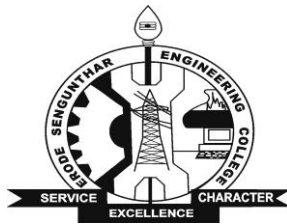


ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution, Affiliated to Anna University, Chennai)

PERUNDURAI, ERODE - 638 057



Department of Biomedical Engineering
3rd BOARD OF STUDIES MEETING

6th November 2020 @ 10.30 a.m.

GOOGLE ONLINE MEET

Link: <https://meet.google.com/wfh-hasx-kvf>



DEPARTMENT OF BIOMEDICAL ENGINEERING

Third Board of Studies Meeting

Mode: Through Online (Meeting Link: <https://meet.google.com/wfh-hasx-kvf>)

Date & Time: 06.11.2020 & 10.30 a.m.

AGENDA

The Third Board of Studies Meeting is convened to get the approval for the Curriculum and Syllabi for the Semesters V to VI, Open Electives offered by BME, Industry supported Electives (Infosys Limited) and NPTEL courses to be offered.

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|---------------|---|
| BoS / BME 3.1 | Welcome address and opening remarks by Chairman, Board of Studies in the Department of Biomedical Engineering |
| BoS / BME 3.2 | Confirmation of the 2 nd Board of Studies Meeting Minutes of the Department of Biomedical Engineering and Action taken report of 2nd Board of Studies meeting. |
| BoS / BME 3.3 | To consider and approve the curriculum: V and VI Semester for B.E. BME Programme. |
| BoS / BME 3.4 | To consider and approve the Syllabi: V and VI Semester courses for B.E. BME Programme |
| BoS / BME 3.5 | To consider and approve Open Electives offered by Biomedical Engineering Department |
| BoS / BME 3.6 | To consider and approve syllabi for Infosys Limited supported courses |
| BoS / BME 3.7 | To consider and approve NPTEL Courses to be offered |
| BoS / BME 3.8 | Any other Matter |

DEPARTMENT OF BIOMEDICAL ENGINEERING

MINUTES OF THE MEETING

The Third Board of Studies meeting of Department of Biomedical Engineering was held on 6th November 2020 at 10.30 a.m. through online.

1. The following members were present:

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| 1 | Dr. S. Karthick Associate Professor & Head Department of Biomedical Engineering, Erode Sengunthar Engineering College, Perundurai. | Chairman |
| 2 | Dr. V. Venkatachalam Principal, Erode Sengunthar Engineering College, Perundurai. | Member |
| 3 | Dr. R. Kalaivani, Professor, Department of Electronics and Communication Engineering, Erode Sengunthar Engineering College, Perundurai. | Member |
| 4 | Dr. M. Ramasubba Reddy, Professor, Department of Applied Mechanics, Indian Institute of Technology, Chennai | University Nominee |
| 5 | Dr. J. Krishnan, Professor, Department of Instrumentation Engineering, Annamalai University, Chidambaram, Cuddalore District. | Academic Experts |
| 6 | Dr. P. Manimegalai, Associate Professor, Department of Biomedical Engineering, School of Engineering and Technology, Karunya Institute of Technology and Sciences, Coimbatore. | |
| 7 | Mr. V. Angappa, Managing Director, Mega Tech Scientific Instruments, 70, Rajunaidu Street, Sivanandha Colony, Coimbatore. | Industry Expert |
| 8 | Dr. V. Premchandran, Associate Professor / BME Erode Sengunthar Engineering College, Perundurai | Internal Members |
| 9 | Dr. M. N. Saravana Kumar, Associate Professor / BME Erode Sengunthar Engineering College, Perundurai | |
| 10 | Mr. K. Balasubramanian, Assistant Professor / BME Erode Sengunthar Engineering College, Perundurai | |

