ADHIYAMAAN COLLEGE OF ENGINEERING (AUTONOMOUS), HOSUR

(An Autonomous Institution Affiliated to Anna University, Chennai)
DEPARTMENT OF BIOMEDICAL ENGINEERING

Board of Studies in Biomedical Engineering Thirty second Meeting on 05.07.2025 at 12.30 PM

Minutes of Meeting

32nd Board of studies meeting in Biomedical Engineering was conducted on 05.07.2025 at 12.30 pm in R & D Lab, Main Block, Adhiyamaan College of Engineering (Autonomous), Hosur.

MEMBERS PRESENT

- 1. Dr.T.S.Udhaya Suriya, Chairperson, BoS / Biomedical Engineering
- 2. Dr. G. Kavithaa, University Nominee.
- 3. Dr. Sasikumar K, Subject expert.
- 4. Dr N.Sriraam, Subject expert.
- 5. Mr.S. Kumar, Industry Nominee.
- 6. Dr. N. Bagyalakshmi, Member, BoS / Biomedical Engineering
- 7. Dr. V. P. Krishnammal, Member, BoS / Biomedical Engineering
- 8. Mr. P. Ganesh Babu, Member, BoS / Biomedical Engineering
- 9. Mr. C. Sathish Kumar, Member, BoS / Biomedical Engineering
- 10. Mrs. A. Martina Jenitha, Member, BoS / Biomedical Engineering
- 11. Mrs. J. Jeba, Member, BoS / Biomedical Engineering
- 12. Mr. M. Kaviyarasu, Member, BoS / Biomedical Engineering
- 13. Mrs. S. Sivaranjani, Member, BoS / Biomedical Engineering
- 14. Mrs. M. Indhuja, Member, BoS / Biomedical Engineering

32.1 Welcome and Opening Remarks

Dr. T. S. Udhaya Suriya, Chairperson – Board of Studies chaired the meeting and welcomed all the members to the 32nd Board of studies meeting in the Department of Biomedical Engineering. The chairperson of the board introduced the external members of the Board of Studies which includes a University Nominee, Expert members, Industrial Member and an alumnus of the college and thanked each of them for sparing their valuable time to attend the meeting. The internal members introduced themselves to the Board of studies.

To consider the minutes of the thirty first meeting of the Board of Studies in Biomedical Engineering held on 14.12.2024.

RESOLVED that the minutes of the thirty first meeting of the Board of Studies in Biomedical Engineering have been considered.

To consider the syllabi of 5th semester of B.E (Biomedical Engineering) under **Regulation 2022 (CBCS)** for the batch of students admitted in 2023-24.

RESOLVED that the syllabi of 5th semester of B.E (Biomedical Engineering) under **Regulation 2022 (CBCS)** for the batch of students admitted in 2023-24 be approved (**Annexure-I**).

To consider the syllabi of 3rd semester of B.E (Biomedical Engineering) under **Regulation 2022 (CBCS)** for the batch of students admitted in 2024-25.

RESOLVED that the syllabi of 3rd semester of B.E (Biomedical Engineering) under **Regulation 2022 (CBCS)** for the batch of students admitted in 2024-25 be approved (**Annexure-II**).

32.3 To consider Curriculum Outcome Framework

The Curriculum Outcome was analyzed and some instructions given by the members.

32.4.1 To consider the CO/PO Attainment Data

The CO/PO Attainment Data for the odd semester of 2024-2025 academic year was presented by chairperson. The attainment levels were compared with the predefined benchmarks as 70%. Areas of achievement and underperformance were highlighted.

32.4.2 Gap Analysis & Corrective Measures

Gaps between the targeted and actual CO/PO attainment were identified. Possible reasons for gaps included:

- Limited practical exposure in certain courses
- Corrective actions proposed:
- Conduct of remedial classes and workshops for difficult topics
- Industry interactions and expert lectures to bridge practical knowledge gaps
- 32.4.3 Faculty Development Plan

To address the gaps and improve teaching-learning quality, the following faculty development initiatives were proposed:

- FDPs on Outcome-Based Education (OBE) practices
- Training sessions on advanced teaching tools and assessment techniques
- Encouragement for faculty to participate in NPTEL and certification programs
- 32.5 IKS-based Elective Courses

Discussion was held on integrating Indian Knowledge System (IKS) in Audit courses of the curriculum.

- 32.6 SWAYAM/NPTEL Course Mapping
- To consider the list of students who have cleared the SWAYAM/NPTEL courses for credit allocation.

 RESOLVED that the list of students who have cleared the SWAYAM/NPTEL courses for credit allocation be approved.
- 32.6.2 To consider the list of SWAYAM/NPTEL courses for the batch of students admitted in 2022-23, 2023-24 and 2024-25.

RESOLVED that the list of SWAYAM/NPTEL courses for the batch of students admitted in 2022-23, 2023-24 and 2024-25 be approved.

- 32.7.1 NSQF Level Mapping
 The BoS ensure that the curriculum will align with AICTE guidelines.
- 32.7.2 Skill-based Add-on/Certificate Courses

 To consider the value-added course under Regulation 2022 (CBCS).

