



VELS



INSTITUTE OF SCIENCE, TECHNOLOGY
& ADVANCED STUDIES (VISTAS)
(DEEMED TO BE UNIVERSITY Emd. 0/63 OF THE UGC ACT, 1956)
NAAC ACCREDITED
PALLAVARAM - CHENNAI - INDIA

MINUTES OF THE MEETING OF THE BOARD OF STUDIES IN DEPARTMENT OF BIOMEDICAL ENGINEERING

DATE: 17.05.2018

The meeting of Board of Studies in Biomedical Engineering (UG) of the Department of Biomedical Engineering, School of Engineering, VISTAS held on **17.05.2018 at 02.00 p.m.** in Room No: OEB001, Ocean Engineering Block to discuss the revision of First year UG Course Curriculum & Syllabus of B.E Biomedical Engineering.

Members Present:

S.No	Member Name	Designation & Address	BOS Designation
1.	Dr.Venkat Sai	Prof & Head, SRMC, Chennai	External Expert
2.	Dr.M.Hariharan	Associate Prof, Dept of BME, SRM Univ, Chennai	Special Invitee
3.	Mr.B.Venkatraman	Managing Partner – Technical, Bio Vision Medical Systems, Chennai	External Expert
4.	Mrs.Hemalatha R.J	Head of the Department-Biomedical Engg, VISTAS, Pallavaram, Chennai-117	Convenor
5.	Mr.R.Chandrasekaran	Assistant Professor, Department-Biomedical Engg, VISTAS, Pallavaram, Chennai-117	Member

Considered the Course Curriculum and Syllabus presented before the Board of Studies and discussed in detail and resolved as follows:

Resolved to recommend that the Curriculum & Syllabus for the First Year B.E Biomedical Engineering, prescribed by AICTE/UGC for the Academic Year 2018-2019 be approved.

Signature of the Members:

Dr.Venkat Sai	Dr.M.Hariharan	Mr.B.Venkatraman	Mrs.Hemalatha R.J	Mr.R.Chandrasekaran
Prof & Head,	Associate Prof,	Managing Partner	Head of the	Assistant Professor
		– Technical,	Department-	Department-
			Biomedical Engg,	Biomedical Engg,
			VISTAS, Pallavaram,	VISTAS, Pallavaram,
SRMC	Dept of	Bio Vision Medical		
	BME, SRM Univ,	Systems,		
Chennai	Chennai	Chennai	Chennai	Chennai
External	Special Invitee	External Expert	Convenor	Member
Expert				

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

CHENNAI - 600 117

REGULATIONS 2018

CHOICE BASED CREDIT SYSTEM

Common to Engineering Full-Time Programmes

DEGREE OF B.E Biomedical Engineering

1. DURATION OF THE PROGRAMME

1.1. Four years (eight semesters)

1.2. Each academic year shall be divided into two semesters. The odd semesters shall consist of the period from July to November of each year and the even semesters from January to May of each year.

1.3 There shall be not less than 90 working days for each semester.

2. ELIGIBILITY FOR ADMISSION

2.1. Candidates for admission to the first year of the Bachelor of Engineering shall be required to have passed the higher secondary examinations (Academic stream) conducted by the Government of Tamil Nadu or an examination accepted as equivalent thereof by the Vels University provided that candidates for admission into the specific Main subject of study shall also possess such other qualifying conditions as may be prescribed by the University. The student must have a pass in the 10+2 / HSC / ICSE or equivalent examination with Biology / Mathematics, Physics and Chemistry with an average of 60% marks and above (in Biology / Mathematics, Physics and Chemistry).

3. CREDIT REQUIREMENTS AND ELIGIBILITY FOR AWARD OF DEGREE

Candidates shall be eligible for the award of the degree only if he/she has undergone the prescribed course of study in the University for a period of not less than four academic years, passed the examination of all the eight semesters prescribed earning 170 credits and fulfilled such conditions as prescribed by the University.

4. COURSE OF STUDY, CREDITS AND SCHEME OF EXAMINATION

4.1. The main subject of study for Bachelor Degree shall consist of the following:

Language course consists of technical and communication English.

Main courses consists of,

- Core
- Electives
- Practicals

4.2 The Course Components and Credit Distribution shall consist Part I, II,III& IV:

(Minimum number of Credits to be obtained is 170)

Credit Assignment Each course is assigned certain number of credits based on the following:
Contact period per week CREDITS

1 Lecture Period - 1 Credit

1 Tutorial Period - 1 Credit

2 Practical Periods - 1 Credit

(Laboratory / Seminar / Project Work / etc.)

4.3 Scheme of Examination:

PART A: (30 words) Answer 10 Questions without choice 10 X 2 = 20 marks

PART B: (500 words) Answer all questions 5 X 16 = 80 marks

Total = 100 marks

5.REQUIREMENTS FOR PROCEEDING TO SUBSEQUENT SEMESTER

5.1. **Eligibility:** Students shall be eligible to go to subsequent semester only if they earn sufficient attendance as prescribed therefor by the Board of Management from time to time.

5.2. **Attendance:** All Students must earn 75% and above of attendance for appearing for the University Examination. (Theory/Practical)

5.3. **Condonation of shortage of attendance:** If a Student fails to earn the minimum attendance (Percentage stipulated), the HODs shall condone the shortage of attendance up to a maximum limit of 10% (i.e. between 65% and above and less than 75%) after collecting the prescribed fee towards the condonation of shortage of attendance. Such fees collected and should be remitted to the University.

