(An Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF BIOMEDICAL ENGINEERING

Board of Studies in Biomedical Engineering

Minutes of the 26th Meeting of the Board of Studies in Biomedical Engineering held on 28.07.2022 at 11:00 am (Online mode).

MEMBERS PRESENT

- 1. Dr.T.S.Udhaya Suriya, Chairman, BOS/ Biomedical Engineering
- 2. Dr. V.P. Krishnammal, Member, BOS/ Biomedical Engineering
- 3. Dr. N.Bagyalakshmi, Member, BOS/ Biomedical Engineering
- 4. Prof.P.Ganesh Babu, Member, BOS/ Biomedical Engineering
- 5. Prof.C.Sathish Kumar, Member, BOS/ Biomedical Engineering
- 6. Dr.B.Padmapriya, Member, University Nominee
- 7. Dr.A.Kavitha, Member, Academic Council Nominee
- 8. Dr.N.Sriraam, Member, Academic Council Nominee
- 9. Mr.Rodda Koteeswara, Member, Industrial Expert
- 10. Mr. J. Hariraman, Member, Representative from Alumni
- 11. Dr.S.Sumathi, HOD/ECE/ACE, Inter Disciplinary Expert
- 12. Dr. V. Manivasagan, HOD/Bio Tech/ACE, Inter Disciplinary Expert
- To consider the minutes of the Twenty fifth meeting of the Board of Studies in Biomedical Engineering held on 23.10.2021.
 - **RESOLVED** that the minutes of the Twenty fifth meeting of the Board of Studies in Biomedical Engineering have been considered.
- To consider the syllabi of 7th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2019-20.

RESOLVED that the syllabi of 7th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2019-20 be approved (**Annexure – I**).

- To consider the syllabi of 5th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2020-21. **RESOLVED** that the syllabi of 5th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2020-21 be approved (**Annexure-II**).
- To consider the syllabi of 3rd semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2021-22. **RESOLVED** that the syllabi of 3rd semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2021-22 be approved (**Annexure-III**).
- To consider the Continuous Assessment (Internal) and End Semester Assessment (External) Marks ratio under Regulation 2022 (CBCS).

 RESOLVED that the Continuous Assessment (Internal) and End Semester Assessment (External) Marks ratio under Regulation 2022 (CBCS) (Annexure-IV)
- To consider the panel of examiners for the evaluation process.

 RESOLVED that the panel of examiners for the evaluation process be approved

 (Annexure-V).

Date: 28.07.2022

Chairman

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DEPARTMENT OF BIOMEDICAL ENGINEERING

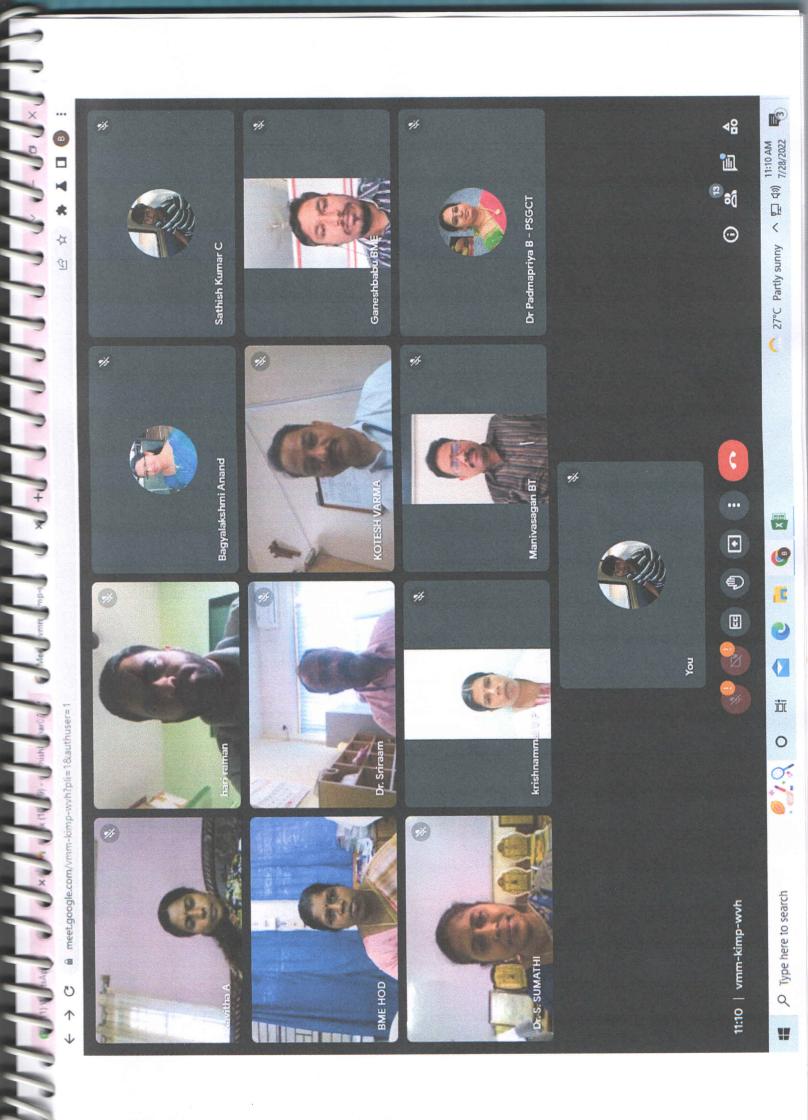
26th Board of Studies meeting in Biomedical Engineering (UG)

Held on 28.07.2022 at 11:00 a.m (Online mode).

S. No.	Name	Address	Designation	Attendance
1	Dr.T.S.Udhaya Suriya	Prof & Head, Department of BME, Adhiyamaan College of Engg. Hosur	Chairman	Say
2	Dr.V.P.Krishnammal	Associate Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	1.b. tryp
3	Dr. N.Bagyalakshmi	Associate Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member (AIR
4	Prof.P.Ganesh Babu	Assistant Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	RAVI
5	Prof.C.Sathish Kumar	Assistant Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	Die
6	Dr.B.Padmapriya	Associate Professor Department of Biomedical Engineering PSG College of Technology Peelamedu, Coimbatore- 641004 Ph:9443883109 bpp.bme@psgtech.ac.in	University Nominee	Online
7	Dr.A.Kavitha	Professor & Head, Dept of Biomedical Engineering SSN College of Engineering, Chennai, Tamilnadu. 04427469700 kavithaa@ssn.edu.in	Member Nominated by Academic Council	Online

8	Dr.N.Sriraam	Professor & Head, Department of Medical Electronics, M.S.Ramaiah Institute of Technology, Bangalore, Karnataka Ph: 09632294999 sriraam@msrit.edu	Member Nominated by Academic Council	Online
9	Mr.Rodda Koteswara	HOD Biomedical Department, St.John's Medical College Hospital, Bangalore-560034	Industrial Expert	Online
10	Mr. J. Hariraman, B.E.,	Territory Manager Fisher and Paykel Healthcare Company Coimbatore Ph: 9597299911 Hariraman.jeyaprakash@fp hcare.in	Representative from Alumni	Online
11	Dr.S.Sumathi	Professor & Head Department of Electronics & Communication Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	8
12	Dr. V. Manivasagan	Professor & Head Department of Biotechnology Adhiyamaan College of Engineering, Hosur Ph:9865373358 hod_bt@adhiyamaan.ac.in	Inter Disciplinary Expert	1 1 12 m

Chairman



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DEPARTMENT OF BIOMEDICAL ENGINEERING

Board of Studies in Biomedical Engineering

Minutes of the 25th Meeting of the Board of Studies in Biomedical Engineering held on 23.10.2021 at 10:00 am (Online mode).

- 1. Dr.T.S.Udhaya Suriya, Chairman, BOS/ Biomedical Engineering
- 2. Dr.V.P.Krishnammal, Member, BOS/ Biomedical Engineering
- 3. Dr. N.Bagyalakshmi, Member, BOS/ Biomedical Engineering
- 4. Prof.P.Ganesh Babu, Member, BOS/ Biomedical Engineering
- 5. Prof.C.Sathish Kumar, Member, BOS/ Biomedical Engineering
- 6. Dr.B.Padmapriya, Member, University Nominee
- 7. Dr.A.Kavitha, Member, Academic Council Nominee
- 8. Dr.N.Sriraam, Member, Academic Council Nominee
- 9. Mr.Rodda Koteeswara, Member, Industrial Expert
- 10. Mr. J. Hariraman, Member, Representative from Alumni
- 11. Dr.S.Sumathi, HOD/ECE/ACE, Inter Disciplinary Expert
- 12. Dr. V. Manivasagan, HOD/Bio Tech/ACE, Inter Disciplinary Expert
- To consider the minutes of the Twenty fourth meeting of the Board of Studies in Biomedical Engineering held on 30.03.2021.
 - **RESOLVED** that the minutes of the Twenty fourth meeting of the Board of Studies in Biomedical Engineering have been considered.
- To consider the syllabi of 8th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19.
 - **RESOLVED** that the syllabi of 8th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19 be approved (**Annexure I**).

