carried out in the academic year 2018-2019 = (12/83)*100				14.46


Program Coordinator


Head of the Department


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



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Department of Mining Engineering

Dt-20/11/2018

Minutes of III BoS meeting conducted on 17-11-2018

The III meeting of the Board of Studies of Mining Engineering Department was held on 17/11/2018 at 10 AM in the Conference Hall, Ajivika, Bill Gates Bhavan AEC Mr. Satyajee Parida, Chairperson presided over the meeting.

Agenda 3.1: Welcome address by Chairperson- BoS

Mr. Satyajee Parida, Chairman of BoS, invited all the distinguished members of BoS to the III BOS meeting.

Agenda 3.2: Discussion on proposed AR17 B.Tech. Program - VI , VII & VIII semesters syllabus and ratification of the same.

The BOS members approved the AR17 B.Tech. Program - VI , VII & VIII semesters syllabus after making the following points , and some minor rectifications.

- Members reviewed and slightly modified the first 2 units of the course Computer Applications in Mining.
- Members suggested writing the full names of authors & publishers while mentioning the text books.
- The Title for the Course Geomechanics II, Geomechanics I have been changed to Advanced Geomechanics and Basic Geomechanics Respectively as per BOS suggestion.
- Modifications & Rearrangements in the syllabus of VI, VII and VIII semester courses were done it's per the suggestion of BoS members.
- Seminars, technical report writing should be incorporated form the 1st year of the program.
- The BoS members have discussed and approved the new courses introduced in B. Tech. (Min.E), programmes. The Percentage new courses introduced in the academic year 2018-2019 for B.Tech (Min.E) is 7.23%. The list of new courses is enclosed as Annexure-I.
- BOS members discussed and ratified the percentage revision in the courses. The percentage of courses revised in the academic year 2018-2019 for B.Tech (Min. E) is 14.46%. The list of courses revised is enclosed as Annexure-II.
- The BOS members discussed and ratified the elective courses.


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Agenda 3.3: Discussion on the proposed AR19 B.Tech Program as per the guidelines of APSCHE & AICTE

The BoS members have discussed and suggested to incorporate the guidelines given by APSCHE & AICTE. The following key points were discussed

1. For AR19 the title of the course Mine Economics should be changed to Mineral economics as suggested by BoS members.
2. To promote industry oriented education the members suggested, a joint valuation process shall be carried out by the industry & faculty members, after an industry based learning in which the students of eighth semester will be allowed to learn the subjects of that semester practically from an industry.

Agenda 3.4: 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.

Agenda 3.5: 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 3.6: Analysis of Results

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

Agenda 3.7: Any other item/s

- The BoS members suggested that unless NPTEL course are not upgraded & the syllabus become more contemporary it is not advisable to give the students credit for qualifying those courses. However, these courses can be used as a supplementary source of reading.
- BOS members suggested to focus on the courses which increase the placement opportunities of the students.
- If self-reading needs to be promoted, the BoS members suggested to establish MOUs with some reputed universities; & courses offered by which will be considered by awarded credits if the students successfully complete those.
- To provide minor degree to students we can add safety, finance, information technology streams by which student can proceed in both the fields in future.
- Seminars, technical report writing should be incorporated form the 1st year of the program.

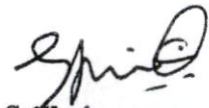

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Agenda 3.8: Scheduling of the next BoS meeting.

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

Agenda 3.9: Vote of Thanks

- Mr. Satyajee Parida, BoS Chairperson thanked the members for the successful completion of BoS III.



BoS Chairperson

Head of the Department
DEPARTMENT OF MINING ENGINEERING
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Annexure-I

List of New Courses in the Academic Year 2018-2019

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (Min.E)	III	171BS3T10	Probability & Statistics
2	B. Tech (Min.E)	III	171ES3L13	Basic Mechanical Engineering Lab
3	B. Tech (Min.E)	III	171HS3A10	Employability Skills - I
4	B. Tech (Min.E)	IV	171HS4A11	Employability Skills - II
5	B. Tech (Min.E)	VI	R1632035A	Entrepreneurship
6	B. Tech (Min.E)	VI	R1632015D	Waste Water Management


Bos Chairperson

Head of the Department
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Annexure-II

List of Courses Revised in the Academic Year 2018-2019

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (Min.E)	III	171MI3T01	Introduction To Mining Technology
2	B. Tech (Min.E)	III	171MI3T02	Basic Mechanical Engineering For Mines
3	B. Tech (Min.E)	III	171ES3L12	Electrical and Electronics Lab
4	B. Tech (Min.E)	IV	171MI4T08	Fundamentals of Rock Mechanics
5	B. Tech (Min.E)	V	R1631268	Mechanical Engineering Lab
6	B. Tech (Min.E)	VI	R163226C	Mine Safety Engineering

BoS Chairperson

Head of the Department
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Annexure III

Action Taken Report on Stakeholders Feedback in the Academic Year 2018-2019

S. No	Agenda Item No.	Stakeholders Recommended	Action Taken
1	3.5	Students should be well aware of geology aspect in the formation of different minerals and they should be thorough in the geology which will help them in different mining operation.	The subject which makes the student well aware of geology is already incorporated in the syllabus. They are: <ul style="list-style-type: none">• Mining Geology-I• Mining Geology –II
2		Students should be aware of latest mining machinery used in mining that helps in mining industry.	The subject which are related to mining machinery are: <ul style="list-style-type: none">✓ Mining Machinery & Mechanization – I✓ Mining Machinery & Mechanization – II
3	3.2	Students should be aware of latest computer application in the mining field	The computer application in the mining area is treated to be an important subject so it is included in the curriculum and also it is revised from time to time <ul style="list-style-type: none">✓ Computer Applications in Mining
4	3.5	Department should include mining technology that are used in High wall and Tunnel engineering	The subject which are related to different types of High wall mining and tunnel engineering are included: <ul style="list-style-type: none">• Tunnelling Engineering

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5		Department should aware the students about the health hazards happening in the mines.	The subject related to health hazards in mine has been included in the syllabus and the recent update of the syllabus was given over here: • Mine Health and Safety Engineering
6		Guest lecture should be done by industry persons so that the curriculum gap will be fulfilled	To fulfill the curriculum gap between industry demand and college courses, value added courses has been introduced with the suggestion of different mining industry persons who were the committee members of our BoS.
7	3.5	The subjects that were taught should be reformed so that Latest technology used in that field should be included in those subjects.	The subjects that were reformed and the syllabus has been changed are as follows :- ✓ Geology-II ✓ Mine Surveying-I ✓ Surface mining ✓ Fundamentals in Rock mechanics
8		Student should be aware of different water management program happening in mining field.	The subject which makes students aware of different water management program are: Waste Water Management
9		Students should be taught employability Skills related Course that will later on help them to get placed in various companies	Employability Skills related courses has been included in the curriculum they are: Employability Skills-I Employability Skills-II
10	3.4	Students should be aware of the entrepreneurship skills which will help them to become an entrepreneur.	The subject which enhances the entrepreneurship skills among the students is included in the curriculum Entrepreneurship

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11		Students should be encouraged towards the innovative projects in the mining.	Different course expert were present in the department who were expertise in different area of mining and by their wide diverse we can guide in different real time mining projects,
12		Students should be aware of basic safety measure that they should follow inside the mining field	To make basic safety practices in the mines the related subject has included in the curriculum: ✓ Mine Safety Engineering


BoS Chairperson

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