5.4.**Non-eligibility for condonation of shortage of attendance:** Students who have secured less than 65 % but more than 50 %of attendance are NOT ELIGIBLE for condonation of shortage of attendance and such Students will not be permitted to appear for the regular examination, but will be allowed to proceed to the next year/next semester of the program

5.5.**Detained students for want of attendance:** Students who have earned less than 50% of attendanceshall be permitted to proceed to the next semester and to complete the Program of study. Such Students shall have to repeat the semester, which they have missed by rejoining after

completion of final semester of the course, by paying the fee for the break of study as prescribed by the University from time to time.

5.6. Condonation of shortage of attendance for married women students: In respect of married women students undergoing UG programs, the minimum attendance for condonation (Theory/Practical) shall be relaxed and prescribed as 55% instead of 65% if they conceive during their academic career. Medical certificate from the Doctor together with the attendance details shall be forwarded to the university to consider the condonation of attendance mentioning the category.

5.7. Zero Percent (0%) Attendance: The Students, who have earned 0% of attendance, have to repeat the program (by rejoining) without proceeding to succeeding semester and they have to obtain prior permission from the University immediately to rejoin the program.

5.8. Transfer of Students and Credits: The strength of the credits system is that it permits inter Institutional transfer of students. By providing mobility, it enables individual students to develop their capabilities fully by permitting them to move from one Institution to another in accordance with their aptitude and abilities.

5.8.1. Transfer of Students is permitted from one Institution to another Institution for the same program with same nomenclature. Provided, there is a vacancy in the respective program of Study in the Institution where the transfer is requested. Provided the Student should have passed all the courses in the Institution from where the transfer is requested.

5.8.2. The marks obtained in the courses will be converted and grades will be assigned as per the University norms.

5.8.3. The transfer students are not eligible for classification.

5.8.4. The transfer students are not eligible for Ranking, Prizes and Medals.

5.8.5. Students who want to go to foreign Universities upto two semesters or Project Work with the prior approval of the Departmental/College Committee are allowed to get transfer of credits and marks which will be converted into Grades as per the University norms and are eligible to get CGPA and Classification; they are not eligible for Ranking, Prizes and Medals.

6. EXAMINATION AND EVALUATION

6.1. Register for all subjects: Students shall be permitted to proceed from the First Semester up to Final Semester irrespective of their failure in any of the Semester Examination. For this purpose, Students shall register for all the arrear subjects of earlier semesters along with the current (subsequent) Semester Subjects.

6.2. Marks for Internal and End Semester Examinations for PART I, II, III

6.2.1 There shall be no passing minimum for Internal.

6.2.2 For external examination, passing minimum shall be 40% [Forty Percentage] of the maximum marks prescribed for the paper for each Paper/Practical/Project and Viva-Voce.

6.2.3 In the aggregate [External/Internal] the passing minimum shall be of 40%.

6.2.4. He/She shall be declared to have passed the whole examination, if he/she passes in all the papers and practical wherever prescribed as per the scheme of the examinations by earning 170 CREDITS in PartI, II, III.

7. MAXIMUM PERIOD FOR COMPLETION OF THE PROGRAMS TO QUALIFY FOR A DEGREE

7.1. A Student who for whatever reasons is not able to complete the programs within the normal period (N) or the Minimum duration prescribed for the programme, may be allowed two years period beyond the normal period to clear the backlog to be qualified for the degree. (Time Span = $N + 2$ years for the completion of programme)

8. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The University may from time to time revise, amend or change the Regulations, Curriculum, Syllabus and Scheme of examinations through the Academic Council with the approval of the Board of Management.

VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES (VISTAS)

B.E. BIOMEDICAL ENGINEERING DEGREE COURSE

COURSES OF STUDY AND SCHEME OF ASSESSMENT

(MINIMUM CREDITS TO BE EARNED: 170)

Category	Course Title	Hours/Week			Credits	Maximum Marks			
		Lecture	Tutorial	Practical		CA	SEE	Total	
SEMESTER I									
Humanities	English	2	0	0	2	40	60	100	
Basic Science	Physics (Oscillation, Waves and Optics)	3	1	0	4	40	60	100	
Basic Science	Mathematics – I (Calculus and Linear Algebra)	3	1	0	4	40	60	100	
Engineering Course	Basic Electrical Engineering	3	1	0	4	40	60	100	
Engineering Course	Engineering Graphics & Design	1	0	4	3	40	60	100	
Basic Science Lab	Physics Lab	0	0	3	2	40	60	100	
Engineering Lab	Electrical Engineering Lab	0	0	2	1	40	60	100	
Humanities Lab	English Lab	0	0	2	1	40	60	100	
		12	3	11	21				
SEMESTER II									
Basic Science	Chemistry	3	1	0	4	40	60	100	
Basic Science	Mathematics – II (Probability and Statistics)	3	1	0	4	40	60	100	
Engineering Course	Programming for Problem Solving	3	0	0	3	40	60	100	
Basic Science Lab	Chemistry Lab	0	0	3	2	40	60	100	
Engineering Lab	Programming for Problem solving Lab	0	0	4	2	40	60	100	
Engineering Course	Workshop/Manufacturing Practices	1	0	4	3	40	60	100	
		10	2	11	18				

CA - Continuous Assessment

SEE - Semester End Examination