To consider the syllabi of 6th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2019-20.

RESOLVED that the syllabi of 6th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2019-20 be approved (**Annexure-II**).

To consider the syllabi of 4th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2020-21.

RESOLVED that the syllabi of 4th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2020-21 be approved (**Annexure-III**).

25.5 To consider the panel of examiners for the evaluation process.

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

Date: 23.10.2021

	Department of Biomedical Engineering-25th BoS Recommendations					
Sem	Course Code	Name of the course	Remarks			
			(New course introduced/Contents			
			incorporated in the corresponding			
			course)			
		2021-2022				
		HOGBITAL	The following topics have been			
		HOSPITAL	included in the existing syllabus			
VIII	818BMT01	ENGINEERING AND				
		MANAGEMENT	Unit I-Medical Ethics, Legal issues in			
			hospital management			
			The following topics have been			
			included in the existing syllabus			
			Hait I Dulmanan anist device			
VIII	818BME04	ASSIST DEVICES	Unit I- Pulmonary assist device Unit II- Peritoneal dialysis,			
			, Continuous Renal Replacement			
			Therapy (CRRT)			
	•		Unit V-Brain Computer Interface			
			The syllabus has been framed with			
			the following unit modules			
			Unit I – Fundamentals of IoT			
		INTERNET OF THINGS	Unit II – IoT protocols			
VIII	818BME06	IN MEDICAL	Unit III – Design and Development			
V 111		APPLICATION	Unit IV – Internet of Medical Things			
			(IOMT)			
			Unit V - IoT in Smart Healthcare			
			System			
			The following topics have been			
		ADVANCED	included in the existing syllabus			
	818BME07	MEDICAL	metadod in the existing syndous			
VIII		INSTRUMENTATION	Unit-V - Smart phone based ECG			
		INSTRUMENTATION	monitoring system, Cloud computing			
			technology			
Feedback	k obtained about	Curriculum and Syllabus				

Feedback obtained about Curriculum and Syllabus from Stakeholders (Faculty, Student, Alumni, Employers) were also discussed and concluded

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DEPARTMENT OF BIOMEDICAL ENGINEERING

25th Board of Studies meeting in Biomedical Engineering (UG) Held on 23.10.2021 at 10:00 a.m (Online mode).

WEWIBERS I RESERVE				
S. No.	Name	Address	Designation	Attendance
1	Dr.T.S.Udhaya Suriya	Prof & Head, Department of BME, Adhiyamaan College of Engg. Hosur	Chairman	Sur
2	Dr.V.P.Krishnammal	Associate Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	Online
3	Dr. N.Bagyalakshmi	Associate Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	4 Contraction of the second
4	Prof.P.Ganesh Babu	Assistant Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	p. y
5	Prof.C.Sathish Kumar	Assistant Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	
6	Dr.B.Padmapriya	Associate Professor Department of Biomedical Engineering PSG College of Technology Peelamedu, Coimbatore- 641004 Ph:9443883109 bpp.bme@psgtech.ac.in	University Nominee	Online
7	Dr.A.Kavitha	Professor & Head, Dept of Biomedical Engineering SSN College of Engineering, Chennai, Tamilnadu. 04427469700 kavithaa@ssn.edu.in	Member Nominated by Academic Council	Online

8	Dr.N.Sriraam	Electronics, M.S.Ramaiah Institute of Technology, Bangalore, Karnataka Ph: 09632294999 sriraam@msrit.edu	Member Nominated by Academic Council	Online
9	Mr.Rodda Koteswara	HOD Biomedical Department, St.John's Medical College Hospital, Bangalore-560034	Industrial Expert	Online
10	Mr. J. Hariraman, B.E.,	Territory Manager Fisher and Paykel Healthcare Company Coimbatore Ph: 9597299911 Hariraman.jeyaprakash@fp hcare.in	Representative from Alumni	Online
11	Dr.S.Sumathi	Professor & Head Department of Electronics & Communication Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	Jour
12	Dr. V. Manivasagan	Professor & Head Department of Biotechnology Adhiyamaan College of Engineering, Hosur Ph:9865373358 hod_bt@adhiyamaan.ac.in	Inter Disciplinary Expert	online

Chairman

(An Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF BIOMEDICAL ENGINEERING

Board of Studies in Biomedical Engineering

Minutes of the 24th Meeting of the Board of Studies in Biomedical Engineering held on 30.03.2021 at 11:00 a.m (Online mode).

- 1. Dr.T.S.Udhaya Suriya, Chairman, BOS/ Biomedical Engineering
- 2. Dr.V.P.Krishnammal, Member, BOS/ Biomedical Engineering
- 3. Dr. N.Bagyalakshmi, Member, BOS/ Biomedical Engineering
- 4. Prof.P.Ganesh Babu, Member, BOS/ Biomedical Engineering
- 5. Prof.C.Sathish Kumar, Member, BOS/ Biomedical Engineering
- 6. Dr.B.Padmapriya, Member, University Nominee
- 7. Dr.A.Kavitha, Member, Academic Council Nominee
- 8. Dr.N.Sriraam, Member, Academic Council Nominee
- 9. Mr.Rodda Koteeswara, Member, Industrial Expert
- 10. Mr. J. Hariraman, Member, Representative from Alumni
- 11. Dr.S.Sumathi, HOD/ECE/ACE, Inter Disciplinary Expert
- 12. Dr.N.G. Ramesh Babu, HOD/Bio Tech/ACE, Inter Disciplinary Expert
- To consider the minutes of the Twenty third meeting of the Board of Studies in Biomedical Engineering held on 17.10.2020.
 - **RESOLVED** that the minutes of the Twenty third meeting of the Board of Studies in Biomedical Engineering have been considered.
- To consider the syllabi of 7th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19.
 - **RESOLVED** that the syllabi of 7th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19 be approved (**Annexure I**).

To consider the syllabi of 5th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2019-20.

RESOLVED that the syllabi of 5th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2019-20 be approved (**Annexure-II**).

To consider the syllabi of 3rd semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2020-21.

RESOLVED that the syllabi of 3rd semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2020-21 be approved (**Annexure-III**).

24.5 To consider the panel of examiners for the evaluation process.

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

Date: 30.03.2021

	Department of	f Biomedical Engineering-2	24 th BoS Recommendations
Sém	Course Code	Name of the course	Remarks (New course introduced/Contents incorporated in the corresponding course)
		2020-2021	
VII	718BMT01	MEDICAL OPTICS	The following topics have been included Single channel and multichannel detectors-Unit II Holmium LaserUnit III
VII	718BMT03	BIOMECHANICS	The following topics have been included Stress strain analysis - Unit I Gait Analysis-abnormal gait- corrective measures- Unit IV Ortho implants-types and applications- Unit V
VII	718BMT04	MEDICAL INFORMATICS	The following topics have been included Standards- HL7, JCAHO, JCIA- Unit II Picture Achieving and Communication System (PACs), Electronic health record (EHR)- Unit IV Smart medical homes, Personalized e-Health Services – Unit V
VII	(718BME05)	BIOSENSORS AND TRANSDUCERS	The syllabus has been framed with the following unit modules UNIT I-General components and working principles of biosensors Unit II-Micromachining for Biosensors And Bio sensing Systems Unit III-Classification of Biosensors Unit IV-Applications of Biosensors Unit V-Physico-Chemical Transducers
VII	718BME07	EMBEDDED SYSTEMS	The following topics have been included Embedded medical applications Ophthalmology - Glaucom screening device, Medical Imagin Acquisition User Interfact acquisition and implementation biopotential, Drug delivery system Patient monitoring Systems- Unit V
VII	718BME08	REHABILITATION ENGINEERING	The following topics have been included Introduction to virtual reality, Virtu reality based rehabilitation, Har

VII	718BME09	ICU AND OPERATION THEATRE EQUIPMENTS	motor recovery systems with Phantom haptics, Robotics and Virtual Reality Applications in Mobility Rehabilitation - Unit IV The following topics have been included in the existing syllabus Syringe pump - Unit I Peritoneal Dialysis, High flow Cannula Therapy - Unit II Scavenging system - Unit III
VII	718BME10	HOSPITAL WASTE MANAGEMENT	The syllabus has been framed with the following unit modules Unit I - Healthcare Hazard Control and Understanding Accidents Unit II - Biomedical Waste Management Unit III - Hazardous Materials Unit IV - Facility Safety Unit V - Infection Control, Prevention and Patient Safety
VII	718BME11	INTELLECTUAL PROPERTY RIGHTS	The syllabus has been framed with the following unit modules Unit I – Introduction Unit II – Registration of IPRs Unit III – International agreements Unit IV – Indian legislations towards IPR Unit V – Enforcement of IPRs
VII	718BMP09	INTERPERSONAL SKILLS/ LISTENING AND SPEAKING	Newly introduced course helps the students to improve their interpersonal skills/listening and speaking. This course is focuses on employability

