

Minutes of the Ninth Board of Studies Meeting

Venue: Legend Hall (Hybrid mode)

Date: 22.11.2023



Meeting ID: 892 2802 8608

Time: 10:00 AM to 1:00 PM

Agenda:

1. Vision and Mission of the Institution
2. Vision, Mission, PEO & PSO of the Department
3. Discussion on the minutes of previous BoS meeting and action taken
4. Stakeholders' inputs on Curriculum Design
5. Amendments in R2021 UG programme curriculum and syllabus
6. Syllabus of the courses for the research scholars
7. Value Added Courses
8. Any other matter brought by the Chair

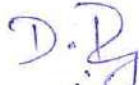






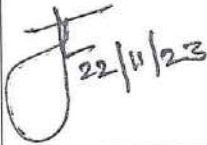
Members Present:

S.No	Name of the member with Designation	Category	Signature
1.	Dr. D. Ganesh Kumar Professor and Head, Department of BME, KPRIET, Coimbatore	Chairman	 22/11/2023
2.	Dr. M. Santhanalakshmi Associate Professor, Department of Electronics and Communication Engineering, PSG College of Technology, Peelamedu, Coimbatore	University Nominee	ONLINE
3.	Dr. G. Muralidhar Bairy Professor & Head, Department of Biomedical Engineering, Manipal Institute of Technology, Secretary, Biomedical Engineering Society of India, Manipal	Academic Expert-1	
4.	Dr. Kunal Pal Professor & Head, Department of Biomedical Engineering,	Academic Expert-2	ONLINE

Department of Biomedical and Engineering

KPR Institute of Engineering and Technology



	National Institute of Technology, Rourkela		
5.	Mr. D. Rajesh Leader – Program Management Office, Emergency Care Business, Philips, Pune	Industry Expert	 22/11/2023
6.	Dr. K. Rajasekaran Professor, Department of BME, KPRIET	Faculty Member	ONLINE
7.	Dr. P.Sreelatha Professor, Department of BME, KPRIET	Faculty Member	 22/11/23
8.	Dr. A. Allwyn Gnanadas Assistant Professor (Sl.G), Department of BME KPRIET	Faculty Member	
9.	Dr. T.Gayathri Assistant Professor (Sl.G), Department of BME KPRIET	Faculty Member	—
10.	Dr. S. Logesh Kumar Assistant Professor (Sl.G), Department of BME KPRIET	Faculty Member	 22/11/23
11.	Dr. N. Rajasingham Assistant Professor (Sl.G), Department of BME KPRIET	Faculty Member	 22-11-23
12.	Mr. V. Bharath Assistant Professor (Sr.G), Department of BME, KPRIET	Faculty Member	 22/11/23
13.	Ms. M. Swathy Assistant Professor (Sr.G), Department of BME, KPRIET	Faculty Member	 22/11/23.
14.	Mr. John Amose Assistant Professor (Sr.G) Department of BME, KPRIET	Faculty Member	 22/11/23

15.	Dr. P. Arun Kumar Assistant Professor (Sr.G), Department of BME KPRIET	Faculty Member	<i>PA 22/6/23</i>
16.	Ms. B. Priya Darshini Assistant Professor, Department of BME, KPRIET	Faculty Member	<i>B Priya Darshini</i>
17.	Mr. R. Krishna Kumar Assistant Professor, Department of BME, KPRIET	Faculty Member	<i>RK Priya Darshini</i>
18.	Ms. K. Priyadarshni Associate Analyst, Zifo RnD Solutions, Chennai	Alumna (2018 – 2022)	ONLINE

Minutes of the 9th Meeting of the Board of Studies:

The meeting started with the Chairman, Department of Biomedical Engineering welcoming the members of the Board of Studies and continued with a presentation on Vision, Mission, POs, PEOs, PSOs, Syllabus content of Professional Electives and Open Electives under Regulations 2021.

Following points were discussed at the Ninth Board of Studies meeting.

RESOLUTIONS:

1. Action taken on the minutes of the 8th BOS meeting:

- U21BMP36 - Communication Network Systems is included in Vertical V
- Real time processing processing systems are included as applications in the course U21BMP39 - Embedded Systems for Biomedical Applications

2. Regulations 2021 – U.G. Programme

- An additional course U21BMX06 – Telemedicine is included in the list of open elective choices that will be offered during the VI semester (OEC III). And the syllabus was approved by the members.

- Dr. G. Muralidhar Bairy insisted to provide latest editions of text books for all the courses.

3. Industry/Academic inputs on curriculum design

Special Elective Courses for Ph.D scholars – P.G. Regulations 2023

- Dr. Bodhisatwa Das, Assistant Professor, Department of Biomedical Engineering, IIT Ropar suggested to include techniques for thermal characterization in the course Nanobiomaterials for Biomedical Applications
- Mr. Boopathy Sakthivel, CEO & Founder, Prashan Medical Technologies, Coimbatore suggested to include digital ground reference problems and ground loops in the course Bioelectronics and Biosensors
- Mr. C. V. Renjith, Electrical Architect - Medical Imaging at Philips Healthcare, Pune suggested to include reconstruction techniques related to MRI & CT
In the course Applied Medical Image Processing
- Mr. Sai Venkateshwaran Srinivasan, AIML Division Head, Standardized Chartered GBS suggested to include Decision tree and debugging tools in the course Explainable AI (XAI) In Healthcare

4. Syllabus of the Special Elective Courses for Ph.D scholars – P.G. Regulations 2023

1. **P23BM001 - Explainable AI (XAI) In Healthcare** - Approved without any changes.
2. **P23BM002 - Bioelectronics and Biosensors** – Dr. Kunal Pal emphasized the importance of Enzyme based sensors. Based on his suggestions, Enzyme based sensors are included as a separate unit.
3. **P23BM003 - Nanobiomaterials for Biomedical Applications** – The members suggested to include topics on targeted drug delivery and interactions. The topics are included in the unit IV.
4. **P23BM004 - Applied Medical Image Processing** - Approved without any changes.
5. **P23BM005 - Research Methodology for Biomedical Engineering** – The members suggested to provide software-based teaching learning experience for Statistical Analysis and Interpretation. The recommendation was accepted and considered to utilize MATLAB for the same.

5. Industry Oriented Courses / Value Added Courses

The following courses are offered as Value Added Courses for the students of Batch 2021 – 2025

1. Signal Analysis using MATLAB
2. Physiological Signal Analysis using LabVIEW

6. Amendments if any in R2019

No recommendations were presented.

7. Amendments if any in R2021

As the department has established the Biomechanics and Rehabilitation Laboratory, the following changes are made to the curriculum structure

- The Project component in the course Biomechanics is replaced with Practical component
- The Project component in the course Rehabilitation Engineering is replaced with Practical component

8. Any other matters

Dr. M.Santhanalakshmi, University Nominee suggested to consider the elective courses of P.G. Programme (Biomedical Engineering) to be offered as choices for special electives for the Ph.D scholars in future.



Chairman – BoS/BME

