VIGNAN'S
Foundation for Science, Technology & Research
UNIVERSITY
(Estd u/s 3 of UGC Act of 1956)

DEPARTMENT OF BIOTECHNOLOGY

Minutes of CDMC Meeting

15-04-2018

The members of Curriculum Design and Monitoring Committee for B.Tech. Bioinformatics programme met on 15-04-2018 at ASF04, 'U' block, of Vignan's University. The following members attended the meeting

S.No.	Member	Designation	Signature
1	Dr.S.Krupanidhi Professor & Head	Chairman	
2	Dr.D.John Babu	Member	
3	Dr.Abhinav Parasher	Member	
4	Mr. A. Venkata Narayana	Member	

Agenda of the meeting

1. Analysis of the feedback collected from various stakeholders such as Alumni, Employers, Faculty, Parents and Students during the academic year 2017-18
2. Any point with the permission of Chair.

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

1. More emphasis needs to be laid on introducing 'Programming' which is very much essential to be a successful Bioinformatician in future.
2. The course contents of 'Genomics and Proteomics' are good. Add the contents related to the concept of 'Metabolomics' as it is emerging area.

3. Knowledge related to drug development will be helpful in Insilco drug design.
4. It is better to include advanced programming languages and databases to address data intensive and large-scale biological problems.
5. Theory courses has to be integrated with Laboratories for better understanding of the concept.
6. More insights related to the subject structural bioinformatics was given for better understanding of biological processes and drug development for diseases.
7. It is better to add the immunology experiments in the subject immunology and Immunoinformatics to get hands on training related wet lab.
8. Encouragement towards extracurricular activities is needed.
9. Activities related to life skills and employability have to be included in the curriculum.
10. The curriculum must be suitable for attempting national competitive examinations and industry needs.

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.

Chairman, CDMC

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Annexure I

Feedback has been received from students on the following nine parameters:

Q1. The Course Contents of Bioinformatics Curriculum are in tune with the Program Outcomes.

Q2. The Bioinformatics Course Contents are designed to enrich laboratory Skills and Core competencies.

Q3. The Courses placed in the Bioinformatics curriculum serve the needs of both advanced and slow learners.

Q4. Contact Hour Distribution among the various Course Components (LTP) is Satisfiable.

Q5. The Electives offered will enrich the passion to learn new technologies in emerging areas.

Q6. The Curriculum provides an opportunity towards Self learning to realize the expectations.

Q7. The Composition of Basic Sciences, Engineering, Humanities and Management Courses in the curriculum is a right mix and satisfiable.

Q8. Number of Laboratory sessions Integrated with Theory Courses in Bioinformatics have been sufficient to improve the technical skills.

Q9. Integration of Minor Project with Theory Courses offered in Bioinformatics have enhanced the technical competency and leadership skills in the management of biotech related firms.

The categorization of rating is as follows: Strongly Agree (5), Agree (4), Moderate (3), Disagree (2) and Strongly Disagree (1).

Feedback Analysis is carried based on Average Satisfaction Rating. Rating categorization is carried based on Excellent (≥4); Very Good (≥3.5 & <4); Good (≥3 & <3.5); Moderate (>2 & <3) and Unsatisfactory (<2)

Feedback from Students 2017-18 (Academic Year) - UG – B. Tech (BI)

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

Table 1: Analysis of feedback from students 2017 – 18

Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	94.7	5.3	0	0	4.947	Excellent
Q2	91.6	8.4	0	0	4.916	Excellent
Q3	3.2	94.7	2.1	0	4.011	Excellent
Q4	87.4	7.4	2.1	1.1	4.772	Excellent
Q5	2.1	96.8	1.1	0	4.01	Excellent
Q6	6.3	91.6	2.1	0	4.042	Excellent
Q7	88.4	9.5	1.1	0	4.844	Excellent
Q8	90.5	8.4	1.1	0	4.894	Excellent
Q9	91.6	4.2	4.2	0	4.874	Excellent

The highest score of 4.947 was given to the parameter namely "Course Contents of Curriculum are in tune with the Program Outcomes" immediately followed by yet another parameter namely "The Bioinformatics Course Contents are designed to enrich laboratory Skills and Core competencies" with a score of 4.916 and both of them had been rated as Excellent.

It is clearly visible from the table that the parameters "Number of Laboratory sessions Integrated with Theory Courses in Bioinformatics have been sufficient to improve the technical skills" and "Integration of Minor Project with Theory Courses offered in Bioinformatics have enhanced the technical competency and leadership skills in the management of biotech related firms" obtained average scores 4.894 and 4.874 respectively and had been rated as Excellent.

The parameters namely "The Composition of Basic Sciences, Engineering, Humanities and Management Courses in the curriculum is a right mix and satisfiable" and "Contact Hour

Distribution among the various Course Components (LTP) is Satisfiable" obtained the scores of 4.844 and 4.772 respectively and had been rated as Excellent which clearly reflects the compliance of students' expectations.

Average scores of 4.042, 4.011 and 4.01 were obtained for the parameters namely "The Curriculum provides an opportunity towards Self learning to realize the expectations", "The Courses placed in the Bioinformatics curriculum serve the needs of both advanced and slow learners" and The Electives offered will enrich the passion to learn new technologies in emerging areas". They were all rated as Excellent. "Curriculum is providing opportunity towards Self learning to realize the expectations".

Time to time meetings were conducted at the department level to leverage new and advanced techniques to combat the learning difficulties of the students. The feedback analysis reveals that laboratory sessions help to improve the student's technical skills and the courses placed in the curriculum supports both the advanced learners as well as slow learners.

Feedback has been received from the Faculty on the following nine parameters:

Q1. The Course Contents of Bioinformatics Curriculum are in tune with the Program Outcomes

Q2. The Course Contents along with the laboratory skills will enhance Informatics and Core competencies.