Feedback obtained about Curriculum and Syllabus from Stakeholders (Faculty, Student, Alumni, Employers) were also discussed and concluded

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DEPARTMENT OF BIOMEDICAL ENGINEERING

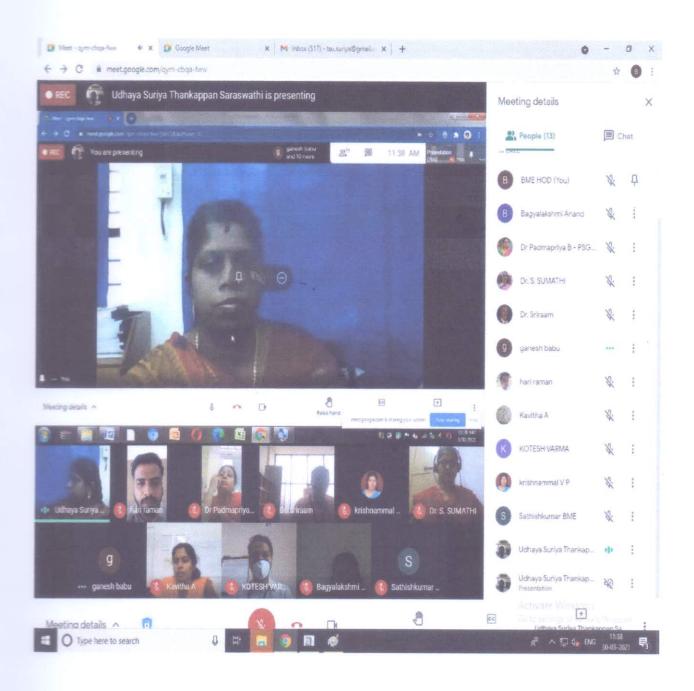
24th Board of Studies meeting in Biomedical Engineering (UG)

Held on 30.03.2021 at 11:00 a.m (Online mode).

S. No.	Name	Address	Designation	Attendance
1	Dr.T.S.Udhaya Suriya	Prof & Head, Department of BME, Adhiyamaan College of Engg. Hosur	Chairman	Present
2	Dr.V.P.Krishnammal	Associate Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	Present
3	Dr. N.Bagyalakshmi	Associate Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	Present
4	Prof.P.Ganesh Babu	Assistant Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	Present
5	Prof.C.Sathish Kumar	Assistant Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	Present
6	Dr.B.Padmapriya	Associate Professor Department of Biomedical Engineering PSG College of Technology Peelamedu, Coimbatore- 641004 Ph:9443883109 bpp.bme@psgtech.ac.in	University Nominee	Present
7	Dr.A.Kavitha	Professor & Head, Dept of Biomedical Engineering SSN College of Engineering, Chennai, Tamilnadu. 04427469700 kavithaa@ssn.edu.in	Member Nominated by Academic Council	Present

9	Mr.Rodda Koteswara	HOD Biomedical Department, St.John's Medical College Hospital, Bangalore-560034	Industrial Expert	Present
10	Mr. J. Hariraman, B.E.,	Territory Manager Fisher and Paykel Healthcare Company Coimbatore Ph: 9597299911 Hariraman.jeyaprakash@fp hcare.in	Representative from Alumni	Present
11	Dr.S.Sumathi	Professor & Head Department of Electronics & Communication Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	Present
12	Dr.N.G. Ramesh Babu	Professor & Head Department of Biotechnology Adhiyamaan College of Engineering, Hosur Ph:9845697770 hod_bt@adhiyamaan.ac.in	Inter Disciplinary Expert	Present

24th BoS meeting held on 30.03.2021 Photograph:



(An Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF BIOMEDICAL ENGINEERING

Board of Studies in Biomedical Engineering

Minutes of the 23rd Meeting of the Board of Studies in Biomedical Engineering held on 17.10.2020 at 11:00 a.m.

- 1. Dr.T.S.Udhaya Suriya, Chairman, BOS/ Biomedical Engineering
- 2. Dr.V.P.Krishnammal, Member, BOS/ Biomedical Engineering
- 3. Dr. N.Bagyalakshmi, Member, BOS/ Biomedical Engineering
- 4. Prof.P.Ganesh Babu, Member, BOS/ Biomedical Engineering
- 5. Prof.C.Sathish Kumar, Member, BOS/ Biomedical Engineering
- 6. Dr.B.Padmapriya, Member, University Nominee
- 7. Dr.A.Kavitha, Member, Academic Council Nominee
- 8. Dr.N.Sriraam, Member, Academic Council Nominee
- 9. Mr.Rodda Koteeswara, Member, Industrial Expert
- 10. Mr. J. Hariraman, Member, Representative from Alumni
- 11. Dr.S.Sumathi, HOD/ECE/ACE, Inter Disciplinary Expert
- 12. Dr.N.G. Ramesh Babu, HOD/Bio Tech/ACE, Inter Disciplinary Expert
- To consider the minutes of the Twenty second meeting of the Board of Studies in Biomedical Engineering held on 9.11.2019.
 - **RESOLVED** that the minutes of the Twenty second meeting of the Board of Studies in Biomedical Engineering have been considered.
- To consider the minutes of Board of Studies in Biomedical Engineering held on 27.06.2020.
 - **RESOLVED** that the minutes of the Board of Studies in Biomedical Engineering have been considered.

To consider the syllabi of 7th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2017-18.

RESOLVED that the syllabi of 7th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2017-18 be approved (**Annexure – I**).

To consider the syllabi of 5th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19.

RESOLVED that the syllabi of 5th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19 be approved (**Annexure-II**).

To consider the syllabi of 3rd semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2019-20.

RESOLVED that the syllabi of 3rd semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2019-20 be approved (**Annexure-III**).

To consider the syllabi of 8th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2017-18.

RESOLVED that the syllabi of 8th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2017-18 be approved (**Annexure – IV**).

To consider the syllabi of 6th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19.

RESOLVED that the syllabi of 6th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19 be approved (**Annexure-V**).

23.8 To consider the syllabi of 4th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2019-20.

RESOLVED that the syllabi of 4th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2019-20 be approved (**Annexure-VI**).

23.9 To consider the curriculum of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students to be admitted in 2020-21.

RESOLVED that the curriculum of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students to be admitted in 2020-21 be approved (**Annexure-VII**).

23.10 To consider the panel of examiners for the evaluation process.

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

Date: 17.10.2020

Chairman, Board of Studies
Faculty of Bio Medical Engineering (UG)
Adhiyamaan College of Engineering (Autonomous)
Hosur - 635 109

Krishnagiri (Dt), Tamil Nadu.

			23 rd BoS Recommendations
Sem	Course Code	Name of the course	Remarks (New course introduced/Contents incorporated in the corresponding course)
		2020-2021	,
VI	618BMT01	DIAGNOSTIC EQUIPMENT	The following topics have been included ECG machine maintenance and troubleshooting. EEG system maintenance and troubleshooting-Unit I Echoencephalogram-Unit II Apnoea Monitor, Oximetry-In vitro oximetry, In vivo oximetry, Ear oximeter-Unit III Basal Skin Resistance (BSR)-Unit IV Patient monitoring systems, ICU/CCU Equipments, bed side monitors, Infusion pumps, Central consoling controls. Radio Telemetry (single, multi), Portable and Landline Telemetry unit, Applications in ECG and EEG Transmission-Unit V
VI	618BMT02	THERAPEUTIC EQUIPMENT	The following topics have been included Hazards and safety procedures -I Unit Spinal cord stimulator, Brain stimulation for pain reduction -III Unit Electrical safety codes and standards-IEC 60601-1 2005 standard- Unit V
VI	618BMT03	RADIOLOGICAL EQUIPMENT	The following topics have been included Causes of x-ray tube failure: Electron arcing/filament burn out, Failure to warm up tube, High temp due to over exposure, x-ray tube rating charts. Image characteristics-Unit I 3D Imaging and its application-Unit II Radionuclide imaging- Bone imaging, myocardial perfusion-Unit IV Recent Techniques in radiation therapy - 3DCRT - IMRT - IGRT and Cyber knife-Unit V
VI	618BME06	BIO SIGNAL PROCESSING	The syllabus has been reframed with the following unit modules Unit 1 - Introduction to Biomedical Signals

