

**VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)**

(Deemed to be University u/s 3 of the UGC Act, 1956)  
PALLAVARAM - CHENNAI - INDIA

**VELS**  
UNIVERSITY

**VELS UNIVERSITY: SCHOOL OF ENGINEERING**  
**DEPARTMENT OF BIOMEDICAL ENGINEERING**

**MINUTES OF THE MEETING OF THE BOARD OF STUDIES**Date : 15<sup>th</sup> May, 2017

Time : 2.00 P.M

Venue : Conference Hall,  
School of Engineering

The meeting of the Board of Studies of the Department of Biomedical Engineering, School of Engineering, Vels University was held at 2.00 P.M on 15.05.2017(Monday) in the conference hall of the School of Engineering to consider the curriculum for B.E Biomedical Engineering.

The following persons were invited to attend the meeting:

Sl.No	Name & Address	Designation
1	<b>Dr. Venkat Sai</b> Professor & Head, SRMC, Chennai Email ID:	External Expert
2	<b>Dr.M.Hariharan</b> Associate Professor/Biomedical Engineering, SRM University, Chennai. Email ID :	Special Invitee
3	<b>Mr.B.Venkatraman</b> Managing Partner - Technical, BioVision Medical Systems, Chennai. Email ID :	External Expert
4	<b>Mrs. Hemalatha.R.J</b> Head of Department /Biomedical Engineering , Vels University, Pallavaram, Chennai -600 117 Mobile No:9994659092 Email ID : hodbiomedical@velsuniv.ac.in	Convenor
5	<b>Ms. Josline Elsa Joseph</b> Assitant Professorr/ Biomedical Engineering, VELS UNIVERSITY, Pallavaram, Chennai-600 117 Mobile No:9940671121 Email ID : joslinejoseph02@gmail.com	Member

All the above listed except one under Sl. No.1 attended the meeting and deliberated on the curriculum in detail.

The following are the recommendations of the Committee on the subject matter.

**B.E – Biomedical Engineering**

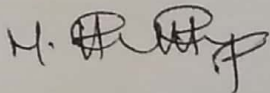
The following are the changes to be made in the curriculum

- To shift Diagnostic and Therapeutic Equipment theory and Diagnostic and Therapeutic Equipment lab from VI semester to V semester
- To shift Sensors and Measurements theory and Sensors and Measurements lab from V semester to VI semester
- To shift implant training to VI semester from IV semester
- To shift minor project to VII semester from VI semester – the credit is changed from 26 to 28

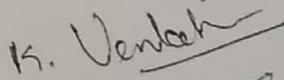
All the above change, modification in the curriculum was carried out in order to execute the laboratory and parallel theory classes efficiently to the students.

1. Dr. Venkat Sai

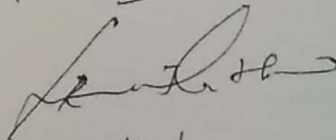
2. Dr.M.Hariharan



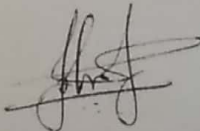
3. Mr.B.Venkatraman



4. Mrs. Hemalatha.R.J



5. Ms. Josline Elsa Joseph



VELS UNIVERSITY  
SCHOOL OF ENGINEERING  
DEPARTMENT OF BIOMEDICAL ENGINEERING  
CHANGES MADE IN THE CURRICULUM

The following are the changes made in the curriculum of B.E Biomedical Engineering in the board of studies meeting conducted on May 15, 2017 is quoted below

S.NO	EXISTING CURRICULUM		PROPOSED CURRICULUM	
	SUBJECTS	SEMESTER	SUBJECTS	SEMESTER
1	Inplant Training	IV	Inplant Training	VI
2	Sensors And Measurements Theory Sensors And Measurements Lab	V	Sensors And Measurements Theory Sensors And Measurements Lab	VI
3	Diagnostic And Therapeutic Equipment Diagnostic And Therapeutic Equipment Lab	VI	Diagnostic And Therapeutic Equipment Diagnostic And Therapeutic Equipment Lab	V
4	Minor Project	VI	Minor Project	VII

*[Signature]*  
15/5/17

HOD  
Department of Biomedical Engineering  
School of Engineering,  
Vels University,  
Pallavaram, Chennai - 600 117.