Q3. The allocation of Credits to the respective Courses is satisfiable.

Q4. The Contact Hour Distribution among the various Course Components (LTP) is Satisfiable

Q5. Electives will enable the passion to learn new technologies in emerging areas of Bioinformatics

Q6. The Curriculum provides an opportunity towards Self learning to realize the expectations.

Q7. The Composition of Basic Sciences, Engineering, Humanities and Management Courses in the curriculum is satisfiable?

Q8. The number of theoretical courses amalgamated with laboratory sessions is sufficient to improve the technical skills of students.

Q9. The integration of Minor Project with Theory Courses will improve the technical competency and leadership skills among the students.

The categorization of rating is as follows: Strongly Agree (5), Agree (4), Moderate (3), Disagree (2) and Strongly Disagree (1).

Feedback Analysis is carried based on Average Satisfaction Rating. Rating categorization is carried based on Excellent (≥4); Very Good (≥3.5 & <4); Good (≥3 & <3.5); Moderate (>2 & <3) and Unsatisfactory (<2).

Feedback from Faculty of the academic year 2017-18 - UG – B. Tech (BI)

The results derived in terms of percentage of students with consensus views, average score, and ratings are presented in Table 2.

Table 2: Analysis of feedback from Faculty 2017 – 18

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	50	45.8	4.2	0	0	4.458	Excellent
Q2	62.5	33.3	0	4.2	0	4.541	Excellent
Q3	54.2	45.8	0	0	0	4.542	Excellent
Q4	58.3	29.2	12.5	0	0	4.458	Excellent
Q5	54.2	45.8	0	0	0	4.542	Excellent
Q6	50	41.7	4.2	4.2	0	4.378	Excellent
Q7	66.7	29.2	4.2	0	0	4.629	Excellent
Q8	54.2	37.5	8.3	0	0	4.459	Excellent
Q9	62.5	29.2	4.2	4.2	0	4.503	Excellent

The highest score of 4.629 was given to the following parameters namely "The Composition of Basic Sciences, Engineering, Humanities and Management Courses in the curriculum are satisfiable?" was rated as Excellent. It is clearly visible from Table I that the following parameters namely "The allocation of Credits to the respective Courses is satisfiable" and "Electives will enable the passion to learn new technologies in emerging areas of Bioinformatics" obtained average scores of 4.542, all of which had been rated as Excellent.

A score of 4.541 was given to the following parameters namely "The Course Contents along with the laboratory skills will enhance Informatics and Core competencies" was rated as Excellent. A score of 4.503 was given to the parameter namely "The integration of Minor Project with Theory

Courses will improve the technical competency and leadership skills among the students", was also rated as Excellent. A score of 4.459 was given to the parameter namely "The number of theoretical courses amalgamated with laboratory sessions is sufficient to improve the technical skills of students", was rated as Excellent.

A score of 4.458 was given to the parameter namely "The Contact Hour Distribution among the various Course Components (LTP) is Satisfiable", was rated as Excellent. A score of 4.378 was given to the parameter namely "The Curriculum provides an opportunity towards Self learning to realize the expectations", was rated as Excellent. A score of 4.458 was given to the parameter namely "The Course Contents of Bioinformatics Curriculum are in tune with the Program Outcomes", was also rated as Excellent.

Feedback has been received from the parents on the following five parameters:

Q1. The theoretical courses and practical sessions offered in our Bioinformatics curriculum are satisfiable

Q2. The overall assessment of technical knowledge in Bioinformatics disciplines acquired by your ward who is pursuing his/her program in our institution is satisfiable.

Q3. The Academic and Emotional Progression of your ward are satisfying as per your expectations.

Q4. Competency of your ward in Bioinformatics is on par with the students from other Universities/Institutes.

Q5. Course Contents of our Bioinformatics Curriculum are in tune with the Industry demand.

The categorization of rating is as follows: Strongly Agree (5), Agree (4), Moderate (3), Disagree (2) and Strongly Disagree (1).

Feedback Analysis is carried based on Average Satisfaction Rating. Rating categorization is carried based on Excellent (≥4); Very Good (≥3.5 &<4); Good (≥3 &<3.5); Moderate (>2 &<3) and Unsatisfactory (<2)

Feedback from Parents of the academic year 2017-18 - UG – B. Tech (BI)

The results derived in terms of percentage of students with consensus views, average score, and ratings are presented in Table 3.

Table 3: Analysis of feedback from Parents 2017 – 18

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	100	0	0	0	0	5	Excellent
Q2	100	0	0	0	0	5	Excellent
Q3	20.5	79.5	0	0	0	4.205	Excellent
Q4	97.4	2.6	0	0	0	4.974	Excellent
Q5	84.6	15.4	0	0	0	4.846	Excellent

The highest score of 5.00 was given to the following parameters namely "The theoretical courses and practical sessions offered in our Bioinformatics curriculum are satisfiable" and "The overall assessment of technical knowledge in Bioinformatics disciplines acquired by your ward that is pursuing his/her program in our institution is satisfiable" all of which were rated as Excellent.

It is clearly visible from the Table I that the parameter "Competency of your ward in Bioinformatics is on par with the students from other Universities/Institutes" obtained average scores of 4.974 has been rated as Excellent.

The parameter namely "Course Contents of our Bioinformatics Curriculum are in tune with the Industry demand" had shown the score of 4.846 which clearly reflects the satisfaction of the parent towards the curriculum. This also has been rated as Excellent.

The parameter namely "The Academic and Emotional Progression of your ward are satisfying as per your expectations" had shown the score of 4.205 which clearly reflects the satisfaction of the parent towards the development of academic and emotional aspects of their wards. This also has been rated as Excellent.

HOD, BT