VI	618BME07	CLINICAL ENGINEERING	Unit II - Filtering for Removal of Artifact Unit III - Cardiovascular Applications Unit IV - Neurological Applications Unit V - Analysis on Wave shape, Signal Classification and Recognition A model clinical engineering department has been included in the I Unit. Maintenance and repair of medical devices has been included in the II
VI	618BME08	PHYSIOLOGICAL MODELLING	Unit. The syllabus has been reframed with the following unit modules Unit I - Introduction to Physiological Modelling Unit II - Modelling of Dynamic Physiological System Unit III - Nonlinear Models of Physiological Systems Unit IV - Compartmental Physiological Model Unit V - Simulation of Physiological Systems

Feedback obtained about Curriculum and Syllabus from Stakeholders (Faculty, Student, Alumni, Employers) were also discussed and concluded

Chairman, Board of Studies
Faculty of Bio Medical Engineering (UG)
Adhiyamaan College of Engineering (Autonomous)

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DEPARTMENT OF BIOMEDICAL ENGINEERING

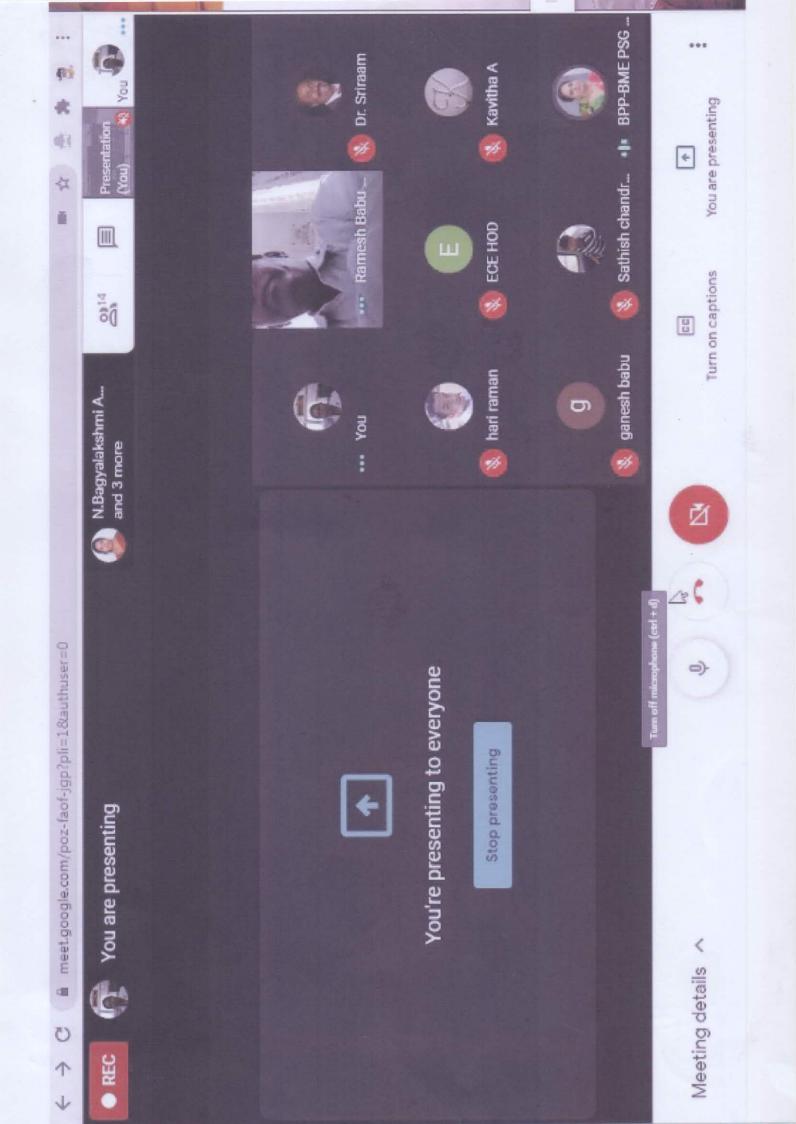
23rd Board of Studies meeting in Biomedical Engineering (UG)

Held on 17.10.2020 at 11:00 a.m.

S	Nama	Address	Designation	Attendance
1	Dr.T.S.Udhaya Suriya	Prof & Head, Department of BME, Adhiyamaan College of Engg. Hosur		Present
2	Dr.V.P.Krishnammal	Associate Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	Present
3	Dr. N.Bagyalakshmi	Associate Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	Present
4	Prof.P.Ganesh Babu	Assistant Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	Present
5	Prof.C.Sathish Kumar	Assistant Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	Present
6	Dr.B.Padmapriya	Associate Professor Department of Biomedical Engineering PSG College of Technology Peelamedu, Coimbatore- 641004 Ph:9443883109 bpp.bme@psgtech.ac.in	University Nominee	Present
7	Dr.A.Kavitha	Professor & Head, Dept of Biomedical Engineering SSN College of Engineering, Chennai, Tamilnadu. 04427469700 kavithaa@ssn.edu.in	Member Nominated by Academic Council	Present

	8	Dr.N.Sriraam	Professor & Head, Department of Medical Electronics, M.S.Ramaiah Institute of Technology, Bangalore, Karnataka Ph: 09632294999 sriraam@msrit.edu	Member Nominated by Academic Council	Present
	9	Mr.Rodda Koteswara	HOD Biomedical Department, St.John's Medical College Hospital, Bangalore-560034	Industrial Expert	Present
10	0 1	Mr. J. Hariraman, B.E.,	Territory Manager Fisher and Paykel Healthcare Company Coimbatore Ph: 9597299911 Hariraman.jeyaprakash@fp hcare.in	Representative from Alumni	Present
11		Or.S.Sumathi	Professor & Head Department of Electronics & Communication Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	Present
12	Di	r.N.G. Ramesh Babu	Professor & Head Department of Biotechnology Adhiyamaan College of Engineering, Hosur Ph:9845697770 hod_bt@adhiyamaan.ac.in	Inter Disciplinary Expert	Present

Chairman 20



(An Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF BIOMEDICAL ENGINEERING

Board of Studies in Biomedical Engineering

Minutes of the Meeting of the Board of Studies in Biomedical Engineering held on 27,06,2020 at 11:00 a.m.

- 1. Dr.T.S.Udhaya Suriya, Chairman, BOS/ Biomedical Engineering
- 2. Dr. V.P. Krishnammal, Member, BOS/ Biomedical Engineering
- 3. Dr. V. Veeramanikandan, Member, BOS/ Biomedical Engineering
- 4. Prof.P.Ganesh Babu, Member, BOS/ Biomedical Engineering
- 5. Prof.C.Sathish Kumar, Member, BOS/ Biomedical Engineering
- 6. Dr.S.Rajkumar, Member, Academic Council Nominee
- 7. Mr.Sivaraj, Member, Representative from Alumni
- 8. Dr.S.Sumathi, HOD/ECE/ACE, Inter Disciplinary Expert
- 9. Dr.S. Sujatha, HOD/EIE/ACE, Inter Disciplinary Expert
- 1. To consider the minutes of the Twenty second meeting of the Board of Studies in Biomedical Engineering held on 9.11.2019.
 - **RESOLVED** that the minutes of the Board of Studies in Biomedical Engineering have been considered.
- 2. To consider the syllabi of 7th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2017-18.
 - **RESOLVED** that the syllabi of 7th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2017-18 be approved (**Annexure I**).

 To consider the syllabi of 5th semester of B.E (Biomedical Engineering) under Regulation 2018 (CBCS) for the batch of students admitted in 2018-19.

RESOLVED that the syllabi of 5th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19 be approved (**Annexure-II**).

4. To consider the syllabi of 3rd semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2019-20.

RESOLVED that the syllabi of 3rd semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2019-20 be approved (**Annexure-III**).

5. To consider the panel of examiners for the evaluation process.

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

Date: 27.06.2020

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Sem	Course Code	Name of the course			
		Name of the course	Remarks (New course introduced/Contents incorporated in the corresponding course)		
	2020-2021				
V	518BMT02	DIGITAL SIGNAL PROCESSING AND BIOMEDICAL APPLICATION	The following topics have been included Biomedical Applications of DSP – I Unit Case study-FIR filters in a hearing aid- II Unit Case study- IIR filters to extract alpha activity from EEG Signal –III Unit		
V	518BMT03	MICROPROCESSOR MICROCONTROLLER AND SYSTEM DESIGN	AVR Microcontroller, Case study- Microcontroller in Biomedical Applications have been included in the V Unit		
V	518BMT05	ANALOG & DIGITAL COMMUNICATION	The following topics have been included Data compression of ECG signals using delta modulation –I Unit DEPSK(Digitally encoded PSK)- III Unit Wireless patient monitoring system (WPM) –V Unit		

Feedback obtained about Curriculum and Syllabus from Stakeholders (Faculty, Student, Alumni, Employers) were also discussed and concluded

Chairman, Board of Studies
Faculty of Bio Medical Engineering (UG)
Adhiyamaan College of Engineering (Autonomous)

Kirishmagiri (Gi), Tamir Nadis

(An Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF BIOMEDICAL ENGINEERING

Board of Studies meeting in Biomedical Engineering (UG)

Held on 27.06.2020 at 11:00 a.m.

