



## DEPARTMENT OF BIOTECHNOLOGY

### Minutes of CDMC Meeting

16-03-2016

The members of Curriculum Design and Monitoring Committee for B.Tech. Bioinformatics programme met on 16-03-2016 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	Mr.D.John Babu	Member	
3	Mrs. M. Indira	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 2015-16.
2. Any point with the permission of Chair.

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

1. The Chairman-CDMC briefed the draft curriculum of R-16 B.Tech Bioinformatics to the members.
2. Additional knowledge is required on computational skills.
3. Connection between theory courses and laboratory is required for better understanding of the concept.

4. Introduce courses related to computational biology.
5. Focus of elective courses has to be in specific domain.
6. Theory courses has to be integrated with Laboratories for better understanding of the concept.
7. Emphasis has to be given on programming courses to gain more understanding programming skills.
8. More importance has to be given to genome sequence analysis to impart more knowledge in Genomes.
9. Encouragement towards extracurricular activities is needed.
10. Activities related to life skills and employability have to be included in the curriculum
11. 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**



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

## DEPARTMENT OF BIOTECHNOLOGY

### 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 ( $\geq 4$ ); Very Good ( $\geq 3.5$  &  $< 4$ ); Good ( $\geq 3$  &  $< 3.5$ ); Moderate ( $> 2$  &  $< 3$ ) and Unsatisfactory ( $< 2$ )

### Feedback from Students 2015-16 (Academic Year) - UG – B. Tech (BI)

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

**Table 1: Analysis of feedback from students 2015 – 16**

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	86.5	13.5	0	0	0	4.865	Excellent
Q2	78.4	21.6	0	0	0	4.784	Excellent
Q3	8.1	86.5	5.4	0	0	4.027	Excellent
Q4	67.6	18.9	5.4	2.7	5.4	4.406	Excellent
Q5	5.4	91.9	2.7	0	0	4.027	Excellent
Q6	16.2	78.4	5.4	0	0	4.108	Excellent
Q7	70.3	24.3	2.7	0	2.7	4.595	Excellent
Q8	75.7	21.6	2.7	0	0	4.73	Excellent
Q9	78.4	10.8	10.8	0	0	4.676	Excellent

The highest score of 4.865 was given to the parameter namely “Course Contents of Curriculum are in tune with the Program Outcomes” followed by the parameter namely “Course Contents are designed to enable Problem Solving Skills and Core competencies” with a score of 4.784 and both had been rated as Excellent.

It is clearly visible from the Table I that the parameters viz., “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” and “Number of Laboratory sessions Integrated with Theory Courses in Bioinformatics have been sufficient to improve the technical skills” obtained average scores 4.676 and 4.73 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” shown the scores of 4.595 and 4.406 respectively and had been rated as Very Good which clearly reflects the benefit towards the student expectations.

Average scores of 4.108, 4.027 and 4.027 were obtained for the parameters namely “The Curriculum provides an opportunity towards Self learning to realize the expectations”, “The Electives offered will enrich the passion to learn new technologies in emerging areas” and “The Courses placed in the Bioinformatics curriculum serve the needs of both advanced and slow learners” respectively. These three parameters were rated as Excellent.

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 ( $\geq 4$ ); Very Good ( $\geq 3.5$  &  $< 4$ ); Good ( $\geq 3$  &  $< 3.5$ ); Moderate ( $> 2$  &  $< 3$ ) and Unsatisfactory ( $< 2$ ).

### Feedback from Faculty of the academic year 2015-16 - 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 2015 – 16**

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	45	45	10	0	0	4.35	Excellent
Q2	45	45	10	0	0	4.35	Excellent
Q3	60	40	0	0	0	4.6	Excellent
Q4	60	35	5	0	0	4.55	Excellent
Q5	50	50	0	0	0	4.5	Excellent
Q6	45	45	10	0	0	4.35	Excellent
Q7	55	45	0	0	0	4.55	Excellent
Q8	60	35	5	0	0	4.55	Excellent
Q9	55	40	0	5	0	4.55	Excellent

The highest score of 4.6 was given to the following parameters namely “The allocation of Credits to the respective Courses is satisfiable”, was rated as Excellent. A score of 4.5 was given to the parameter namely “Electives will enable the passion to learn new technologies in emerging areas of Bioinformatics” was rated as Excellent. It is clearly visible from Table I that the following parameters “The Course Contents of Bioinformatics Curriculum are in tune with the Program Outcomes”, “The Course Contents along with the laboratory skills will enhance Informatics and Core competencies” and “The Curriculum provides an opportunity towards Self learning to realize the expectations” obtained average scores of 4.35, which had been rated as Excellent.

All the following parameters namely “The Contact Hour Distribution among the various Course Components (LTP) is Satisfiable”, “The Composition of Basic Sciences, Engineering, Humanities and Management Courses in the curriculum is satisfiable?”, “The number of theoretical courses amalgamated with laboratory sessions is sufficient to improve the technical skills of students” and “The integration of Minor Project with Theory Courses will improve the technical competency

and leadership skills among the students". This shows that the faculty members are satisfied with the curriculum and its objectivity in reaching the targeted goals. All these parameters had shown the score of 4.55 which were 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 ( $\geq 4$ ); Very Good ( $\geq 3.5$  &  $< 4$ ); Good ( $\geq 3$  &  $< 3.5$ ); Moderate ( $> 2$  &  $< 3$ ) and Unsatisfactory ( $< 2$ )

#### Feedback from Parents of the academic year 2015-16 - 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 2015 – 16**

	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	29.6	70.4	0	0	0	4.296	Excellent
Q4	100	0	0	0	0	5	Excellent
Q5	77.8	22.2	0	0	0	4.778	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”, “The overall assessment of technical knowledge in Bioinformatics disciplines acquired by your ward that is pursuing his/her program in our institution is satisfiable” and “Competency of your ward in Bioinformatics is on par with the students from other Universities/Institutes” with a uniform score of 5, all of which were rated as Excellent.

It is clearly visible from the Table I that the parameter “Course Contents of our Bioinformatics Curriculum are in tune with the Industry demand” obtained average scores of 4.778 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 4.296 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**