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| 11 | Mr. R.Shankar, Assistant Professor / BME Erode Sengunthar Engineering College, Perundurai | Internal Members |
| 12 | Mrs. T.Yamuna, Assistant Professor / BME Erode Sengunthar Engineering College, Perundurai | |
| 13 | Mrs. M. Divya, Assistant Professor / BME Erode Sengunthar Engineering College, Perundurai | |
| 14 | Mrs. K.K.Leka, Assistant Professor / BME Erode Sengunthar Engineering College, Perundurai | |

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| BoS / BME 3.1 | : | <p>WELCOME ADDRESS AND OPENING REMARKS BY CHAIRMAN, BOARD OF STUDIES IN THE DEPARTMENT OF BIOMEDICAL ENGINEERING.</p> |
| BoS / BME 3.2 | : | <p>CONFIRMATION OF THE 2nd BOARD OF STUDIES MEETING MINUTES OF THE DEPARTMENT OF BIOMEDICAL ENGINEERING AND ACTION TAKEN REPORT OF 2nd BOARD OF STUDIES MEETING.</p> |
| BoS / BME 3.3 | : | <p>TO CONSIDER AND APPROVE THE CURRICULUM: V AND VI SEMESTER FOR B.E. BME PROGRAMME</p> |
| | | <p>The Chairman, BOS of the Biomedical Engineering presented the Regulation 2019 curriculum of V and VI Semester B.E.BME among the Board of Studies members.</p> <p>The BoS members suggested the following:</p> <ul style="list-style-type: none"> • Dr. M. Rammasubba Reddy suggested to remove the Bio Control System Subject from Semester IV to Semester V, • Dr. J. Krishnan agreed to have the Bio control System Subject Semester V, • Mr. V. Angappa suggested to give more importance to Subject related to GATE examinations, • Dr. M. Rammasubba Reddy agreed to include Syllabi for Infosys Limited Supported Courses in IV semester. All Bos members agreed the same, • All BoS members suggested to remove the title in the subjects like “supported by Infosys” in the curriculum but can be included in the syllabus by specifying within the brackets, • Dr. M. Rammasubba Reddy & Mr. V. Angappa suggested to remove open elective subject in V semester to reduce the total number of credits in the range of 163 to 160 for UG curriculum, • Dr. M. Rammasubba Reddy suggested to change the Professional Elective paper ‘Body Area Networks’ as ‘Human Body Area Network’. |

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| BoS / BME 3.4 | : | <p>TO CONSIDER AND APPROVE THE SYLLABI: V AND VI SEMESTER COURSES FOR B.E. BME PROGRAMME.</p> |
| | | <p>The Chairman, BOS of the Biomedical Engineering presented the Syllabi of the Regulation 2019 for Semesters V and VI of BME among the Board of Study members.</p> <p>The BoS members suggested the following:</p> <ul style="list-style-type: none"> • Dr. M. Rammasubba Reddy suggested to include Biomedical Waste Management syllabus in one of the unit in Hospital Waste Management. • Dr. M. Rammasubba Reddy & Mr. V. Angappa suggested to have medical related syllabus in Disaster Management of Unit IV and V, • Dr. J. Krishnan and Dr. M. Rammasubba Reddy suggested to include Covid – 19 related management topics in Disaster management, • For the remaining Professional Elective subjects all the BoS members accepted. |
| BoS / BME 3.5 | : | <p>TO CONSIDER AND APPROVE OPEN ELECTIVES OFFERED BY COMPUTER SCIENCE AND ENGINEERING DEPARTMENT</p> |
| | | <p>The Chairman, BOS of the Biomedical Engineering presented the Open Electives of the Regulation 2019 offered by BME Department among the Board of Study members.</p> <p>The BoS members suggested the following:</p> <ul style="list-style-type: none"> • Dr. M. Rammasubba Reddy suggested to show variations in the subject title and syllabus of the Open Electives from the BME department subjects • Dr. M. Rammasubba Reddy and Dr. J. Krishnan suggested to change the title of the subjects Biomedical Waste Management as Hospital Waste Management. • Mr. V. Angappa suggested to include the following subjects as Open Electives: <ul style="list-style-type: none"> ✓ Bio MEMS ✓ Biometric System ✓ Telemedicine ✓ Basics of Bioinformatics ✓ Design of Medical Instruments • Dr. M. Rammasubba Reddy suggested to increase the number of Professional Electives and decrease the number of Open Electives, • Dr. J. Krishnan suggested to include the prerequisite of the Open Elective subjects. |