MEMBERS PRESENT

MEMBERS PRESENT				
S. No.	Name	Address	Designation	Attendance
1	Dr.T.S.Udhaya Suriya	Prof & Head, Department of BME, Adhiyamaan College of Engg. Hosur	Chairman	Present
2	Dr.V.P.Krishnammal	Associate Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	Present
3	Dr. N.Bagyalakshmi	Associate Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	Present
4	Prof.P.Ganesh Babu	Assistant Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	Present
5	Prof.C.Sathish Kumar	Assistant Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	Present
6	Dr.S.Sumathi	Professor & Head Department of Electronics & Communication Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	Present
7	Dr.S. Sujatha	Professor & Head Department of Electronics and Instrumentation Adhiyamaan College of Engineering, Hosur Ph:9845697770 hod eie@adhiyamaan.ac.in	Inter Disciplinary Expert	Present



(An Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF BIOMEDICAL ENGINEERING

Board of Studies in Biomedical Engineering

Minutes of the 22nd Meeting of the Board of Studies in Biomedical Engineering held on 9.11.2019 at 11:30 a.m.

- 1. Dr.T.S.Udhaya Suriya, Chairman, BOS/ Biomedical Engineering
- 2. Prof.P.Ganesh Babu, Member, BOS/ Biomedical Engineering
- 3. Prof.C.Sathish Kumar, Member, BOS/ Biomedical Engineering
- 4. Prof. V.P. Krishnammal, Member, BOS/ Biomedical Engineering
- 5. Prof V. Veeramanikandan, Member, BOS/ Biomedical Engineering
- 6. Dr.S.Rajkumar, Member, Academic Council Nominee
- 7. Mr.Rodda Koteeswara, Member, Industrial Expert
- 8. Mr. Sivaraj, Member, Representative from Alumni
- 9. Dr.S.Sujatha, Member, Inter Disciplinary Expert
- 10. Dr.S.Sumathi, Member, Inter Disciplinary Expert
- To consider the minutes of the Twenty first meeting of the Board of Studies in Biomedical Engineering held on 27.04.2019.
 - **RESOLVED** that the minutes of the Twenty first meeting of the Board of Studies in Biomedical Engineering have been considered.
- To consider the syllabi of 8th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2016-17.
 - **RESOLVED** that the syllabi of 8th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2016-17 be approved (**Annexure I**).

To consider the syllabi of 6th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2017-18.

RESOLVED that the syllabi of 6th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2017-18 be approved (**Annexure-II**).

To consider the syllabi of 4th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19.

RESOLVED that the syllabi of 4th semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19 be approved (**Annexure-III**).

To consider the curriculum B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2019-20.

RESOLVED that the curriculum of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2019-20 be approved (**Annexure-IV**).

22.6 To consider the panel of examiners for the evaluation process.

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

Date: 09.11.2019

Chairman

	Department	t of Biomedical Enginee	ering-22 nd BoS Recommendations Remarks		
Sem	Course Code	Name of the course	(New course introduced/Contents incorporated in the corresponding course)		
2019-2020					
IV	418BMT02	ANALOG INTEGRATED CIRCUITS	The following topics are included in the existing syllabus, UNIT – II Feedback Amplifiers Current mirror and current sources, Curren sources as active loads, Voltage sources, Voltage References, BJT Differential amplifier with active loads, Basic concept of feedback amplifiers positive feed back, Advantages of negative feedback – voltage / current, series , Shurfeedback – stability of feed back. UNIT-V-Three terminal fixed and adjustable voltage regulators		
VI	418BMT03	DIGITAL LOGIC DESIGN	The Double Data Rate SDRAM included in the IV Unit Case studies-Biomedical Application included in the V unit		
VI	418BMT04	PATHOLOGY AND MICROBIOLOGY	The syllabus has been framed with the following unit modules UNIT – I Cell Degeneration, Repair& Neoplasia UNIT – II Fluid and Hemodynamic Derangement UNIT – III Fundamentals of Microbiology UNIT – IV Microbial diseases and Diagnosis UNIT – V Immunopathology & Immuno Diagnosis		
VI	418BMT05	BIOCHEMISTRY	The syllabus has been framed with the following unit modules UNIT – I Introduction to Biochemistry UNIT – II Carbohydrates UNIT – III Lipids UNIT – IV Nucleic Acid & Protein UNIT – V Enzyme & its clinical application		
VI	418BMP08	PATHOLOGY AND MICROBIOLOGY LABORATORY	Newly Introduced Lab		

Feedback obtained about Curriculum and Syllabus from Stakeholders (Faculty, Student, Alumni, Employers) were also discussed and concluded

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DEPARTMENT OF BIOMEDICAL ENGINEERING

22nd Board of Studies meeting in Biomedical Engineering (UG)

Held on 09.11.2019 at 11:30 a.m.

S. No.	Name	Address	Designation	Signature
1	Dr.T.S.Udhaya Suriya	Prof & Head, Department of BME, Adhiyamaan College of Engg. Hosur	Chairman	Shur
2	Prof.P.Ganesh Babu	Assistant Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	MS.
3	Prof.C.Sathish Kumar	Assistant Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	Spir
4	Prof.V.P.Krishnammal	Associate Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	1 Photo
5	Prof.V.Veeramanikandan	Assistant Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	1. 2 3/4/
6	Dr.M.Sasikala	Associate Professor Department of Electronics & Communication Engineering CEG Campus, Anna University, Chennai-600025	University Nominee	AB
7	Dr.S.Rajkumar	Professor & Head Department of Biomedical Engineering, Rajalakshmi Engineering College, Chennai	Member Nominated by Academic Council	hy
8	Dr.N.Sriraam	Professor & Head Department of Medical Electronics, M.S.Ramaiah Institute of Technology, Bangalore,	Member Nominated by Academic Council	AB

	1			
5		Karnataka.		
9	Mr.Rodda Koteswara	HOD Biomedical Department, St.John's Medical College Hospital, Bangalore-560034	Industrial Expert	By Star Son
10	Mr.Sivaraj	Senior Executive Service Karlstorz Ltd, Healthcare Sector, Bangalore-560001	Representative from Alumni	T. Pauf
11	Dr.S.Sujatha	Professor & Head Department of Electronics & Instrumentation Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	Chapter.
12	Dr.S.Sumathi	Professor & Head Department of Electronics & Communication Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	Juen

Chairman



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DEPARTMENT OF BIOMEDICAL ENGINEERING

Board of Studies in Biomedical Engineering

Minutes of the 21st Meeting of the Board of Studies in Biomedical Engineering held on 27.04.2019 at 11:30 a.m.

- 1. Dr.T.S.Udhaya Suriya, Chairman, BOS/ Biomedical Engineering
- 2. Prof.P.Ganesh Babu, Member, BOS/ Biomedical Engineering
- 3. Prof.Kumar Kandukuri, Member, BOS/ Biomedical Engineering
- 4. Prof.C.Sathish Kumar, Member, BOS/ Biomedical Engineering
- 5. Prof.V.P.Krishnammal, Member, BOS/ Biomedical Engineering
- 6. Dr.M.Sasikala, Member, University Nominee
- 7. Dr.S.Rajkumar, Member, Academic Council Nominee
- 8. Mr.Rodda Koteeswara, Member, Industrial Expert
- 9. Mr. Sivaraj, Member, Representative from Alumni
- 10. Dr.S.Sujatha, Member, Inter Disciplinary Expert
- 11. Dr.S.Sumathi, Member, Inter Disciplinary Expert
- To consider the minutes of the twentieth meeting of the Board of Studies in Biomedical Engineering held on 27.10.2018.
 - **RESOLVED** that the minutes of the twentieth meeting of the Board of Studies in Biomedical Engineering have been considered.
- To consider the syllabi of 7th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2016-17.
 - **RESOLVED** that the syllabi of 7th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2016-17 be approved (**Annexure I**).

To consider the syllabi of 5th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2017-18.

RESOLVED that the syllabi of 5th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2017-18 be approved (**Annexure-II**).

To consider the syllabi of 3rd semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19.

RESOLVED that the syllabi of 3rd semester of B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19 be approved (**Annexure-III**).

To consider the proposed one credit course (OCC) Industry Interface Program of 8th semester of B.E (Biomedical Engineering) under **Regulation 2015** (CBCS) for the batch of students admitted from 2015-16 to gain knowledge in the latest trends and techniques in medical and healthcare.

RESOLVED that the proposed one credit course (OCC) Industry Interface Program of 8th semester of B.E (Biomedical Engineering) under **Regulation 2015** (CBCS) for the batch of students admitted from 2015-16 to gain knowledge in the latest trends and techniques in medical and healthcare be approved (**Annexure-IV**).