 RESOLVED that the value-added course under Regulation 2022 (CBCS) be approved (Annexure-III).
- Job Role Mapping (NSDC)

 Department Advisory Board prepared detailed job role mapping documentation. Proposed mapping will be reviewed by the Board of Studies (BoS). Industry expert's feedback on practical competencies required for the listed job roles. The BoS members advised to add more certification courses to strengthen employability.
- 32.8.1 Internship Structure

 The **Department Advisory Board** prepared a detailed handbook for internship including guidelines, templates and timelines. Faculty mentors will be assigned to each student for regular monitoring.

List of student's undergone internship in hospitals, biomedical companies and research organizations will be expanded and approved.

32.8.2 Stake holder feedback on Curriculum

The **Department Advisory Board** prepared summary of feedback from stake holders. The suggestions given by the DAB were analyzed in the BoS.

The BoS suggested for inclusion of new topics such as Artificial Intelligence in Healthcare, Biostatistics and Internet of Medical Things (IoMT) was recommended. Recommend to establish additional MoUs with industry partners.

32.8.3 Employability Skills Modules

The Board suggested initiating placement training to significantly improve the

Industry readiness and employability of final year Biomedical Engineering students.

- 32.9 Elective Course Expansion
- To consider the Elective subject syllabi of 5th semester of B.E (Biomedical Engineering) under **Regulation 2022 (CBCS)** for the batch of students admitted in 2023-24. **RESOLVED** that the Elective subject syllabi of 5th semester of B.E (Biomedical Engineering) under **Regulation 2022 (CBCS)** for the batch of students admitted in 2023-24 be approved (**Annexure-IV**).
- To consider the Elective subject syllabi of 7th semester of B.E (Biomedical Engineering) under **Regulation 2022 (CBCS)** for the batch of students admitted in 2022-23. **RESOLVED** that the Elective subject syllabi of 7th semester of B.E (Biomedical Engineering) under **Regulation 2022 (CBCS)** for the batch of students admitted in 2022-23 be approved (**Annexure-V**).
- 32.10 Stakeholder Feedback and Curriculum Benchmarking
 The **Department Advisory Board** prepared summary of feedback from stack holders. The BoS suggested that the feedback given by the DAB were incorporated in the upcoming regulation 2025.
- 32.11 Curriculum Revision
- 32.11.1 To consider the curriculum and syllabi of 7th semester of B.E (Biomedical Engineering) under Regulation 2022 (CBCS) for the batch of students admitted in 2022-23.

 RESOLVED that the curriculum and syllabi of 7th semester of B.E (Biomedical Engineering) under Regulation 2022 (CBCS) for the batch of students admitted in 2022-23 be approved (Annexure-VI).
- To consider the curriculum of B.E (Biomedical Engineering) under Regulation 2025 (CBCS) for the batch of students admitted in 2025-26.

 RESOLVED that the curriculum of B.E (Biomedical Engineering) under Regulation 2025 (CBCS) for the batch of students admitted in 2025-26 be approved (Annexure-VII).

The BoS members presented their suggestions as mentioned below:

Dr. G. Kavithaa, University Nominee suggested that recent edition books should be included for all subjects. She also suggested, checking CO-PO mapping for all subjects.

Dr. Sasikumar K, Subject Expert, advised to ensure that GATE Syllabus should be incorporated in curriculum and Syllabus.

Mr.S. Kumar, Industry Nominee, suggested including Biomedical Signal Processing as Professional Core subject.

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Dr. Sasikumar K, Subject Expert, advised to ensure that GATE Syllabus should be incorporated in curriculum and Syllabus.

Mr.S. Kumar, Industry Nominee, suggested including Biomedical Signal Processing as Professional Core subject.

Dr N.Sriraam, Subject Expert, recommended for changing the subject in the curriculum. He also suggested including more examples of medical images in the subject 722BMT01- Medical Image Processing.

S1.	Programme	Subject	Existing Course	Proposed Course
No		Code		
1	B.E- Biomedical	722BMP07	Digital Image	Medical Image
	Engineering		Processing Laboratory	Processing Laboratory
2	B.E- Biomedical	522BME01	Biosensors and	Biosensors
	Engineering		Transducers	

- 32.12 Resolutions to be passed
- 32.12.1 To consider the Continuous Assessment (Internal) and End Semester Assessment (External) Marks ratio under **Regulation 2025 (CBCS) (Annexure-VIII)**

RESOLVED that the Continuous Assessment (Internal) and End Semester Assessment (External) Marks ratio under **Regulation 2025 (CBCS)** be approved (**Annexure-VIII**)

32.12.2 To consider the panel of examiners for the evaluation process

RESOLVED that the panel of examiners for the evaluation process be approved (Annexure-IX).

32.13 Vote of Thanks

The meeting was concluded by Dr. N. Bagyalakshmi, Associate Professor/Biomedical Engineering proposed the vote of thanks for all the members for attending the meeting and for giving valuable suggestions.

Approval & Recommendations

Based on the suggestions and recommendations given by the members, BoS resolved to recommend the above discussed items to the Academic Council for further approval.

Date: 05.07.2025

Chairperson
Profossor and Head
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