

ATR

R21

**VIGNAN'S**

Foundation for Science, Technology &amp; Research

(Deemed to be **UNIVERSITY**)

-Estd. u/s 3 of UGC Act 1956

**DEPARTMENT OF CHEMICAL ENGINEERING****Action Taken Report on B. Tech Chemical Engineering Program R19 Feedback  
Implemented in R21 introduced in the AY 2021 – 22*****Action taken based on the suggestions from Students:***

Q1	Course Contents of B.Tech - Chemical Engineering Curriculum are in tune with the Program Outcomes
Q2	Course Contents designed to enable skills and knowledge required for process Design, optimization, modeling, quality control, analysis and hazardous chemicals handling for several chemical and allied industries.
Q3	Courses placed in the B.Tech - Chemical Engineering curriculum serves the needs of both Advanced and Average learners.
Q4	Contact Hour Distribution among the various Course Components (LTP) is Satisfiable.
Q5	Electives have enabled the passion to learn new technologies in emerging areas
Q6	B.Tech - Chemical Engineering Curriculum providing opportunity towards Self learning to realize the expectations
Q7	Composition of Basic Sciences, Engineering, Humanities and Management Courses is a right mix and appropriate in B.Tech - Chemical Engineering curriculum.
Q8	No. of Laboratory sessions sufficient to improve the technical skills
Q9	Sufficient courses available to improve technical competency and leadership skills among the students.

**Analysis of Overall Feedback given by the Students on R 19**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Moderate</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Avg. Rating</b>	<b>Grade</b>
Q1	65.4	21.2	11.5	0	1	4.473	<b>Excellent</b>
Q2	51.9	28.8	16.3	1.9	0	4.274	<b>Excellent</b>
Q3	63.5	28.8	5.8	1	0	4.521	<b>Excellent</b>
Q4	69.2	24	5.8	0	0	4.594	<b>Excellent</b>
Q5	76.9	13.5	4.8	3.8	0	4.605	<b>Excellent</b>
Q6	64.4	23.1	9.6	1	1	4.462	<b>Excellent</b>
Q7	75	4.8	18.3	1	0	4.511	<b>Excellent</b>
Q8	65.4	25	4.8	1.9	1.9	4.471	<b>Excellent</b>
Q9	76.9	15.4	3.8	2.9	0	4.633	<b>Excellent</b>

### Itemized responses given to the Suggestions of Students

**Suggestion:** Include more problem solving skills and data manipulation courses in curriculum.

**Action Taken:** Introduction of subjects like Programming for Problem Solving, Matlab Programming for Chemical Engineers, Process Modelling, Simulation and Optimization and Aspen Plus® simulation software - a basic course for beginners are in curriculum.

**Suggestion:** Add more courses related to industrial and new technologies in emerging fields.

**Action Taken:** Inclusion of Industrial Pollution & Control Engineering, Electrochemical Technology in Pollution Control, Chemical plant safety and risk assessment, Upstream LNG Technology and more safety related subjects in R21 Curriculum

**Suggestion:** Include more software related subjects.

**Action Taken:** Data Structures, Python Programming and Competitive Programming courses are included.

**Suggestion:** Provide subject related to bioprocessing

**Action Taken:** Biochemical Engineering course is included in Curriculum.

### *Action taken based on the suggestions from Alumni:*

Q1	B.Tech – Chemical Engineering Curriculum has paved a good foundation in understanding the basic engineering concepts
Q2	Course Contents of Curriculum in tune with the Program Outcomes
Q3	B.Tech – Chemical Engineering Curriculum imparted all the required Job Oriented Skills for its core and allied industries
Q4	Professional and Open Electives of B.Tech – Chemical Engineering Curriculum served the technical advancements needed to serve in the industry
Q5	The activities, experiments planned during laboratory sessions are sufficient in the curriculum
Q6	Are you in a position to compete with your peers from other Universities
Q7	Current Regulation Curriculum is superior than your studied Curriculum

### Analysis of Overall Feedback given by the Alumni on R 19

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	90	4.8	0	0	5.2	4.5	Excellent
Q2	90	5.3	0	0	4.7	4.5	Excellent
Q3	50	40	1.8	0	8.2	4.1	Excellent
Q4	30	60	1.5	0	8.5	3.9	Very Good
Q5	90	4.5	0	0	5.5	4.5	Excellent
Q6	90	5.2	0	0	4.8	4.5	Excellent
Q7	90	4.2	0	0	5.8	4.5	Excellent

### Action taken based on the suggestions from Faculty:

Q1	Course Contents of B.Tech - Chemical Engineering Curriculum are in tune with the Program Outcomes.
Q2	Course Contents of B.Tech - Chemical Engineering enhances the Problem Solving Skills and Core competencies
Q3	Allocation of Credits to the Courses are appropriate.
Q4	Contact Hour Distribution among the various Course Components (LTP) are appropriate.
Q5	Electives cover the frontier technologies in the field of Chemical and allied industries
Q6	Curriculum providing opportunity towards Self learning to realize the expectations
Q7	Composition of Basic Sciences, Engineering, Humanities and Management Courses are appropriate.
Q8	Laboratory sessions sufficient to improve the technical skills of students
Q9	Sufficient courses available to improve the technical competency and leadership skills among the students.

