

#### BIOMEDICAL ENGINEERING

# Department of Electronics & Communication Engineering.

## **Minutes of CDMC Meeting**

05-03-2019

The members of Curriculum Design and Monitoring Committee for B.Tech Biomedical Engineering program met on 05-03-2019 at VSF - 04, "H" block, of VFSTR. The following members attended the meeting.

S.No	Members	Designation	Signatures
1.	Mr. T. Pitchaiah	Chairman	2
2.	Dr. G. Sitaramanjaneya Reddy	Member	GZ.
3.	Mr. B. Sunil Tej	Member	B-5013
4.	P. Krishna Chaitanya	Member	do

## Agenda of the meeting

1. Analysis of the feedback collected from various stakeholders such as Employers, Faculty, Parents and Students during the academic year 2018-19.

The following are the important points of analysis obtained from various stakeholders:

- 1. Employers suggested the following.
  - a. Motivate the students towards research based on current trends.
  - b. Project oriented curriculum gives hands on experience.
- 2. Faculty suggested the following
  - a. Credits should be given for NPTEL certification courses.
- 3. Parents suggested the following
  - a. Communications skills need to be improved
  - b. Hospital visits should be conducted
- 4. Students suggested the following
  - 1. Industrial visits & hospital vists are to be conducted
  - 2. Regular workshops need to be conducted.

Detailed feedback analysis report is enclosed as Annexure-I.

The outcomes of the meeting will be placed before the BOS for further discussion and recommendations.

# Feedback from Students 2018-19 (Academic Year) - UG - B. Tech (BM)

The result derived in terms of percentage of students with common views, average score, and ratings is presented in Table 1.

Table 1: Analysis of feedback from students 2018 - 19

Parameters	Rating 5	Rating 4	Rating 3	Rating 2	Rating 1	Average Score	Rating
Q1	66	34	0	0	0	4.66	Excellent
Q2	36.8	63.2	0	0	0	4.368	Excellent
Q3	32.1	67	0.9	0	0	4.312	Excellent
Q4	63.2	28.3	8.5	0	0	4.547	Excellent
Q5	43.4	56.6	0	0	0	4.434	Excellent
Q6	46.2	53.8	0	0	0	4.462	Excellent
Q7	50.9	48.1	0.9	0	0	4.496	Excellent
Q8	38.7	61.3	0	0	0	4.387	Excellent
Q9	42.5	56.6	0.9	0	0	4.416	Excellent

The highest score of 4.66 was given to the parameter "Course Contents of Curriculum are in tune with the Program Outcomes" followed by "Contact Hour Distribution among the various Course Components (LTP) is satisfiable." with a score of 4.54 and has been rated as Excellent.

It is clearly visible from the table that the parameters "The design of courses in the Curriculum is considered the extra learning or self learning."; "Composition of Basic Sciences, Engineering, Humanities and Management Courses is a right mix and satisfiable" and "Inclusion of Minor Project/ Mini Projects improved the technical competency and leadership skills among the students"; "The electives offered in relation to the Technological advancements in Biomedical and allied fields" obtained average scores 4.462, 4.496, 4.416 and 4.434 respectively and has been rated as Excellent.

The parameters "Courses placed in the curriculum serves the needs of both advanced and slow learners and "Laboratory sessions are sufficient to improve the technical skills of students"; "Course Contents are designed to enable Problem Solving Skills and Core competencies' obtained the scores of 4.387,4.312 &4.368 respectively and has been rated as Excellent which clearly reflects the benefit towards the student expectations.

### Feedback from Employer 2018-19 (Academic Year) - UG - B. Tech (BM)

The result derived in terms of percentage of employer with common views, average score, and ratings is presented in Table 2.

Table 2: Analysis of feedback from Employer 2018 – 19

Parameters	Rating 5	Rating 4	Rating 3	Rating 2	Rating 1	Average Score	Rating
Q1	20	80	0	0	0	4.2	Excellent
Q2	0	100	0	0	0	4	Excellent
Q3	0	100	0	0	0	4	Excellent
Q4	20	80	0	0	0	4.2	Excellent
Q5	60	40	0	0	0	4.6	Excellent

The highest score of 4.6 was given to the parameter "5. Curriculum develops skills to model and analyze the biomedical and allied industrial issues." And followed by "1. Course Contents of Curriculum are in tune with the Program Outcomes"; "Professional and Open Electives are in relation to the Technological advancements and fulfilling the needs of biomedical and allied industries "with an average score of 4.2 respectively which has been rated as Excellent

It is clearly visible from the table that the parameter & "2. Curriculum helps in bridging gap between industry and academic institution." & 3 Applicability of the domains and the tools used for designing the experiments in terms of existing practices in the Biomedical Engineering Industry.." obtained average 4 and has been rated as Excellent

### Feedback from faculty2018-19 (Academic Year) - UG - B. Tech (BM)

The result derived in terms of percentage of faculty with common views, average score, and ratings are presented in Table 3.