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| BoS / BME 3.6 | : | TO CONSIDER AND APPROVE SYLLABI FOR INFOSYS LIMITED SUPPORTED COURSES . |
| | | <p>The Chairman, BOS of the Biomedical Engineering presented the Syllabi for Infosys Limited Supported Courses of the Regulation 2019 offered by BME Department among the Board of Study members.</p> <p>The BoS members suggested the following:</p> <ul style="list-style-type: none"> • All BoS members agreed to have the Infosys Limited Supported Courses. • All BoS members agreed to replace existing Soft Skills – I (Semester I) and Soft Skills – II (Semester II) Course of R2019 B.E. BME curriculum. The modification is applicable to the students who admitted in the academic year 2020-2021 onwards. |
| BoS / BME 3.7 | : | TO CONSIDER AND APPROVE NPTEL COURSES TO BE OFFERED. |
| | | <p>The Chairman, BOS of the Biomedical Engineering presented the NPTEL Courses to be offered among the Board of Study members.</p> <p>The BoS members suggested the following:</p> <ul style="list-style-type: none"> • The Chairman, BoS of CSE presented the following NPTEL courses <ul style="list-style-type: none"> ✓ Medical Biomaterials ✓ Tissue Engineering ✓ Bioinformatics Algorithm and Applications ✓ Biomedical Nanotechnology ✓ Bio Analytical Techniques and Bioinformatics ✓ Basic Electronics ✓ Digital Signal Processing • All BoS members suggested to include either two 8 week courses or one 12 week course. Also they suggested to consider 4 week course also, • All BoS members suggested to consider NPTEL course for open electives. Also they insisted to keenly watch that subjects should not be repeated. |
| BoS / BME 3.8 | : | VOTE OF THANKS |
| | | <ul style="list-style-type: none"> ❖ Dr. S. Karthick, Associate Professor / BME, proposed the vote of thanks for the 3rd BoS meeting conducted on 06.11.2020. She thanked everyone for their valuable presence over online mode and for their valuable suggestions to improve the curriculum and syllabi of B.E. Biomedical Engineering. |



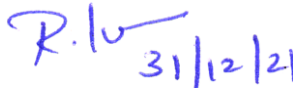




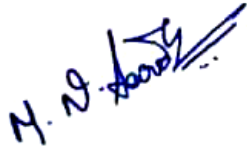





CHAIRMAN
BOARD OF STUDIES

MEMBERS PRESENT IN ONLINE

| | | |
|----|---|-----------------------|
| 1. | Dr. S. Karthick, Professor & Head Department of Biomedical Engineering, Erode Sengunthar Engineering College, Perundurai. | Chairman |
| 2. | Dr. M. Ramasubba Reddy, Professor, Department of Applied Mechanics, Indian Institute of Technology, Chennai | University Nominee |
| 3. | Dr. J. Krishnan, Professor, Department of Instrumentation Engineering, Annamalai University, Chidambaram, Cuddalore District. | Academic Experts |
| 4. | Dr. P. Manimegalai, Associate Professor, Department of Biomedical Engineering, School of Engineering and Technology, Karunya Institute of Technology and Sciences, Coimbatore. | |
| 5. | Mr. V. Angappa, Managing Director, Mega Tech Scientific Instruments, 70, Rajunaidu Street, Sivanandha Colony, Coimbatore. | Industry Expert |