### Analysis of Overall Feedback given by the Faculty on R 19

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	85.7	7.1	0	0	7.1	4.64	Excellent
Q2	71.4	21.4	0	7.1	0	4.568	Excellent
Q3	78.6	21.4	0	0	0	4.786	Excellent
Q4	78.6	7.1	7.1	7.1	0	4.569	Excellent
Q5	57.1	42.9	0	0	0	4.571	Excellent
Q6	85.7	7.1	7.1	0	0	4.782	Excellent
Q7	92.9	7.1	0	0	0	4.929	Excellent
Q8	71.4	21.4	7.1	0	0	4.639	Excellent
Q9	71.4	21.4	0	7.1	0	4.568	Excellent

### Itemized responses given to the suggestions of Faculty

**Suggestion:** Introduction of more problem solving and soft skill based courses

**Action Taken:** Several new courses are introduced like Programming for Problem Solving, Matlab Programming for Chemical Engineers, Process Modelling, Simulation and Optimization and Aspen Plus® simulation software - a basic course for beginners in new curriculum

**Suggestion:** Include emerging and frontier industry oriented courses

**Action Taken:** Industry oriented upstream elective subjects are incorporated in new curriculum

**Suggestion:** Conduct special and continuous monitoring for backlog students

**Action Taken:** Slow learners program is a part of curriculum to monitor and support the backlog students

**Action taken based on the suggestions from Employers:**

Q1	Course Contents of B.Tech - Chemical Engineering Curriculum are in tune with the Program Outcomes.
Q2	Course Contents designed to enable skills and knowledge required for Chemical and allied Industry Demands.
Q3	Professional Electives and Open Elective are in-line with the technological advancements.
Q4	Curriculum imparted all the required Skills for Chemical and relevant industry related Skills.
Q5	Problem Solving and Soft Skills 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 R 19

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	50	28.6	21.4	0	0	4.286	Excellent
Q2	21.4	50	28.6	0	0	3.928	Very Good
Q3	64.3	21.4	14.3	0	0	4.5	Excellent
Q4	39.3	32.1	28.6	0	0	4.107	Excellent
Q5	39.3	39.3	21.4	0	0	4.179	Excellent

#### Itemized responses given to the suggestions of Employers

**Suggestion:** Find the solutions for real time applications in industries

**Action Taken:** More emphasis given on software related and problem solving skill related subjects

**Suggestion:** Introduction of Pharmaceutical and safety related subjects in curriculum

**Action Taken:** Several upstream industry oriented subjects are included in elective pool.

**Suggestion:** Need more practical skills

**Action Taken:** Courses are included, which improves the basic skills required for chemical and pharma industry

**Suggestion:** Include topics related to latest technical advancements in industries

**Action Taken:** More safety, petrochemical, energy and industrial waste management related courses are included in elective courses

**Action taken based on the suggestions from Parents:**

Q1	Course Contents of B.Tech - Chemical Engineering Curriculum are in tune with the Program Outcomes.
Q2	B.Tech - Chemical Engineering Curriculum helped improving technical knowledge acquired by your son / daughter in our University.
Q3	B.Tech - Chemical Engineering Curriculum helped improving Academic, Emotional Progression of your son / daughter in our University
Q4	Proficiency of your son / daughters on par with the students from other Universities/Institutes
Q5	Course Contents designed to enable skills and knowledge required for chemical industries.

### Analysis of Overall Feedback given by the Parents on R 19

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	58.8	17.6	17.6	2.9	2.9	4.259	Excellent
Q2	55.9	20.6	11.8	5.9	5.9	4.15	Excellent
Q3	55.9	14.7	11.8	5.9	11.8	3.973	Very Good
Q4	58.8	11.8	17.6	2.9	8.8	4.086	Excellent
Q5	50	5.9	29.4	2.9	11.8	3.794	Very Good

### Itemized responses given to the suggestions of Parents

**Suggestion:** Include Employability and skill-oriented courses

**Action Taken:** Courses are included, which improves the basic skills required for chemical and allied industry

**Suggestion:** The curriculum must improve the placements of the department

**Action Taken:** Industry internship and industrial training for students has been ensured the more placements in nearest industrial sector.

**Suggestion:** Provide coaching for higher studies (GRE/GATE)

**Action Taken:** Curriculum itself provides courses for improving English proficiency and communication for GRE aspiring students. Provision of extra GATE coaching classes by departmental faculty to train the GATE aspiring students.



HoD, Chemical Engineering

**HEAD**

Department of Chemical Engineering  
VIGNAN'S FOUNDATION

FOR SCIENCE, TECHNOLOGY & RESEARCH  
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