



ADITYA ENGINEERING COLLEGE

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Aditya Nagar, ADB Road, Surampalem - 533437, Near Kakinada, E.G.Dt., Ph:99498 76662

Department of Mining Engineering

Dt-26/04/2022

Minutes of VIII BoS meeting conducted on 23.04.2022

The VIII meeting of the Board of Studies of Mining Engineering Department was held on 23-04-2022 at 10.00 AM through Microsoft Team. Mr. Satyajeet Parida, Chairperson presided over the meeting.

Agenda 8.1: Welcome address by Chairperson- BoS

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

Agenda 8.2: Ratification of the minutes of VII BoS meeting

The BoS members have ratified the points discussed in the previous BoS meeting held on 06-10-2021 and 07-10-2021.

Agenda 8.3: Discussion on proposed AR20 B.Tech. Program - V, VI, VII & VIII semesters syllabus and ratification of the same.

The BOS members approved the AR20 B.Tech. Program - V, VI, VII & VIII semesters syllabus after making the following changes, and some minor rectifications as listed.

1. Case Studies in mine system engineering
2. Mine illumination in mine ventilation
3. Minor changes in PE-1, EIA
4. Contribution of greenhouse gases to be included in Environmental management
5. Environmental audit is suggested to be included in EIA
6. The unit V of EIA was changed to Environmental performance assessment
7. Unit names for POUCMP were added as Planning objectives, Exploitation & Mechanization, Production, Transport & Automation, Planning of thick seam mining and Project planning
8. Land acquisition & Revenue was suggested to be included in ML&GS
9. Suggested to include mine fan characteristics in Mine Ventilation & Environment Lab
10. Suggested to keep at most 10 -11 experiments
11. Unit III in MPT has shifted to Unit II, Unit II shifted to Unit I, part of Unit IV is removed and added in Unit II
12. Suggested to include man riding system in Unit II of Mine Machinery,
13. Suggested to add Land acquisition & revenue, related laws and regulations in Unit V of ML&GS
14. Suggested to remove Safety & mines legislation in Unit I of ML&GS

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15. Suggested to include Accident enquiry report in Unit II of MHSE and removed the prevention in surface & underground mines
16. Suggested to change Unit III heading as Hazard identification & analysis in MHSE
17. Suggested to change headings of Unit IV & V as Behavioral based safety, Safety management and audit and added innovations in mine safety engineering in Unit V
18. Suggested to keep headings as, Design of stoping operations, Equipment & Support systems, Transport & Backfilling, Case studies, Basic considerations for the Units II, III, IV, V & I, removed grade control in Unit III and added in Unit I, also planning of stoping methods in Unit I of PUMMP.
19. Suggested to include Bio fuels in Unit V from Unit I in Green Mining
20. In RFE, removed the portion of types of explosives & accessories in Unit IV and suggested the headings as Blasting design, Blasting monitoring & control for IV & V Units.
21. In MPT Lab, John riffle method is removed in experiment I, kept Proximate analysis of coal in experiment VII, and small changes in II, III, IV, V and VIII experiments
22. In Environmental Engineering Lab, added DO & BOD of water sample and PH content & conductivity of water sample in exp I & II, acidity & alkalinity, determination of ambient air quality using respirable dust samples, application of sensor for air quality measurement, determination of organic matter content of soil, soil resistivity, noise quality assessment using sound level meter, determination of soil texture in list of experiments and determination of sulphate content Na, K, Ca, ions using flame photo meter, determination of hardness of water in augmented experiments.
23. In PSMP, suggested all Units headings as Preliminary Investigations, Production planning & scheduling, Transport & Material handling, Design of slopes, Other Mining Techniques.
24. Headings of units are changed as Introduction, Profile of the sea, Marine deposit, Offshore exploration, Legal aspects of ocean floor mining in Deep Sea Mining.
25. Unit II heading is changed as Properties of Rocks in REE.
26. In Safety practices in mines, included accident analysis, Henrich & Pearson triangle for mine accidents, rescue apparatus and Safety appliances w.r.t mine gasses in Unit III & IV.
27. Suggested the headings as Mechanism of slope failure, monitoring & analysis, Parameters affecting slope stability and included Static & dynamic loading in Unit III, Biological & Engineering Techniques in Unit V, Software's for slope stability analysis in Unit IV for Rock Slope Technology.
28. Identification of safety issues in different industries, changed the term technological to engineering in Unit IV, headings as Concept of mine closure, mine closure planning, implementation of mine planning, mine reclamation challenges, risk of mine closure planning, Financial Provisions for all the units and included mine closure funding sources, Escrow account, penalties, cost of mine closure & reclamation in Unit V of MC& R.
29. In Unit IV & V, removed design of open pit slopes, waste dumps and included Factor of safety, Design & stability, subsidence damage and prevention.

30. Suggested mine design software heading for Unit V for Software's in mine planning and blasting
31. Suggested to add Planning & Designing of Surface Mining Project in Minor & Honors degree courses.

Agenda 8.4: Discussion on proposed syllabus for courses in V to VII Semester under AR20 honours and Minor Degree and ratification of the same.

The BoS members have discussed and approved the courses in V to VII Semester under AR20 honours and Minor Degree.

Agenda 8.5: Discussion on the value-added courses to be 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 8.6: Discussion on the new courses offered in B. Tech. (Min.E), programme and ratification of the same.

The BoS members have discussed and approved the new courses introduced in B. Tech. (Min.E), programmes. The Percentage of new courses introduced in the academic year 2021-2022 for B.Tech (Min.E) is 7.69%. The list of new courses is enclosed as Annexure-I.