**B.E. Biomedical Engineering  
CURRICULUM**

Category	Code No.	Course	Hours/Week			Credits
			Lecture	Tutorial	Practical	
SEMESTER III						
AECC	15GBE204	Environmental Science and Engineering	3	0	0	3
CORE	15GBE012	Mathematics III	3	1	0	3
CORE	15EBM004	Pathology and Microbiology	3	1	0	3
CORE	15EBM005	Biomaterials and Artificial Organs	3	0	0	3
CORE	15EBM006	Biocontrol system	3	1	0	3
DSE	15EBM...	Discipline Specific Elective I	3	0	0	3
GE	15EBM...	Generic Elective I	3	0	0	3
CORE	15EBM007	Pathology and Microbiology Laboratory	0	0	3	2
DSE	15EBM...	Discipline Specific Elective II Laboratory	0	0	3	2
		TOTAL	21	3	6	25
SEMESTER IV						
Category	Code No.	Course	Hours/Week			Credits
			Lecture	Tutorial	Practical	
CORE	15GBE015	Statistics and Numerical Methods	3	1	0	4
CORE	15EBM008	Medical Physics	3	0	0	3
CORE	15EBM009	Microprocessor, Microcontroller and System Design	3	1	0	3
CORE	15EBM010	Electronic Circuits	3	1	0	3
DSE	15EBM...	Discipline Specific Elective III	3	1	0	3
GE	15EBM...	Generic Elective II	3	0	0	3
SEC	15EBM...	Skill Enhancement Elective II	2	0	0	2
CORE	15EBM011	Microprocessor and Microcontroller Laboratory	0	0	3	2
CORE	15EBM012	Electronic Circuits Laboratory	0	0	3	2
CORE	15BESY41	Basic Life Skills	1	0	1	2
		TOTAL	20	4	6	27

**B.E. Biomedical Engineering  
CURRICULUM**

Category	Code No.	Course	Hours/Week			Credits
			Lecture	Tutorial	Practical	
SEMESTER V						
CORE	15EBM014	Biomedical Instrumentation	3	1	0	4
CORE	15EBM019	Diagnostic and Therapeutic Equipment	3	1	0	3
CORE	15EBM016	Medical Optics	3	1	0	3
DSE	15EBM...	Discipline Specific Elective IV	3	1	0	3
DSE	15EBM...	Discipline Specific Elective V	3	0	0	3
GE	15EBM...	Generic Elective III	3	0	0	3
SEC	15EBM...	Skill Enhancement Elective III	2	0	0	2
CORE	15EBM017	Biomedical Instrumentation Laboratory	0	0	3	2
CORE	15EBM023	Diagnostic and Therapeutic Equipment Lab	0	0	3	2
		TOTAL	20	4	6	26
SEMESTER VI						
Category	Code No.	Course	Hours/Week			Credits
			Lecture	Tutorial	Practical	
CORE	15EBM015	Sensors and Measurement	3	1	0	3
CORE	15EBM020	Digital Signal Image processing	3	1	0	3
CORE	15EBM021	Radiological Equipment	3	1	0	3
DSE	15EBM...	Discipline Specific Elective VI	3	0	0	3
DSE	15EBM...	Discipline Specific Elective VII	3	1	0	3
GE	15EBM...	Generic Elective IV	3	0	0	3
CORE	15EBM022	Digital Signal Image processing Laboratory	0	0	3	2
CORE	15EBM018	Sensor and measurement Lab	0	0	3	2
CORE	15EBM013	Inplant training	0	0	0	2
		TOTAL	18	4	6	24



**B.E. Biomedical Engineering  
CURRICULUM**

Category	Code No.	Course	Hours/Week			Credits
			Lecture	Tutorial	Practical	
SEMESTER VII						
CORE	15EBM025	Pattern Recognition and Neural Networks	3	1	0	4
CORE	15EBM026	Medical Informatics	3	0	0	3
CORE	15EBM027	Virtual Instrumentation Design For Medical Systems	3	1	0	3
CORE	15EBM028	Biomechanics	3	1	0	3
DSE	15EBM...	Discipline Specific Elective VIII	3	0	0	3
DSE	15EBM...	Discipline Specific Elective IX	3	0	0	3
GE	15EBM...	Generic Elective V	3	0	0	3
CORE	15EBM029	Virtual Instrumentation Design For Medical Systems Lab	0	0	3	2
CORE	15EBM020	Medical Image Processing and Analysis Lab	0	0	3	2
CORE	15EBM024	Minor Project	0	0	0	2
			21	3	6	28
SEMESTER VIII						
Category	Code No.	Course	Hours/Week			Credits
			Lecture	Tutorial	Practical	
CORE	15EBM021	Prosthetic Engineering	3	0	0	3
GE	15EBM...	Generic Elective VI	3	0	0	3
CORE	15EBM022	Project Work	0	0	21	12
		TOTAL	6	0	21	18