Table 3: Analysis of feedback from faculty 2018-19

Parameters	Rating 5	Rating 4	Rating 3	Rating 2	Rating 1	Average Score	Rating
Q1	44.4	55.6	0	()	0	4.444	Excellent
Q2	44.4	55.6	0	0	0	4.444	Excellent
Q3	55.6	44.4	0	0	0	4.556	Excellent
Q4	66.7	33.3	0	0	0	4.667	Excellent
Q5	44.4	55.6	0	0	0	4.444	Excellent
Q6	22.2	66.7	11.1	0	0	4.111	Excellent

Q7	33.3	66.7	0	0	O	4.333	Excellent
Q8	44.4	55.6	0	0	0	4.444	Excellent
Q9	44.4	55.6	0	0	O	4.444	Excellent

The highest score of 4.667 was given to the parameter "Q4 To practically enable to develop experimental, design, problem solving and analysis skills of the students" followed by "Q3.Curriculum is sufficient to bridge the gap between industry standards /current global scenarios and academics" with a score of 4.556 & followed by "Q5.The timely coverage of syllabus is possible in the mentioned number of hours.", Q1: Course Contents of Curriculum in tune with the Program Outcomes", "Q2: The depth of the course content is adequate to have significant learning outcomes.", "Q8: 8. The number of theoretical courses and laboratory sessions sufficient to improve the technical skills of students" and "Q9 Electives enable the passion to learn new technologies in emerging area" with the similar scores of 4.444 and has been rated as Excellent.

It is clearly visible from the table that the parameters "Q7. Rate the capability of the curriculum for improving ethical values in students", and obtained score of 4.333 followed by "Q6: The Curriculum providing opportunity towards Self learning to realize the expectations" with a score of 4.111 and have been rated as Excellent.

### Feedback from Parent 2018-19 (Academic Year) - UG - B. Tech (BM)

The result derived in terms of percentage of Parent with common views, average score, and ratings is presented in Table 4.

Table 4: Analysis of feedback from Parent 2018 – 19

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Rating
Q1	50	50	0	0	0	4.5	Excellent
Q2	40	50	10	0	0	4.3	Excellent
Q3	60	40	0	0	0	4.6	Excellent
Q4	70	30	0	0	0	4.7	Excellent
Q5	70	30	0	0	0	4.7	Excellent

The highest score of 4.7 was given to the parameter 4 &5. "4. The curriculum has been designed to make your ward industry ready by imparting analytical and reasoning, language and soft skills in addition to technical competencies, as desired by the electrical and allied industries." followed by "5. Course Curriculum is of the global standard and is in tune with

the needs of electrical and allied industries." with a score of 4.4respectively which has been rated as Excellent.

It is clearly visible from the table that the parameter "3 &1"3. Competency of your ward is on par with the students from other Universities/Institutes.."& "1. Your ward is sensitized towards issues like gender equality, environment and sustainability, ethics and values etc., through relevant courses in the curriculum" obtained average 4.6 and 4.5 respectively followed by "2.The academic flexibility embedded in the curriculum provides opportunities to students to pursue their interest by choosing from a vast number of pathways / electives from own area/specialization as well as from other areas." With a score 4.3 has been rated as Excellent

The following are the important points recommended by CDMC to incorporate in new curriculum

- 1. Curriculum should motivate students towards self-learning.
- 2. Provision of credits for online courses like MOOCs and NPTEL courses
- 3. Instead of minor projects, curriculum comprises of Projects oriented towards industrial and societal needs.
- 4. Decrement in the no of credits is suggested.
- 5. Introduce credits for physical fitness, sports and games.
- 6. Project-based learning approach.
- 7. The inclusion of Theory with Laboratory is giving overall development in the student.

Chairman, CDMC