

Date: 6th Feb, 2021

Minutes of BOS Meeting held on 6th Feb 2021

A Board of Studies (BOS) meeting of Biomedical Engineering department was held on 6th Feb 2021 in the department to discuss & finalize the Scheme and Syllabus of IV year B.E. Biomedical Engineering as per AICTE Model Curriculum. Expert members joined the meeting through online platform. Following members joined the meeting:

- | | |
|--|------------------|
| 1. Prof. B. R. Rawal | |
| 2. Prof. R. B. Pachori, Professor Department of Electrical Engineering, IIT-Indore | Chairman |
| 3. Prof. Ashutosh Datar, Professor Electronics Engineering S.A.T.I., Vidisha | Expert Member |
| 4. Dr. Mrs. A. V. Mulay, Associate Professor, COEP, Pune | Expert Member |
| 5. Mr. Manish Joshi, M/S Scientech, Indore | Special Invitee |
| 6. Prof. P. P. Bansod | Industry Expert |
| 7. Mrs. Vibha Bhatnagar | Member |
| 8. Mrs. Gauri Gupta | Member |
| 9. Mrs. Avni Mazawadia | Member |
| 10. Mr. Sunny Ganavdiya | Member (Invitee) |
| | Member (Invitee) |

The deliberations of the meeting are as under:

Item No.1 – Performance Index for the Department of Biomedical Engineering were framed according to AICTE norms. Suggestions received

Dr. A. V. Mulay advised to also indicate percentage distribution of the indicators for the Curriculum. As per her suggestion steps will be taken to compile data in this respect

Item No. 2 – To finalize the scheme & syllabus of IV year as per AICTE Model for students admitted in the year 2018-2019. After discussion with the experts following changes were incorporated in the scheme of Final Year B.E:

i) Semester VII in Elective III subjects to be offered

1. Rehabilitation Engineering
2. Hospital Technology Systems
3. Medical Image Processing
4. Design & manufacturing of Medical Devices

ii) Semester VIII in Elective IV & V subjects to be offered

Elective IV

1. Artificial Intelligence & Machine Learning for Medical Applications
2. Power Electronics
3. Hospital management & Information systems

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4. Internet of Things for Medical Applications

Elective V

- 1 Biomaterials
- 2 Telemedicine
- 3 Nanosensors

iii) Syllabus for all the subjects to be offered as per the proposed scheme were discussed and finalized.

Item No. 3 - No changes proposed in syllabus of PG Biomedical Signal Processing Instrumentation

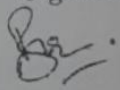
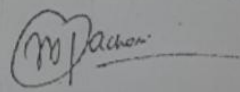
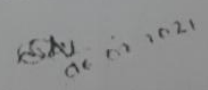
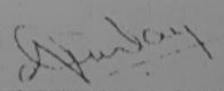
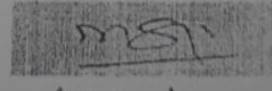
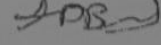
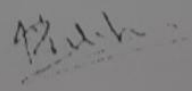
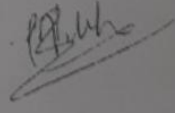

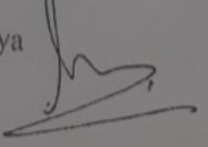
Item No. 4 - Any other item.

Minor changes were done in the syllabus of

- i) Embedded Systems BM-39251
- ii) Human Anatomy & Physiology BM-29003

The meeting ended with a vote of thanks to the chair.

Signature of members

S.No.	Name	Signature
1.	Prof. B. R. Rawal	
2.	Prof. R. B. Pachori	
3.	Prof. Ashutosh Datar	
4.	Dr. Mrs. A. V. Mulay	
5.	Mr. Manish Joshi	
6.	Prof. P. Bansod	
7.	Mrs. Vibha Bhatnagar	
8.	Mrs. Gauri Gupta	
9.	Mrs. Avni Jain	
10.	Mr. Sunny Ganavdiya	

Semester: III

S. No.	Subject Code	Category	Subject Name	Hours /Week			Maximum Marks Allotted				Credits		Total Credits
				L	T	P	Theory		Practical		T	P	
							Th.	CW	SW	Pr.			
1	MA-29024	BSC	Mathematics III	3	1	-	70	30	-	-	4	-	4
2	EE-29011	ESC	Network Analysis	3	-	2	70	30	40	60	3	1	4
3	EI-29017	ESC	Basic Electronics	3	-	2	70	30	40	60	3	1	4
4	BM-29007	PCC	Bioelectricity & Transducers	3	-	2	70	30	40	60	3	1	4
5	BM-29003	PCC	Human Anatomy & Physiology	3	-	2	70	30	40	60	3	1	4
6	EE-29498	LC	Electrical workshop	-	-	2	-	-	40	60	-	1	1
7	HU-29481	HSMC	Values, Humanities and Professional	-	2	-	-	100	-	-	2	-	2
Total				15	3	10	350	250	200	300	18	5	23
Optional Subject													
8	BM-XXXXX	OC-I	Physiology for Engineers	2	-	-	70	30	-	-	2	-	2
Grand Total				17	3	10	420	280	200	300	20	5	25

*OC/PEC --> Can be replaced by NPTEL/Moocs/Swayam Course in consultation with mentor