21.6 To consider the list of panel of examiners for the evaluation process.

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

Date: 27.04.2019

Chairman

Chairman, Board of Studies
Faculty of Bio Medical Engineering (UG)
Adhiyamaan College of Engineering (Autonomous)
Hosur - 635 109
Krishnagiri (Dt), Tamil Nadu.

			ng-21 st BoS Recommendations
Sem	Course Code	Name of the course	Remarks
	ži.		(New course introduced/Contents
			incorporated in the corresponding course)
	19		
III	318BMT02	ELECTRICAL MACHINES	The following topics are included in the existing syllabus, UNIT - I Magnetic circuits Magnetic effects of electric current, Magnetic circuits, Magnetic materials and B-H relationship, Electromagnetic induction and force, Hysteresis and eddy current losses.
III	318BMT03	HUMAN ANATOMY & PHYSIOLOGY	The syllabus has been framed with the following unit modules Unit I -Basics of Human Body Unit II -Hematological System Unit III -Renal, Respiratory And Cardiac System Unit IV -Nervous System, Sensory Organs And Endocrine System Unit V -Skeletal, Digestive And Reproductive System
			s from Stakeholders (Faculty, Student,
Alumni,	Employers) were	also discussed and con-	cluded

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Chairman, Board of Studies
Faculty of Bio Medical Engineering (UG)
Adhiyamaan College of Engineering (Autonomous)
Hosur - 635 109
Krisnnagiri (Dt), Tainii Nadu.

(An Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF BIOMEDICAL ENGINEERING

21st Board of Studies meeting in Biomedical Engineering (UG)

Held on 27.04.2019 at 11:30 a.m.

S. No.	Name	Address	Designation	Signature
1	Dr.T.S.Udhaya Suriya	Prof & Head, Department of BME, Adhiyamaan College of Engg. Hosur	Chairman	Glas
2	Prof.P.Ganesh Babu	Assistant Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	<u>Clus</u>
3	Prof.Kumar Kandukuri	Assistant Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	Quines
4	Prof.C.Sathish Kumar	Assistant Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	Phin
5	Prof.V.P.Krishnammal	Associate Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	V.P. losh
6	Dr.M.Sasikala	Associate Professor Department of Electronics & Communication Engineering CEG Campus, Anna University, Chennai-600025	University Nominee	M-Janik
7	Dr.S.Rajkumar	Professor & Head Department of Biomedical Engineering, Rajalakshmi Engineering College, Chennai	Member Nominated by Academic Council	hy
8	Dr.N.Sriraam	Professor & Head Department of Medical Electronics, M.S.Ramaiah Institute of Technology, Bangalore,	Member Nominated by Academic Council	AB

9	Mr.Rodda Koteswara	Karnataka. HOD Biomedical Department, St.John's Medical College Hospital, Bangalore-560034	Industrial Expert	of geograph.
10	Mr.Sivaraj	Senior Executive Service Karlstorz Ltd, Healthcare Sector, Bangalore-560001	Representative from Alumni	T.Q
11	Dr.S.Sujatha	Professor & Head Department of Electronics & Instrumentation Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	Color dules
12	Dr.S.Sumathi	Professor & Head Department of Electronics & Communication Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	Juses

Chairman

Chairman, Board of Studies
Faculty of Bio Medical Engineering (UG)
Adhiyamaan College of Engineering (Autonomous)
Hosur - 635 109
Krishnagiri (Dt), Tamil Nadu.



(An Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF BIOMEDICAL ENGINEERING

Board of Studies in Biomedical Engineering

Minutes of the 20th Meeting of the Board of Studies in Biomedical Engineering held on 27.10.2018 at 10:30 a.m.

MEMBERS PRESENT

- 1. Dr.T.S.Udhaya Suriya, Chairman, BOS/ Biomedical Engineering
- 2. Prof.P.Ganesh Babu, Member, BOS/ Biomedical Engineering
- 3. Prof.Kumar Kandukuri, Member, BOS/ Biomedical Engineering
- 4. Prof.C.Sathish Kumar, Member, BOS/ Biomedical Engineering
- 5. Prof.V.P.Krishnammal, Member, BOS/ Biomedical Engineering
- 6. Dr.M.Sasikala, Member, University Nominee
- 7. Dr.S.Rajkumar, Member, Academic Council Nominee
- 8. Dr.N.Sriraam, Member, Academic Council Nominee
- 9. Mr.Rodda Koteeswara, Member, Industrial Expert
 - 10. Mr. Sivaraj, Member, Representative from Alumni
 - 11. Dr.S.Sujatha, Member, Inter Disciplinary Expert
 - 12. Dr.S.Sumathi, Member, Inter Disciplinary Expert
- 20.1 To consider the minutes of the Nineteenth meeting of the Board of Studies in Biomedical Engineering held on 21.04.2018.
 - **RESOLVED** that the minutes of the Nineteenth meeting of the Board of Studies in Biomedical Engineering have been considered.
- To consider the syllabi of 8th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2015-16.

RESOLVED that the syllabi of 8th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2015-16 be approved (**Annexure – I**).

To consider the syllabi of 6th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2016-17.

RESOLVED that the syllabi of 6th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2016-17 be approved (**Annexure-II**).

20.4 To consider the syllabi of 4th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2017-18.

RESOLVED that the syllabi of 4th semester of B.E (Biomedical Engineering) under **Regulation 2015 (CBCS)** for the batch of students admitted in 2017-18 be approved (**Annexure-III**).

20.5 To consider the curriculum and evaluation criteria of Regulation 2018, B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19.

RESOLVED that the curriculum and evaluation criteria of Regulation 2018, B.E (Biomedical Engineering) under **Regulation 2018 (CBCS)** for the batch of students admitted in 2018-19 be approved (**Annexure-IV**).

20.6 To consider the list of panel of examiners for the evaluation process.

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

Date: 27.10.2018

Chairman

Chairman, Board of Studies
Faculty of Bio Medical Engineering (UG)
Adhiyamaan College of Engineering (Autonomous)
Hosur - 635 109
Krishnagiri (Dt), Tamil Nadu,

	Department of	of Biomedical Engineering-	20 th BoS Recommendations
Sem	Course Code	Name of the course	Remarks (New course introduced/Contents incorporated in the corresponding course)
	1	2018-2019	/
VIII	815BMT01	HOSPITAL ENGINEERING AND MANAGEMENT	The syllabus has been reframed with the following unit modules Overview of Hospital Administration Human Resource Management in Hospital Marketing Research Process Hospital Information Systems & Supportive Services Quality and Safety Aspects in Hospital
VIII	815BME02	NANOTECHNOLOGY	The syllabus has been reframed with the following unit modules Introduction to Nanotechnology Fabrication and Characterization of Nanomaterials Properties and Measurement of Nanomaterials Nano Structures Applications of Nanotechnology
VIII	815BME04	ASSIST DEVICES	The following topics are removed in the existing syllabus, From unit III - Bionic Eye From unit IV - Gait analysis I
VIII	815BME05	MEMS	Unit I Mems Materials and Fabrication and Unit IV Micro fluidic System has been swapped
VIII	815BME06	DISASTER MANAGEMENT & MITIGATION	The syllabus has been framed with the following unit modules Unit I-Introduction Unit II-Environmental Disaster Unit III-Earthquake and tsunami Unit IV-Cyclone Unit V-Application of technology in disaster management
VIII	815BME07	ADVANCED MEDICAL INSTRUMENTATION	The syllabus has been reframed with the following unit modules • Implantable stimulators • Sensory instruments • Special equipments • Analytical instruments

			Applications of medical
VIII	815BME08	BRAIN COMPUTER INTERFACE AND APPLICATIONS	equipments The syllabus has been framed with the following unit modules Unit I- Introduction to BCI Unit II - Brain activation Unit III- Feature extraction methods Unit IV -Machine learning methods for BCI Unit V - Case studies in Invasive BCIs and Noninvasive BCIs
VIII	(815BME09)	MEDICAL ROBOTICS	The syllabus has been framed with the following unit modules Unit I- Introduction Unit II - Kinematics Unit III- Robot Vision Unit IV -Planning Unit V - Applications
VIII	815BME10	WEARABLE SYSTEMS	The syllabus has been framed with the following unit modules Unit I- Sensors Unit II -Signal Processing Unit III- Energy harvesting for wearable devices Unit IV -Wireless health systems Unit V - Applications of wearable systems
VIII	815BME11	BIOMETRICS	The following topics are included in the existing syllabus, Unit IV-Sources of multiple evidence-multi sensor system, Multi-algorithm system, Multi-instance system, Multi-sample system Unit V-Performance measures of biometric systems-AR,FRR,FTE,EER,Iris recognition, retina recognition, Voice recognition, Gait-based recognition, Limitations of biometric systems, New biometric challenges, Attacks on Biometric-based authentication systems

Value Added Courses are Recommended

Feedback obtained about Curriculum and Syllabus from Stakeholders (Faculty, Student, Alumni, Employers) were also discussed and concluded



(An Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF BIOMEDICAL ENGINEERING

20th Board of Studies meeting in Biomedical Engineering (UG)

Held on 27.10.2018 at 10:30 a.m.

