



Vidya Pratishthan's
**KAMALNAYAN BAJAJ INSTITUTE OF ENGINEERING
AND TECHNOLOGY, BARAMATI**

Date: 26/08/2024

DEPARTMENT OF GENERAL SCIENCE AND ENGINEERING

Minutes of the Meeting

The curriculum draft was prepared by the internal BoS committee members of VPKBIET, Baramati, and a soft copy of the draft was provided to the external BoS members for their views and guidelines. Based on this, a meeting of all the members of the Board of Studies (BOS) of the **General Science and Engineering** Department for Basic Science courses was held Online mode (for external members) as well as offline mode (for internal members), on Monday, 26-08-2024 at 11.00 a.m. to 2.00 p.m. in the Bharat Forge Center of Excellence.

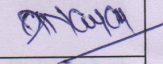
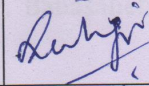
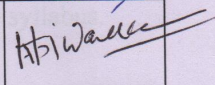
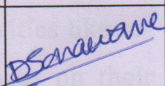
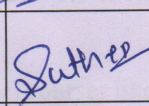
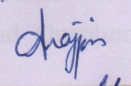
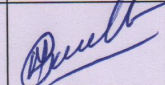
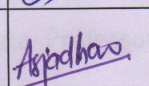
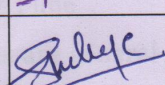
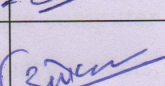
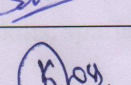
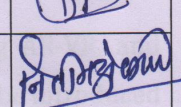
Online meet link: - <https://meet.google.com/juk-yrwc-ojd>

Agenda of the meeting:

1. Revision of NEP-based curriculum framework, credit system, and its implementation.
2. Discussion on the curriculum draft of Basic Science courses of the First Year B. Tech.

The following BOS Members were present for the meeting:

Sr. No.	Name of Attendees	Designation (Subject)	Sign
1.	Dr. R. S. Bichkar	Principal, VPKBIET, Baramati	
2.	Dr. Anil S. Disale	Chairman of BOS & Head of General Science and Engineering Dept, VPKBIET, Baramati	
3.	Dr. Vinayak V. Joshi	Member BOS, Professor, SPPU, Pune. (Mathematics)	Attended Online
4.	Dr. Kiran V. Dalvi	Member BOS, COEP Technological University, Pune. (Mathematics)	Absent
5.	Dr. Prabhakar B. Undre	Member BOS, Dr, Babasaheb Ambedkar Marathwada University, Aurangabad. (Physics)	Attended Online

6.	Dr. Yogesh P. Patil	Member BOS, AISSMS Institute of Information Technology, Shivajinagar Pune. (Chemistry)	Attended Online
7.	Dr. Sachin M. Bhosale	Dean Academics, VPKBIET, Baramati	
8.	Dr. Cittaranjan B. Nayak	Dean Autonomy, VPKBIET, Baramati	
9.	Dr. Nirmal K. Sahuji	BOS Member, General Science and Engineering, VPKBIET, Baramati	
10.	Dr. Anil P. Hiwaekar	BOS Member, General Science and Engineering, VPKBIET, Baramati	
11.	Mr. Deepak S. Sonawane	BOS Member, General Science and Engineering, VPKBIET, Baramati	
12.	Mrs. Gauri G. Bhoite	BOS Member, General Science and Engineering, VPKBIET, Baramati	
13.	Dr. Aparna G. Sajjan	BOS Member, General Science and Engineering, VPKBIET, Baramati	
14.	Dr. Nitin A. Jadhav	BOS Member, General Science and Engineering, VPKBIET, Baramati	
15.	Mr. Amol S. Jadhav	BOS Member, General Science and Engineering, VPKBIET, Baramati	
16.	Mrs. Supriya A. Thube	BOS Member, General Science and Engineering, VPKBIET, Baramati	
17.	Mr. Abhijeet P. Khandagale	BOS Member, General Science and Engineering, VPKBIET, Baramati	
18.	Mrs. Shubhangi S. Khot	BOS Member, General Science and Engineering, VPKBIET, Baramati	
19.	Dr. Nitin T. Shelke	Member Secretary, General Science and Engineering, VPKBIET, Baramati, Baramati	

At the beginning of the meeting, Dr. Anil S. Disale, Head of the Department of General Science and Engineering, presented the details of the First-year B. Tech. curriculum incorporating the NEP-2020. In her presentation, he explained the structure along with the examination schemes and Bloom's taxonomy levels of the course objectives for each of the Basic Science courses. Then, all the internal subject experts in Mathematics, Physics, and Chemistry presented the detailed aspects of the syllabus, examination schemes, and the activities that are proposed.

