



VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be UNIVERSITY)

Established in 1996



DEPARTMENT OF BIOTECHNOLOGY

Action Taken Report on M. Tech Biotechnology Program R20 Feedback

Implemented in R22 introduced in the AY 2022 – 23

Action taken based on the suggestions from Students:

1. The Course Contents of M.Tech Biotechnology Curriculum is in compliance with the Program Outcomes
2. The Biotechnology Course Contents are designed to enrich laboratory skills and core competencies.
3. The Courses placed in the Biotechnology curriculum serve the needs of both advanced and slow learners.
4. Contact Hour Distribution among the various Course Components (LTP) is satisfiable.
5. The Electives offered will enrich the passion to learn new technologies in emerging areas.
6. The Curriculum provides an opportunity towards Self learning to realize the expectations.
7. The Composition of theory and lab Courses and year-long internship is a right mix and satisfiable.
8. No. of Laboratory Sessions Integrated with Theory Courses in Biotechnology have been sufficient to improve the technical skills.
9. Student Orientation program and Research Methodology and Year-long internship offered in Biotechnology have enhanced the technical competency and leadership skills in the management of biotech related firms.

Analysis of Overall Feedback given by the Students on R20

Parameters	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	100	0	0	0	0	5	Excellent
Q4	80	20	0	0	0	4.8	Excellent
Q5	100	0	0	0	0	5	Excellent

Q6	100	0	0	0	0	5	Excellent
Q7	100	0	0	0	0	5	Excellent
Q8	100	0	0	0	0	5	Excellent
Q9	100	0	0	0	0	5	Excellent

Itemized responses given to the Suggestions of Students

Suggestion: Increase lab hours to get experience in hands on

Action Taken: In M.Tech R22 curriculum each course is integrated with either practice or transactions. Moreover, in T2 assessment students are expected to perform small project on T1 assessment questions for better understanding.

Suggestion: More new elective courses are required.

Action Taken: In R22 curriculum a pool of 17 elective courses were introduced in diversified fields of Biotechnology. Out of 17 courses, 15 elective courses are new and in emerging areas of Biotechnology.

Action taken based on the suggestions from Alumni:

1. The Curriculum laid a good foundation in understanding the basic engineering concepts in Bioinformatics.
2. The Course Contents of Biotechnology Curriculum are in tune with the Program Outcomes.
3. The Biotechnology Curriculum encompasses all the required Job Oriented Skills.
4. Professional and Open Electives of Curriculum serve the technical advancements needed in the Biotech, Biologics, Pharma and Information Technology industry.
5. The Tools and Technologies learnt during laboratory sessions will enrich the Bioprocess skills in Biotechnology industries.
6. While comparing with your peers from other Universities, our curriculum provided technical skills.
7. Current Curriculum is superior than your studied Curriculum.

Analysis of Overall Feedback given by the Alumni on R20

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	61.3	19.4	12.9	0	0	4.228	Excellent
Q2	58.1	22.6	12.9	0	0	4.196	Excellent
Q3	64.5	19.4	9.7	0	0	4.292	Excellent
Q4	64.5	16.1	6.5	6.5	0	4.194	Excellent
Q5	64.5	25.8	3.2	0	0	4.353	Excellent

Q6	67.7	19.4	3.2	3.2	0	4,321	Excellent
Q7	64.5	25.8	3.2	0	0	4,353	Excellent

Itemized responses given to the suggestions of Alumni

Suggestion: Introduce more courses relevant to industry orientation.

Action Taken: In R22 curriculum industry oriented courses namely Advanced Bioprocess Technology, Bioreactor Design and Operations, Advanced Bioprocess modelling, control, and simulation, Industrial Microbiology, Production of Bio-therapeutics, Computational Fluid Dynamics were introduced. In addition, audit courses namely Employment Orientation Program and Research Methodology and IPR were also introduced to train students on IPR policies.

Suggestion: Add more practices in the curriculum

Action Taken: R-22 has been redesigned to inculcate concept oriented and practice based learning in which a dedicated practice sessions and continuous assessment will be carried out.

Action taken based on the suggestions from Faculty:

1. The Course Contents of M.Tech Biotechnology Curriculum are in tune with the Program Outcomes.
2. The Course Contents along with the laboratory skills will enhance Biotechnology and Core competencies.
3. The allocation of Credits to the respective Courses is satisfiable.
4. The Contact Hour Distribution among the various Course Components (LTP) is Satisfiable.
5. Electives will enable the passion to learn new technologies in emerging areas of Biotechnology
6. The Curriculum provides an opportunity towards Self learning to realize the expectations.
7. The Composition of Basic Sciences, Engineering, Humanities and Management Courses in the curriculum is satisfiable?
8. The number of theoretical courses and laboratory sessions offered are sufficient to improve the Bioprocess technical skills of students.
9. The year-long internship will improve the technical and professional competency and leadership skills among the students.

Analysis of Overall Feedback given by the Faculty on R20

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	68.8	25	0	0	0	4.44	Excellent
Q2	81.3	12.5	0	0	0	4.565	Excellent
Q3	81.3	12.5	0	0	0	4.565	Excellent

Q4	81.3	12.5	0	0	0	4.565	Excellent
Q5	68.8	25	0	0	0	4.44	Excellent
Q6	68.8	25	0	0	0	4.44	Excellent
Q7	68.8	25	0	0	0	4.44	Excellent
Q8	81.3	12.5	0	0	0	4.565	Excellent
Q9	68.8	25	0	0	0	4.44	Excellent

Itemized responses given to the suggestions of Faculty

Suggestion: Practice sessions for all courses are required for effective learning

Action taken: In R22 curriculum all courses are integrated with either practice or transactions to enhance hands on experience to students.

Suggestion: Introduce courses on modelling and simulation of bioprocesses

Action taken: A new course on Bioprocess Modelling, control and simulation was introduced in R 22 curriculum.

Suggestion: Lecturer student interaction should be enhanced

Action taken: To enhance students interaction audit courses namely Employ Orientation Program and Research Methodology and IPR were introduced. In addition, 2 credits were allocated for Teaching Activity of students.

Action taken based on the suggestions from Employers:

1. The Course Contents of M.Tech Biotechnology Curriculum are in tune with the Program Outcomes.
2. The relevance of the Course Contents is applicable with the Biotech, Biologics and Pharma Industry.
3. The Professional Electives and Open Electives offered to students are in-line with the technology advancements in the biotech related firms.
4. Applicability of the tools and technologies described in the curriculum will be enough to practice in Industry.
5. Student Orientation program, Research Methodology and year-long internship acquired by the students through the course contents will enable them to be placed in MNC

Analysis of Overall Feedback given by the Employers on R20

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	83.3	0	0	0	0	4.165	Excellent
Q2	83.3	0	0	0	0	4.165	Excellent

Q3	83.3	0	0	0	0	4.165	Excellent
Q4	83.3	0	0	0	0	4.165	Excellent
Q5	66.7	16.7	0	0	0	4.003	Excellent

Itemized responses given to the suggestions of Employers

Suggestions: Include industry involvement in academic activities.

Action taken: R22 curriculum of M.Tech Biotechnology programme is well balanced curriculum and introduced good many number of courses industry oriented courses. Industry personnel will be involved in academic activities in the form of Guest lectures, Value added courses.

Suggestions: Include minimum one to two weeks industry training in Semester break followed by report submission

Action taken: One-year Internship/Project was incorporated after second semester


HOD, BT