	MEMBERS PRESENT					
S. No	Nama	Address	Designation	Signature		
1	Dr.T.S.Udhaya Suriya	Prof & Head, Department of BME, Adhiyamaan College of Engg. Hosur	Chairman	fler		
2	Prof.P.Ganesh Babu	Assistant Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	0.4/2		
3	Prof.Kumar Kandukuri	Assistant Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	Quant.		
4	Prof.C.Sathish Kumar	Assistant Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	gan.		
5	Prof.V.P.Krishnammal	Associate Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	Mohn		
6	Dr.M.Sasikala	Associate Professor Department of Electronics & Communication Engineering CEG Campus, Anna University, Chennai-600025	University Nominee	le-Sarikala		
7	Dr.S.Rajkumar	Professor & Head Department of Biomedical Engineering, Rajalakshmi Engineering College, Chennai	Member Nominated by Academic Council	My		
8	Dr.N.Sriraam	Professor & Head Department of Medical Electronics, M.S.Ramaiah Institute of	Member Nominated by Academic Council	N. 8		

		Technology, Bangalore, Karnataka.		
9	Mr.Rodda Koteswara	HOD Biomedical Department, St.John's Medical College Hospital, Bangalore-560034	Hospital Industrial Expert	OX 27/0/20
10	Mr.Sivaraj	Senior Executive Service Karlstorz Ltd, Healthcare Sector, Bangalore-560001	Representative from Alumni	T. Butte
11	Dr.S.Sujatha	Professor & Head Department of Electronics & Instrumentation Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	Englished W
12	Dr.S.Sumathi	Professor & Head Department of Electronics & Communication Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	Joseph

Chairman

Chairman, Reard of Studies
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Krishnagiri (Dt), Tamil Nadu.



(An Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF BIOMEDICAL ENGINEERING

Board of Studies in Biomedical Engineering

Minutes of the 19th Meeting of the Board of Studies in Biomedical Engineering held on 21.04.2018 at 10:30 a.m.

- 1. Dr.T.S.Udhaya Suriya, Chairman, BOS/ Biomedical Engineering
- 2. Prof.P.Ganesh Babu, Member, BOS/ Biomedical Engineering
- 3. Prof.Kumar Kandukuri, Member, BOS/ Biomedical Engineering
- 4. Prof.C.Sathish Kumar, Member, BOS/ Biomedical Engineering
- 5. Prof.V.P.Krishnammal, Member, BOS/ Biomedical Engineering
- 6. Dr. A.Mahabub Baasha, Member, University Nominee
- 7. Dr.S.Poonguzhali, Member, Academic Council Nominee
- 8. Mr.B.S.Rajasekar, Member, Representative from Alumni
- 9. Dr.S.Sujatha, Member, Inter Disciplinary Expert
- 10. Dr.S.Sumathi, Member, Inter Disciplinary Expert
- To consider the minutes of the Eighteenth meeting of the Board of Studies in Biomedical Engineering held on 28.10.2017.
 - **RESOLVED** that the minutes of the Eighteenth meeting of the Board of Studies in Biomedical Engineering have been considered.
- To consider the syllabi of 7th semester of B.E (Biomedical Engineering) under Regulation 2015 (CBCS) for the batch of students admitted in 2015-16.
 - **RESOLVED** that the syllabi of 7th semester of B.E (Biomedical Engineering) under Regulation 2015 (CBCS) for the batch of students admitted in 2015-16 be approved (Annexure I).

To consider the syllabi of 5th semester of B.E (Biomedical Engineering) under Regulation 2015 (CBCS) for the batch of students admitted in 2016-17.

RESOLVED that the syllabi of 5th semester of B.E (Biomedical Engineering) under Regulation 2015 (CBCS) for the batch of students admitted in 2016-17 be approved (Annexure-II).

To consider the syllabi of 3rd semester of B.E (Biomedical Engineering) under Regulation 2015 (CBCS) for the batch of students admitted in 2017-18.

RESOLVED that the syllabi of 3rd semester of B.E (Biomedical Engineering) under Regulation 2015 (CBCS) for the batch of students admitted in 2017-18 be approved (Annexure-III).

Date: 21.04.2018

Chairman, Board of Studies
Faculty of Bio Medical Engineering (UG)
Adhiyamaan College of Engineering (Autonomous)
Hosur - 635 109
Krishnagiri (Dt), Tamil Nadu.

	Department o	f Biomedical Engineeri	ing-19th BoS Recommendations
Sem	Course Code	Name of the course	Remarks
			(New course introduced/Contents
			incorporated in the corresponding course)
		2017-20	
VII	715BMT01	MEDICAL OPTICS	The syllabus has been reframed with the following unit modules Optical Properties of The Tissues Instrumentation in Photonics Applications of Lasers Optical Coherence Tomography Special Optical Techniques
VII	715BMT02	DIGITAL IMAGE PROCESSING	The syllabus has been reframed with the following unit modules • Digital Image Fundamental and Transforms • Image Enhancement • Image Restoration and Recognition • Image Segmentation • Image Compression
VII	715BMT03	BIOMECHANICS	The existing syllabus has been entirely reframed with the following unit modules Introduction to Mechanics Biofluid Mechanics Mechanics of Skeletal Muscle Mechanics of Shoulder, Knee And Hip Orthopaedic Mechanics
VII	715BMT04	PATTERN RECOGNITION & NEURAL NETWORKS	The following topics are included in the existing syllabus, • Application of pattern recognition • LMS learning algorithm rule-Application • MRII Training Algorithm-Translation invariant pattern recognition
VII	715BMT05	MEDICAL INFORMATICS	The existing syllabus has been entirely reframed with the following unit modules Introduction to Medical Informatics Medicine and The Internet Computer Assisted Medical Imaging and Clinical Laboratory Telemedicine and Technology Computer Aids for the

			Handicapped
VII	715BME06	REHABILITATION ENGINEERING	The existing syllabus has been entirely reframed with the following unit modules Introduction to Rehabilitation & Rehabilitation Team Orthotic Devices in Rehabilitation Engineering Therapeutic Exercise Technique Principles in Management of Communication Amputation and Prosthetic Devices
VII	715BME07	ICU & OPERATION THEATRE EQUIPMENTS	 The following topics are included in the existing syllabus, Surgical monitoring system Medical vacuum system, Gas pipeline system, colour coding, regulators Oxygen Concentrator, Refrigerator, Water systems in hospitals
VII	715BME08	PROFESSIONAL ETHICS AND HUMAN VALUES	The syllabus has been framed with the following unit modules Human values Engineering ethics Engineering as social experimentation Safety, responsibilities and rights Global issues
VII	715BMP07	DIGITAL IMAGE PROCESSING LAB	Display of images is removed from the List of experiment Various segmentation algorithms are included. In the syllabus.
VII	715BMP08	HOSPITAL TRAINING LAB	Training to be undergone for minimum two weeks after VI semester and should produce certificates from the Hospital
VII	715BMP09	MINI PROJECT	The course is to design and development of basic prototypes leading to low cost systems applied in the field of Biomedical Engineering
		Curriculum and Syllabus also discussed and conc	from Stakeholders (Faculty, Student, luded

Chairman, Board of Studies
Faculty of Bio Medical Engineering (UG)
Adhiyamaan College of Engineering (Autonomous)
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DEPARTMENT OF BIOMEDICAL ENGINEERING

19th Board of Studies meeting in Biomedical Engineering (UG)

Held on 21.04.2018 at 10:30 a.m.

S. No.	Name	Address	Designation	Signature
1	Dr.T.S.Udhaya Suriya	Prof & Head, Department of BME, Adhiyamaan College of Engg. Hosur	Chairman	Sur
2	Prof.P.Ganesh Babu	Assistant Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	MS
3	Prof.Kumar Kandukuri	Assistant Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	Dunaf.
4	Prof.C.Sathish Kumar	Assistant Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	John
5	Prof.V.P.Krishnammal	Associate Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	18/12/2
6	Dr.A.Mahabub Baasha	Professor Department of Electronics & Instrumentation Engineering KSR College of Engineering Tiruchengode – 637 215	University Nominee	Openym
7	Dr.S.Poonguzhali	Associate Professor Department of Electronics & Instrumentation Engineering College of Engineering Anna University, Chennai	Member Nominated by Academic Council	
8	Dr.R.M.G.Sumithra	Professor & Head Dept of Electronics and Communication Engineering, Bannari Amman Institute of Technology, Sathy.	Member Nominated by Academic Council	AB

9	Mr.K.Mohanavelu	Scientist & Group Head, Biomedical Instrumentation, Defence Bioengineering & Electro-medical Lab DRDO,Ministry of Defence,Bangalore.	Industrial Expert	AB
10	Mr.B.S.Rajasekar	Biomedical Engineer St.John's Medical College & Hospital,Bangalore.	Representative from Alumni	B.S.Raj.
11	Dr.S.Sujatha	Professor & Head Department of Electronics & Instrumentation Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	Canul &
12	Dr.S.Sumathi	Professor & Head Department of Electronics & Communication Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	Jess

Chairman

Chairman, Board of Studies
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DEPARTMENT OF BIOMEDICAL ENGINEERING

Board of Studies in Biomedical Engineering

Minutes of the 18th Meeting of the Board of Studies in Biomedical Engineering held on 28.10.2017 at 10:00 a.m.

