

JERUSALEM COLLEGE OF ENGINEERING
(An Autonomous Institution, Affiliated to Anna University & Accredited by NAAC 'A' Grade)
DEPARTMENT OF BIOMEDICAL ENGINEERING
(Accredited by NBA)

5TH BOARD OF STUDIES MEETING

MINUTES OF THE MEETING

Date: 02 June, 2023 (Friday)
Venue: Conference Room, First Floor, Main Block,
Jerusalem College of Engineering
Pallikaranai, Chennai - 600100.
Board: Biomedical Engineering

Agenda:

1. To consider and approve the list of Professional Electives to be offered under R-2021, which are listed in the form of Verticals.
2. To consider and approve the Revised PEOs.
3. To consider and approve Curriculum (Semester I to VIII), Draft list of Professional and Open Electives to be offered under R-2023 for B.E - Biomedical Engineering.
4. To Consider and Approve Syllabi for courses to be offered in Semester 2 under Curriculum 2023 for B.E. - ECE & B.E. - BME.
5. To Ratify and Approve Revised Panel of Examiners.
6. Best Practices followed in the Department.

5th Board of Studies meeting for the Department of Biomedical Engineering was held on 02 June, 2023 (Friday) by 10.00 a.m at the campus. The members of boards of BME and ECE are mentioned below.

S.no	Name of the Member	Role Description	
1	Dr. J. Sofia Bobby Head of the Department	Department of Biomedical Engineering, Jerusalem College of Engineering.	Chairperson - BME
2	Dr. M. Tamilarasi Professor	Department of Electronics and Communication Engineering, Pondicherry Engineering College, ECR, Pondicherry.	Anna University Nominee
3	Dr. K. Thayalan Principal	Radiation Physics Department, Dr. Kamakshi Institute of Medical Sciences & Research, Pallikaranai, Chennai.	Subject Expert 1
4	Dr. C. Tharini Professor & Dean	School of Electrical & Communication, Crescent Institute of Science and Technology, Vandalur, Chennai.	Subject Expert 2

5	Mr. Ganesh Balasubramanian Senior Deputy Director	Amphenol Antenna Solutions Inc., Chennai.	Industry Expert
6	Mr. K. Sarathy	Sr. Assistant Engineer	Alumnus/2005-09
7	Dr. Sheeja V Francis Head of the Department	Department of ECE, Jerusalem College of Engineering	Chairperson - ECE
8	Dr. Ramesh S	Jerusalem College of Engineering	Principal
9	Dr. P. Anuradha	Jerusalem College of Engineering	Dean Academics
10	Dr.P.Gnanasivam	Jerusalem College of Engineering	Professor and Dean IR
11	Mr. Ilayaperumal	Jerusalem College of Engineering	Placement Officer
12	Dr.R.Anitha	Jerusalem College of Engineering	Professor
13	Ms.C.L.Annapoorani	Jerusalem College of Engineering	BOS Coordinator/ Assistant Professor
14	Ms.S.Purnima	Jerusalem College of Engineering	Assistant Professor
15	Ms.S.Lavanya	Jerusalem College of Engineering	Assistant Professor
16	Ms.B.Nivetha	Jerusalem College of Engineering	Assistant Professor

The Chairman - BME welcomed the Distinguished Board Members, Principal, Deans and Heads, Faculty members for the 5th Board of Studies meeting.

1. Consideration and Approval of List of Professional Elective courses in the form of Verticals and syllabi, to be offered under R-2021

The Chairperson listed the Professional Elective courses to be offered in the form of verticals for B.E. Biomedical Engineering, under R-2021 and presented its respective syllabi.

- Dr.C.Tharini suggested that topics on Cloud Computing can be included in the syllabus of Healthcare Technology.
- Dr. K. Thayalan suggested that contents in the unit 'Projection Radiography' can be replaced with some recent techniques.
- He also added that few basic terminologies in the unit II 'Radiographic imaging concepts' in the subject Radiographic Imaging Systems be removed and units of radiation shall be incorporated.
- It was also suggested that 2D and 3D imaging techniques such as PET - MRI shall be included in the Unit III – Planar Scintigraphy in the course 'Advanced Medical Imaging Techniques'.
- In the same subject, it was advised to include Phantom Study in every imaging modality topics.
- Dr.Tamilarasi suggested to replace '&' symbol with 'and' in the unit titles.
- Dr. Tharini suggested that topics related to nanomaterials shall be added in the subject 'Medical Implants'.
- Dr.P.Gnansivam suggested that the title of Unit V in the subject 'Virtual Reality in Medicine' could be coined as 'case studies'

The suggestions listed by the board members were incorporated in the respective subjects.

Annexure 1: List of Courses as Professional Electives in the form of Verticals for R-2021

2. Consideration and Approval of Revised PEOs under R-2023

The Chairperson presented the following revised PEOs to the board members, which was approved.

Program Educational Objectives (PEOs)

- **PEO 1:** To enable the graduates to develop prototype models and biomedical devices through the core foundation and knowledge acquired with multi-disciplinary approach.
- **PEO 2:** To facilitate the graduates to adapt to the contemporary technologies and support healthcare providers at various levels with effective communication and team work.
- **PEO 3:** To demonstrate the analytical skills to enhance and innovate with ethical commitment.
- **PEO 4:** To empower the graduates to grow as pioneers in the healthcare sector.

Annexure 2: Revised Program Educational Objectives for R-2023

3. Consideration and Approval of the Curriculum, List of Professional Electives in the form of Verticals and Open Electives to be offered under R-2023

The chairperson presented the framework of Curriculum 2023 (Semester I to VIII) for B.E. Biomedical Engineering program under R-2023.

Annexure 3: Curriculum, List of Professional and Open Elective courses under R-2023

4. Consideration and Approval of Theory & Laboratory Syllabi for courses to be offered in Semester 2 under Curriculum 2023 for B.E. - ECE & B.E. - BME Programs

The syllabus of Electronic Devices & Electric Circuits – Theory and Laboratory Courses which was presented by the chairperson of ECE, was approved by the subject experts with following suggestions.

- Electronic Principles by Malvino can be included in the references of Electronic Devices & Electric Circuits subject.
- The study experiments in Electronic Devices & Electric Circuits Laboratory must be reframed.

As per the above suggestion changes have been incorporated in the respective syllabus.

Annexure 4: Ratified syllabi of Electronic Devices and Electric Circuits - Theory and Lab

5. Ratification and Approval of revised panel of Internal and External examiners to be forwarded to the Academic Council

The Chairperson presented the list of internal and external examiners to the members. The members recommended the list be forwarded to the Academic Council for approval.

Annexure 5: List of Internal and External Examiners

6. Best Practices followed in the Department.

The Chairperson listed out different pedagogical initiatives and innovative methods for teaching and evaluation. The members also gave suggestions and ideas that could be implemented for better teaching – learning environment.

Additional Remarks:

The meeting ended with the Chairperson thanking all the members for their presence and overall suggestions which she ensured would be incorporated and forwarded to the Academic Council.

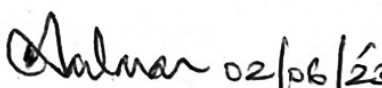

CHAIRPERSON
(Dr. J. SOFIA BOBBY)


SUBJECT EXPERT 1
(DR.C.THARINI)


SUBJECT EXPERT 2
(Dr. K. THAYALAN)


ALUMNI
(Mr. K. SARATHY)


INDUSTRY EXPERT
(Mr. GANESH B)


ANNA UNIVERSITY
NOMINEE
(Dr. M. TAMILARASI)