Semester: IV

S. No.	Category	Subject Name	Hours /Week			Maximum Marks Allotted				Credits		Total Credits	
			L	T	P	Theory		Practical		T	P		
						Th.	CW	SW	Pr.				
1	MA-29501	BSC	Mathematics IV	3	1	-	70	30	-	-	4	-	4
2	EC-29509	ESC	Digital Electronics	3	-	2	70	30	40	60	3	1	4
3	BM-29508	PCC	Analog Electronics	3	-	2	70	30	40	60	3	1	4
4	EI-29572	ESC	Fundamentals of Measurement	3	-	2	70	30	40	60	3	1	4
5	EI-29998	LC	Electronic Workshop	-	-	4	-	-	40	60	-	2	2
6	HU-29507	HSMC	Economics for Engineers	3	-	-	70	30	-	-	3	-	3
Total				15	1	10	350	150	160	240	16	5	21
Optional Subject													
7	BM-XXXXX	OC-II	Regulatory Requirement for Medical Devices in India	2	-	-	70	30	-	-	2	-	2
Grand Total				17	1	10	420	180	160	240	18	5	23

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SRI G.S. Institute of Technology & Science
III year Bachelor of Biomedical Engineering Scheme of Examination (Applicable from 2020-21)

Semester: V

S. No.	Subject Code	Category	Subject Name	Hours /Week			Maximum Marks Allotted				Credits		Total
				L	T	P	Theory		Practical		T	P	Credits
							Th.	CW	SW	Pr.			
1	IP-39021	HSMC	Industrial Engineering & Signals and Systems	3	1	-	70	30	-	-	4	-	4
2	BM-39011	PCC	Biomedical Instrumentation I	3	1	2	70	30	40	60	4	1	5
3	BM-39013	PCC	Elective-I	3	1	-	70	30	40	60	4	1	5
4	BM-	PEC	Seminar/Hospital Training/Internship	3	-	2	70	30	40	60	3	1	4
7	BM-39481	S/A	Total	-	-	4	-	-	100	-	-	2	2
Optional Subject				12	3	10	280	120	220	180	15	5	20
6		OC-III	1) Biomaterials for Engineering Applications 2) Digital Image Processing	2	-	-	70	30	-	-	2	-	2
Grand Total				14	3	10	350	150	220	180	17	5	22

Elective-I: (1) BM-39254 -Programming Tools & Techniques (2) BM-39251-Embedded Systems

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Semester:VI

S. No.	Subject Code	Category	Subject Name	Hours /Week			Maximum Marks allotted				Credits		Total
				L	T	P	Theory		Practical		T	P	Credits
							Th.	CW	SW	Pr.			
1	EE-39508	PCC	Control Systems	3	1	2	70	30	40	60	4	1	5
3	BM-39501	PCC	Biomedical Signal Processing	3	1	2	70	30	40	60	4	1	5
4	BM-39512	PCC	Biomedical Instrumentation II	3	1	2	70	30	40	60	4	1	5
5		PEC	Elective-II	3	-	-	70	30	-	-	3	-	3
6	BM-39952	PROJECT	Minor Project-I	-	-	8	-	-	40	60	-	4	4
Total				12	3	14	280	120	160	240	15	7	22
Optional Subject				2	-	-	70	30	-	-	2	-	2
8		OC-IV	1) Health Research Fundamentals 2) Embedded Systems	2	-	-	70	30	-	-	2	-	2
Grand Total				14	3	14	350	150	160	240	17	7	24

Elective-III: (1) BM-39603-Biomedical Statistical Signal Processing (2) EC-39602 Analog & Digital Communication

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J. J. S. Institute of Technology & Science
IV Year Bachelor of Biomedical Engineering Proposed Scheme of Examination
(Applicable to students from 2021-22 session)

Semester-VII

S. No.	Subject Code	Category	Subject Name	Hours /Week			Maximum Marks allotted				Credits		Total Credits
				L	T	P	Theory		Practical		T	P	
1	BM-	PCC	Biomechanics	2	1	2	70	30	40	60	3	1	4
2	BM-	PCC	Medical Imaging Systems	3	1	-	70	30	-	-	4	-	4
3	BM-	PCC	Biological Control Systems	3	-	2	70	30	40	60	3	1	4
4	BM-	PEC	Elective-III	2	-	-	70	30	-	-	2	-	2
6	BM-	PROJECT	Major Project-I (AB Group)	-	-	8	-	-	40	60	-	4	4
7	BM-	PROJECT	Major Project-II (BA Group)	-	-	8	-	-	40	60	-	4	4
8	BM-	S/I/I	Summer Industrial Training/Internship/Seminar	-	-	4	-	-	100	-	-	2	2
Total(AB Group)				10	2	16	280	120	220	180	12	8	20
Total(BA Group)				10	2	16	280	120	220	180	12	8	20

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Semester- VIII

S. No.	Subject Code	Category	Subject Name	Hours /Week			Maximum Marks allotted				Credits		Total
				L	T	P	Theory		Practical		T	P	
1	BM-	PEC	Elective-IV	3	-	2	70	30	60	40	3	1	4
2	BM-	PEC	Elective-V	3	1	-	70	30	-	-	4	-	4
3	BM-	S/I/I	Industrial Training/Internship/Ser	-	-	8	-	-	100	-	-	4	4
4	BM-	PROJECT	Major Project-II (AB Group)	-	-	8	-	-	40	60	-	4	4
5	BM-	PROJECT	Major Project-I (BA Group)	-	-	8	-	-	40	60	-	4	4
Total(AB GROUP)				6	1	18	140	60	200	100	7	9	16
Total(BA GROUP)				6	1	18	140	60	200	100	7	9	16

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