Agenda 8.7: Discussion on the percentage of syllabus revision done in B.Tech.(Min.E) programme and ratification of the same.

The BoS Members approved the change in of syllabus revision done in the AR20 B.Tech. (Min.E) program. The percentage of courses revised in the academic year 2021-2022 for B.Tech (Min. E) is 41.79%. The list of courses revised is enclosed as Annexure-II.

Agenda 8.8: Discussion on the courses having focus on employability/entrepreneurship/skill development in B.tech (Min.E) programs and ratification of the same.

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

Agenda 8.9: Discussion on B.Tech. (Min.E), programme 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 B.Tech. (Min.E), programme.


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Agenda 8.10: Analysis of Feedback on Curriculum from Stakeholders

The BoS chairperson expressed the process of collecting feedback from the stake holders, the BoS members reviewed and discussed regarding that. 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 8.11: Analysis of Results of the odd semester of the academic year 2021-22.

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

Agenda 8.12: Analysis of student's feedback in the odd semester of the A.Y 2021-22.

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 the odd semester.

Agenda 8.13: Any other item/s

BoS members suggested to extend the period of internships for the students and encourage the students to pursue software applications.

Agenda 8.14: Scheduling of the next BoS meeting.

The next BoS meeting is tentatively scheduled in the month of June 2023.

Agenda 8.15: Vote of Thanks

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


BoS Chairperson

Head of the Department
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Annexure-I

List of New Courses in the Academic Year 2021-2022

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (Min.E)	IV	201SC4L20	Skill Oriented Course-II Data Analytics for Mining using Python
2	B. Tech (Min.E)	V	191PR5P02	Socially Relevant Project
3	B. Tech (Min.E)	V	191MI5E04	Sustainable Mining
4	B. Tech (Min.E)	V	191MI5O01	Overview of Mining
5	B. Tech (Min.E)	VI	191MI6T15	Environmental Management in Mines
6	B. Tech (Min.E)	VI	191MI6E05	Green Mining
7	B. Tech (Min.E)	VI	191MI6O03	Electrical equipment's in Mine

BoS Chairperson

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Annexure-II

List of Courses Revised in the Academic Year 2021-2022

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (Min.E)	III	201SO3L09	Geo-Statistics through SURPAC
2	B. Tech (Min.E)	VI	191MI6T13	Mineral Processing Technology
3	B. Tech (Min.E)	VI	191MI6E12	Rock Excavation Engineering
4	B. Tech (Min.E)	VI	191MI6L06	Mineral Processing Lab


BoS Chairperson

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Annexure III

Action Taken Report on Stakeholders Feedback in the Academic Year 2021-2022

S. No	Agenda Item No.	Stakeholders Recommended	Action Taken
1	8.10	The courses which provide different information about various electrical equipment should be included in the curriculum	The subject which gives relative knowledge about electrical equipment in the mines were included in the curriculum they were as follows <ul style="list-style-type: none">• Electrical equipment's in Mine
2	8.3	The sustainability and environment friendly mining activity should be followed in the upcoming days. Students should give importance towards it.	To make student aware of sustainability and environment friendly mining activity some courses added to the curriculum they are: <ul style="list-style-type: none">✓ Green Mining✓ Environmental Management in Mines
3	8.10	Mining students should have good knowledge in the planning of underground and surface mines	For the planning of different underground and surface mines various related courses has been included in the syllabus they are: <ul style="list-style-type: none">✓ Planning of UGMM Project✓ Planning of UGCM Project✓ Planning of Surface Mining Project
4	8.10	Students should participate in social relevant project which develops their internal and external personality.	The socially involved project course was included in the curriculum <ul style="list-style-type: none">✓ Socially Relevant Project

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5	8.10	Include various case studies in the core mining subject for the better understanding of the same course	As per the recommendation few case studies are included in different core mining subjects they are: <ul style="list-style-type: none"> • Mine hazards and rescue • Strata mechanics • Mine Closure & Reclamation
6	8.3	The new innovation, areas and new technology are upcoming in the mining field include those things in the Curriculum.	One new subject has been introduced which is completely in the different are i.e Space mining technology. The old syllabus of Deep Sea Mining and its contents heading is being changed
7	8.10	Subject that creates job opportunities Should be included in curriculum and students should be aware of the subject importance.	The subject which creates job opportunities are included in the syllabus they are as follows: <ul style="list-style-type: none"> • Geo-statistics through Surpac • Data analytics for Mining Using Python
8		Students should be aware of latest software used in mining that helps in mining industry	The subject which are related to mining and are application of software in it has been included in the curriculum are as follows: <ul style="list-style-type: none"> • Computer Aided Mine planning • Geo spatial Imaging and geo informatics
9		Students should be aware of different environment impact created by mining activities.	For making aware students the harmful effect of different mining activities and its effect on environment the following course included in the curriculum. <ul style="list-style-type: none"> ✓ Environmental Impact Assessment
10	8.12	Students should be allowed for internship and industrial visit	Due to corona industry are not allowing outsider to get entry in their premises, For Internship management has allowed each student to visit


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			mines, also faculties are helping them to get the internship from various companies.
11	8.12	Alumni and industry person should visit the campus. So that industry condition should be understood properly	We have already arranged student alumni meeting and it will be held soon. Due to corona industry persons were refrain themselves to visit the campus but they were available in online mode and the instruction is passed to the Hods of the respective department to arrange the interaction as soon as possible.
12		Different MoU should be signed with different industries so that student can be benefited out of it.	Already our department has signed MoU with different educational institutes also we are planning to do MoU with few industries which will happen in the upcoming years.



BoS Chairperson

Head of the Department
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