

DEPARTMENT OF CHEMICAL ENGINEERING

Action Taken Report on B. Tech Chemical Engineering Program R19 & R 21 Feedback Implemented in R 22 introduced in the AY 2022 - 2023

Action taken based on the suggestions from Students:

| Q1 | Course Contents of B. Tech - Chemical Engineering Curriculum are in tune |
|----|--|
| Q2 | with the Program Outcomes 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 |
| 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 &R 21

| Analysis | Strongly Agree | Agree | Moderate | Disagree | Strongly Disagree | Avg. Rating | Grade |
|----------|-------------------|-------|----------|----------|----------------------|----------------|-----------|
| 01 | 78.9 | 17.5 | 0 | 0 | 0 | 4.645 | Excellent |
| Q1 | 71.9 | 24.6 | 0 | 0 | 0 | 4.579 | Excellent |
| Q2 | 86 | 8.8 | 1.8 | 0 | 0 | 4.706 | Excellent |
| Q3 | 84.2 | 12.3 | 0 | 0 | 0 | 4.702 | Excellent |
| Q4 | 84.2 | 10.5 | 0 | 0 | 1.8 | 4.648 | Excellent |
| Q5 | 80.7 | 14 | 1.8 | 0 | . 0 | 4.649 | Excellent |
| Q6 | 84.2 | 10.5 | 0 | 1.8 | 0 | 4.666 | Excellent |
| Q7 | 86 | 7 | 1.8 | 1.8 | 0 | 4.67 | Excellent |
| Q8 Q9 | 86 | 10.5 | 0 | 0 | 0 | 4.72 | Excellent |

Itemized responses given to the Suggestions of Students

Suggestion: Softwares used in chemical industries are needed to be icluded in the curriculum.

Action Taken:

 MAT lab simulations are added in Chemical Reaction Engineering and Process Control labs. Heat Exchanger design and simulations are included in process heat transfer laboratory.

 Mass Transfer Operation simulations by using Aspen Plus are included in Mass Transfer Operations.

Suggestion: Design knowledge is to be imparted.

Action Taken: In R-22 curriculum design of equipment will be given as a design assignment as a part of Target 5.

Example Heat Exchanger design in Process Heat Transfer etc.

Suggestion: It's better to offer computer courses as a minor, instead of regular courses

Action Taken: R-22 curriculum contains not only computer science minor other minors from different disciplines offer to enhance placements.

Action taken based on the suggestions from Alumni:

| | B.Tech – Chemical Engineering Curriculum has paved a good foundation in |
|----------|---|
| Q1 | understanding the basic engineering concepts |
| 02 | Course Contents of Curriculum in tune with the Program Outcomes |
| Q2 | B.Tech – Chemical Engineering Curriculum imparted all the required Job |
| Q3 | Oriented Skills for its core and allied industries |
| Q4 | Professional and Open Electives of B.Tech – Chemical Engineering Courrigulum served the technical advancements needed to serve in the industry |
| Q5 | The activities, experiments planned during laboratory sessions are sufficient |
| Q6 | Are you in a position to compete with your peers from other Universities |
| Q0 Q7 | Current Regulation Curriculum is superior than your studied Curriculum |

Analysis of Overall Feedback given by the Alumni on R 19

| Allaly 515 | of Overall Fe | Agree | Moderate | Disagree | Strongly Disagree | Avg. Rating | Grade |
|------------|---------------|-------|----------|----------|----------------------|----------------|-----------|
| | Agree | 30.8 | 15.4 | 0 | 0 | 4.384 | Excellent |
| Q1 | 53.8 | | 38.5 | 0 | 0 | 4.004 | Excellent |
| Q2 | 38.5 | 23.1 | | | 0 | 4.004 | Excellent |
| Q3 | 46.2 | 23.1 | 15.4 | 15.4 | | 4.307 | Excellent |
| Q4 | 61.5 | 23.1 | 7.7 | 0 | 7.7 | | Excellent |
| Q5 | 46.2 | 23.1 | 23.1 | 0 | . 7.7 | 4.004 | _ |
| | 30.8 | 38.5 | 30.5 | 0 | 0 | 4.004 | Excellent |
| Q6 Q7 | 46.2 | 30.8 | 15.4 | 7.7 | 0 | 4.158 | Excellent |

Itemized responses given to the suggestions of Alumni

Suggestion: More calculation's part should be included, when compared to the theoretical part.

Action Taken: In the R-22 curriculum unit 2 of each module is application based and tutorial hours. In each subject L hours reduced and T/P hours increased. In summative assessment, questions are strictly based on the application of concepts.

Suggestion: Extend more time for group discussions.

Action Taken: In R-22 curriculum class is divided into batches (4 students per batch) and time table discussion hour is included.

Suggestion: Presentation skills and report writing need to be included

Action Taken: In R-22 curriculum target 3 is PPT presentation and report writing.

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 |
| 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 | 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 & R 21

| 95 | 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 | 100 | 0 | 0 | 0 | 0 | 5 | 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 | Excellen |

Itemized responses given to the suggestions of Faculty

Suggestion: More weightage should be given to internal assessment.

Action Taken: In R-22 weightage of 60% is given to formative (internal) assessment, which was 40% in earlier regulations.

Suggestion: Reduce the Lecture component and increase more T /P components.

Action Taken: In the R-22 curriculum T& P hours are more than L hours in earlier curriculum courses are dominantly L based.

Action taken based on the suggestions from Employers:

| Q1 24 | 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 |
| 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 | 100 | 0 | 0 | 0 | 0 | 5 | Excellent |
| Q2 | 100 | 0 | 0 | 0 | 0 | 5 | Excellent |
| Q3 | 50 | 50 | 0 | 0 | 0 | 4.5 | Excellen |
| Q4 | 50 | 50 | 0 | 0 | 0 | 4.5 | Excellent |
| Q5 | 100 | 0 | 0 | 0 | 0 | 5 | Excellen |

Itemized responses given to the suggestions of Employers

Suggestion: Students are lack of Design knowledge, Include design content.

Action Taken: In R-22 curriculum Design of equipment will be given as a design assignment as a part of Target 5.

HoD, Chemical Engineering

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