MEMBERS PRESENT

| | | |
|----|---|---|
| 1. | Dr. V. Venkatachalam Principal, Erode Sengunthar Engineering College, Perundurai. |  |
| 2. | Dr. S. Karthick, Professor & Head Department of Biomedical Engineering, Erode Sengunthar Engineering College, Perundurai. |  |
| 3. | Dr. R. Kalaivani, Professor, Department of Electronics and Communication Engineering, Erode Sengunthar Engineering College, Perundurai. |  |
| 4. | Dr. M. Sundaram, Professor / BME Department of Biomedical Engineering, Erode Sengunthar Engineering College, Perundurai |  |

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|-----|---|---|
| 5. | Dr.V.Premchandran, Associate Professor / BME Department of Biomedical Engineering, Erode Sengunthar Engineering College, Perundurai |  |
| 6. | Dr.M.N.Saravana Kumar, Associate Professor / BME Department of Biomedical Engineering, Erode Sengunthar Engineering College, Perundurai |  |
| 7. | Mr.K.Balasubramanian, Assistant Professor, Department of Biomedical Engineering, Erode Sengunthar Engineering College, Perundurai. |  |
| 8. | Mr. R.Shankar, Assistant Professor / BME, Department of Biomedical Engineering, Erode Sengunthar Engineering College, Perundurai |  |
| 9. | Mrs. T.Yamuna, Assistant Professor / BME, Department of Biomedical Engineering, Erode Sengunthar Engineering College, Perundurai |  |
| 10. | Mrs.M.Dhivya, Assistant Professor, Department of Biomedical Engineering, Erode Sengunthar Engineering College, Perundurai. |  |
| 11. | Mrs. K.K.Leka, Assistant Professor / BME Department of Biomedical Engineering, Erode Sengunthar Engineering College, Perundurai |  |

Department of Biomedical Engineering

The 03rd Board of studies meeting held on 06.11.2020 through the following link:

Google online meet link <https://meet.google.com/wfh-hasx-kvf>

The screenshot displays a Google Meet session with a shared PDF document titled "CURRICULAM.pdf". The document contains a table titled "OPEN ELECTIVES OFFERED BY BIOMEDICAL ENGINEERING". The table lists 10 courses with their respective codes, objectives, and credit hours. The meeting interface shows 5 participants and meeting details.

| Code No | Course | Objective & Outcomes | | | L | T | P | C |
|----------------------|-------------------------------------|----------------------|---------------------|------|---|---|---|---|
| | | PEOs | POs & | PSOs | | | | |
| OPEN ELECTIVE | | | | | | | | |
| 19BMY01 | Basic of Biomedical Instrumentation | I, IV | 1,6,8,9,10 | - | 3 | 0 | 0 | 3 |
| 19BMY02 | Medical Electronics | I, III | 1,6,7,10 11 | 2 | 3 | 0 | 0 | 3 |
| 19BMY03 | Biotechnology & Telemedicine | III, IV | 1,2,3,7 | - | 3 | 0 | 0 | 3 |
| 19BMY04 | Design of Biomedical Instruments | I, IV | 6,7,8,9,10 11,12 | - | 3 | 0 | 0 | 3 |
| 19BMY05 | Human Assist Devices | IV | 1,2,3 | 1 | 3 | 0 | 0 | 3 |
| 19BMY06 | Robotics and Automation in medicine | III, IV | 1,2,3,7 | - | 3 | 0 | 0 | 3 |
| 19BMY07 | Medical Informatics | IV | 1,2,2 | - | 3 | 0 | 0 | 3 |
| 19BMY08 | Telehealth Technology | IV | 1,2,3,7 | - | 3 | 0 | 0 | 3 |
| 19BMY09 | Hospital Management | IV | 1,2,3 | 1 | 3 | 0 | 0 | 3 |
| 19BMY10 | Biomedical Waste Management | IV | 1,2,3,7 | - | 3 | 0 | 0 | 3 |