- 1. Dr.T.S.Udhaya Suriya, Chairman, BOS/ Biomedical Engineering
- 2. Prof.P.Ganesh Babu, Member, BOS/ Biomedical Engineering
- 3. Prof.Kumar Kandukuri, Member, BOS/Biomedical Engineering
- 4. Prof.C.Sathish Kumar, Member, BOS/ Biomedical Engineering
- 5. Prof.V.Krishnammal, Member, BOS/ Biomedical Engineering
- 6. Dr. A.Mahabub Baasha, Member, University Nominee
- 7. Dr.S.Poonguzhali, Member, Academic Council Nominee
- 8. Dr.M.G.Sumithra, Member, Academic Council Nominee
- 9. Mr.K.Mohanavelu, Member, Industrial Expert
- 10. Dr.S.Sujatha, Member, Inter Disciplinary Expert
- 11. Dr.S.Sumathi, Member, Inter Disciplinary Expert
- To consider the minutes of the seventeenth meeting of the Board of Studies in Biomedical Engineering held on 01.04.2017.
 - **RESOLVED** that the minutes of the seventeenth meeting of the Board of Studies in Biomedical Engineering have been considered.
- To consider the syllabi of 8th semester of B.E (Biomedical Engineering) under Regulation 2011 for the batch of students admitted in 2014-15 (Annexure-I).

RESOLVED that the syllabi of 8th semester of B.E (Biomedical Engineering) under Regulation 2011 for the batch of students admitted in 2014-15 be approved (Annexure – I).

To consider the syllabi of 6th semester of B.E (Biomedical Engineering) under Regulation 2015 (CBCS) for the batch of students admitted in 2015-16 (Annexure-II).

RESOLVED that the syllabi of 6th semester of B.E (Biomedical Engineering) under Regulation 2015 (CBCS) for the batch of students admitted in 2015-16 be approved (Annexure – II).

To consider the syllabi of 4th semester of B.E (Biomedical Engineering) under Regulation 2015 (CBCS) for the batch of students admitted in 2016-17 (Annexure-III).

RESOLVED that the syllabi of 4th semester of B.E (Biomedical Engineering) under Regulation 2015 (CBCS) for the batch of students admitted in 2016-17 be approved (Annexure-III).

To consider the syllabus of 815BME08- Biometrics for the 6th semester B.E-Electronics and Communication Engineering course under Regulation 2015(CBCS), for the batch of students admitted in 2015-16 (Annexure – IV).

RESOLVED that the syllabus of 815BME08- Biometrics for the 6th semester B.E- Electronics and Communication Engineering course under Regulation 2015(CBCS), for the batch of students admitted in 2015-16 (Annexure – IV).

To consider the syllabi of 715BMT04- Pattern Recognition & Neural Networks, 715BME05- Medical Informatics for the 6th semester B.Tech- Information Technology course under Regulation 2015(CBCS), for the batch of students admitted in 2015-16 (Annexure – V).

RESOLVED that the syllabi of 715BMT04- Pattern Recognition &Neural Networks, 715BME05- Medical Informatics for the 6th semester B.Tech-Information Technology course under Regulation 2015(CBCS), for the batch of students admitted in 2015-16 (Annexure – V).

Date: 28.10.2017

Chairman

Chairman, Board of Studies
Faculty of Bio Medical Engineering (UG)
Adhiyamaan College of Engineering (Autonomous)
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	Department of	f Biomedical Engineeri	ng-18 th BoS Recommendations
Sem	Course Code	Name of the course	Remarks (New course introduced/Contents incorporated in the corresponding course)
		2017-20	
VI	615BMT0	DIAGNOSTIC EQUIPMENT	The syllabus has been framed with the following unit modules
VI	615BMT02	THERAPEUTIC EQUIPMENT	The syllabus has been framed with the following unit modules Diathermy Equipment Cardiac Equipment Physiotherapy and Electrotherapy Equipments Extra Corporeal Devices Patient Safety
VI	615BMT03	RADIOLOGICAL EQUIPMENT	The following topics are included in the existing syllabus, Various Generation scanners, 3D CT and PET-CT are included
VI	615BMT04	MEDICAL EMBEDDED SYSTEMS	The syllabus has been framed with the following unit modules • Introduction to Embedded Computing and ARM Processors • Computing Platform • Program Design and Analysis • Process and Operating Systems • Medical Applications
VI	615BMT05	BIOMATERIALS AND ARTIFICIAL ORGANS	The following topics are included in the existing syllabus, Case Study-Blood Coagulation, Bone Coagulation, Synthesis, Characterization, Animal Testing
VI	615BME06	MEDICAL SAFETY AND QUALITY ASSURANCE	The following topics are included in the existing syllabus, Safety Codes, Standards and Regulations: Case study- Bio waste management safety aspects, Implantable devices, safety

			hazards	
VI	615BME07	BIO SIGNAL PROCESSING	The existing syllabus has been entirely reframed with the following unit modules • Introduction to Biomedical Signals • Adaptive Filters • Signal Averaging and Realization • Cardiological Signal Processing • Neuro Muscular Signal Processing	
VI	615BME09	PHYSIOLOGICAL MODELLING	The existing syllabus has been entirely reframed with the following unit modules • Properties of Systems and Electrical Analog • Transfer Functions • Impedance Concept • Feedback Systems • Simulation of Biological Systems	
VI	615BMP08	DIAGNOSTIC AND THERAPEUTIC LAB	Analysis of EMG signals is included in the List of experiment	
VI	615BMP09	EMPLOYABILITY SKILLS LAB	Newly introduced for better placement activities	
VI	615BMP10	SEMINAR / PRESENTATION	Students will undergo paper presentation in inter college events or other technical activities and should produce certificates from the host institutes	

Feedback obtained about Curriculum and Syllabus from Stakeholders (Faculty, Student, Alumni, Employers) were also discussed and concluded

Chairman, Board of Studies
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DEPARTMENT OF BIOMEDICAL ENGINEERING

18th Board of Studies meeting in Biomedical Engineering (UG) Held on 28.10.2017 at 10:00 a.m.

S. No.	Name	Address	Designation	Signature
1	Dr.T.S.Udhaya Suriya	Prof & Head, Department of BME, Adhiyamaan College of Engg. Hosur	Chairman	Heat ay money
2	Prof.P.Ganesh Babu	Associate Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	P.W.
3	Prof.Kumar Kandukuri	Assistant Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	Runaf.
4	Prof.C.Sathish Kumar	Assistant Professor, Department of BME, Adhiyamaan college of Engg. Hosur	Member	Solin
5	Prof.V.Krishnammal	Assistant Professor, Department of BME, Adhiyamaan College of Engg. Hosur	Member	18 Kigns
6	Dr.A.Mahabub Baasha	Professor Department of Electronics & Instrumentation Engineering KSR College of Engineering Tiruchengode – 637 215	University Nominee	Jahm 12 117
7	Dr.S.Poonguzhali	Associate Professor Department of Electronics & Instrumentation Engineering College of Engineering	Member Nominated by Academic Council	Sec. 2xx

		Anna University, Chennai		
8	DrM.G.Sumithra	Professor Dept of Electronics and Communication Engineering, Bannari Amman Institute of Technology, Sathy.	Member Nominated by Academic Council	S Joseph Mar
9	Mr.K.Mohanavelu	Scientist & Group Head, Biomedical Instrumentation, Defence Bioengineering & Electro-medical Lab DRDO, Ministry of Defence, Bangalore.	Industrial Expert	freohavork
10	Mr.B.S.Rajasekar	Biomedical Engineer St.John's Medical College & Hospital,Bangalore.	Representative from Alumni	AB
11	Dr.S.Sujatha	Professor & Head Department of Electronics & Instrumentation Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	Charles 119
12	Dr.S.Sumathi	Professor & Head Department of Electronics & Communication Engineering Adhiyamaan College of Engineering Hosur.	Inter Disciplinary Expert	Joese

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ADHIYAMAAN COLLEGE OF ENGINEERING (AUTONOMOUS), HOSUR DEPARTMENT OF BIOMEDICAL ENGINEERING PHOTOGRAPH OF 18TH BOARD OF STUDIES MEETING ON 28.10.2017