The following points were suggested by the external committee members of BOS during the meeting:

BSC: Basic Science Courses

I) Engineering Physics (BS24103):

Name of BOS Member: **Dr. Prabhakar B. Undre**, External Member BOS, Dr, Babasaheb Ambedkar Marathwada University, Aurangabad. (Physics)

1. Subject experts agree that the End Semester Examination should cover the entire syllabus.
2. Subject experts agree that justice should be given to each subject.
3. The students of the first year should not be engaged in non-academic activities like co-curricular and/or extra-curricular activities so that they will entirely focus on their academics.
4. The subject expert recommends adding elective or MDM (multidisciplinary minor) courses like Semiconductor Physics, Optoelectronics, Quantum Computational Physics, and Quantum Computing that are taught by Physics Faculties.

II) Engineering Chemistry (BS24104):

Name of BOS Member: **Dr. Yogesh P. Patil**, External Member BOS, Associate Professor Department of Engineering Sciences, AISSMS Institute of Information Technology, Pune

1. Dr. Patil, one of the BoS members justified that the basic science courses are general engineering subjects and may not relate exactly to a particular branch like computer engineering. These subjects help build the visualizing capacity and imaginary aspects, enhancing logical thinking and analytical skills, and improving the motor skills, spatial thinking, etc. in the students.
2. Dr. Patil suggested that molecular models can be developed by using AR-VR, and subjects like computational chemistry and Pharmaceutical Chemistry can be introduced in the syllabus for AY 2025-26.
3. Dr. Undre suggested that wastewater purification using nanoparticles (nanotechnology) and due production of Hydrogen by water splitting through photocatalysis can be added to the syllabus.
4. Experts prompted the BOS Chairman to limit involvement in co-curricular and Extracurricular activities that are not intended for FY students for better results.
5. Dr. Undre suggests mini-projects that can develop an interest in a subject with direction from FY teachers.

6. Dr. Patil advised assigning water and corrosion testing tasks to FY students. A 20-mark activity (CAA) can be evenly split throughout the four units (5 marks each).
7. Dr. Patil recommended minimizing the contents of Unit-III Engineering Materials or designating some sections for self-study. Dr. Undre also stated that there should be no repeat of questions in the Physics and Chemistry question papers for Nanotechnology.
8. Dr. Undre proposed using photocatalysis for water splitting for hydrogen production. UV-visible and infrared spectroscopy should also be included in the course.
9. Dr. Patil suggested conducting experiments on nanoparticle synthesis before incorporating it in the lab handbook and validating the results with him. After presenting the results of nanoparticle preparation on the Lab display board, we may add it for students to see.
10. Dr. Undre advised including nanomedicines into the Nanotechnology MDM, as well as fuel and renewable energy technology as MDM or open electives.
11. Dr. Undre advised to incorporate mini-projects on nanoparticles' antibacterial and antifungal activities.

III) Engineering Mathematics-I & II (BS24101 & BS24102):

Name of BOS Member: **Dr. Vinayak V. Joshi**, External Member BOS, Professor, SPPU, Pune. (Mathematics).

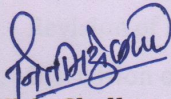
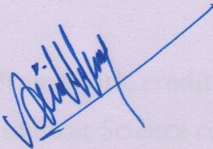
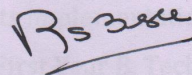
1. The credit of Engineering Mathematics should not be reduced as Basic Science, Mathematics is the backbone of Engineering.
2. Include all units for the End Sem Exam.
3. The syllabus of Engineering Mathematics-I and II are found good.

Recorded online meeting Link: -



On 26/08/2024 at 11:00 am to 2:00 pm in the presence of the Principal, BOS Member Secretary, General Science and Engineering, VPKBIET, Baramati.

Agenda of the meeting:

 Dr. Nitin Shelke BOS Member Secretary General Science and Engineering, VPKBIET, Baramati	 Dr. Anil S. Disale BOS Chairman & HoD General Science and Engineering, VPKBIET, Baramati	 Dr. R. S. Bichkar Principal VPKBIET, Baramati
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1. Dr. R. S. Bichkar	Principal, VPKBIET, Baramati	Present
2. Dr. Anil S. Disale	Chairman, BOS, General Science and Engineering, VPKBIET, Baramati	Present
3. Dr. Vinayak V. Joshi	Member, BOS, General Science and Engineering, VPKBIET, Baramati	Present
4. Dr. Kiran V. Dabhi	Member, BOS, General Science and Engineering, VPKBIET, Baramati	Absent
5. Dr. Prabhakar R. Undre	Member, BOS, General Science and Engineering, VPKBIET, Baramati	Absent

