



VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be University)

-Estd. u/s 3 of UGC Act 1956

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Action Taken Report on B. Tech EEE Program R 16 Feedback

Implemented in R19 introduced in the AY 2019 - 20

Action taken based on the suggestions from Students:

- Q1. Course Contents of Curriculum are in tune with the Program Outcomes.
- Q2. Course Contents are designed to enable Problem Solving Skills and Core competencies
- Q3. Courses placed in the curriculum serves the needs of both advanced and slow learners.
- Q4. Contact Hour Distribution among the various Course Components (LTP) is satisfiable.
- Q5. The electives offered in relation to the Technological advancements in Electrical and allied fields.
- Q6. The design of courses in the Curriculum is considered the extra learning or self learning.
- Q7. Composition of Basic Sciences, Engineering, Humanities and Management Courses is a right mix and satisfiable.
- Q8. Laboratory sessions are sufficient to improve the technical skills of students.
- Q9. Inclusion of Minor Project/ Mini Projects improved the technical competency and leadership skills among the students

Analysis of Overall Feedback given by the Students on R 16

| Parameters | Strongly Agree | Agree | Moderate | Disagree | Strongly Disagree | Avg. Rating | Grade |
|------------|----------------|-------|----------|----------|-------------------|-------------|-----------|
| Q1 | 9.3 | 82.2 | 8.5 | 0 | 0 | 4.008 | Excellent |
| Q2 | 7.7 | 89.7 | 2.6 | 0 | 0 | 4.051 | Excellent |
| Q3 | 8.8 | 89.9 | 1.3 | 0 | 0 | 4.075 | Excellent |
| Q4 | 8.8 | 89.4 | 1.8 | 0 | 0 | 4.07 | Excellent |
| Q5 | 8 | 89.7 | 2.3 | 0 | 0 | 4.057 | Excellent |
| Q6 | 14.4 | 83.8 | 1.8 | 0 | 0 | 4.126 | Excellent |
| Q7 | 13.7 | 84 | 2.3 | 0 | 0 | 4.114 | Excellent |
| Q8 | 2.1 | 97.7 | 0.3 | 0 | 0 | 4.022 | Excellent |
| Q9 | 3.4 | 94.8 | 1.8 | 0 | 0 | 4.016 | Excellent |

Itemized responses given to the Suggestions of Students

Suggestion: Add industry based courses and offer add on courses on emerging technologies

Action Taken: Modular courses are introduced to have hands-on knowledge in emerging technologies used in industry.

Suggestion: Strengthen Practical exposure in core courses

Action Taken: Increased number of hours for laboratory courses by integrating theory with lab.

Suggestion: add employability courses

Action Taken: Introduced employability courses like Electric Drives, AI techniques in Electrical Engineering and specialized department electives are included to make the student's industry ready.

Suggestion: Freedom to select inter disciplinary courses from large pool of electives courses

Action Taken: To get the interdisciplinary knowledge open electives courses are introduced Instead of minor courses.

Suggestion: Strengthen programming skills

Action Taken: Offered Credits for online Courses (NPTEL, Swayam, Coursera, FDX) to inculcate life learning skills over the students. Honors degree is introduced for advanced learners to have advanced courses in the field of information technology.

Action taken based on the suggestions from Alumni:

- Q1. Curriculum has paved a good foundation in understanding the basic engineering concepts
- Q2. Course Contents of Curriculum are in tune with the Program Outcomes
- Q3. Curriculum imparted all the required Job Oriented Skills
- Q4. The offering of the electives in relation to the Technological advancements and serve the needed in the industry
- Q5. Tools and Technologies learnt during laboratory sessions has enriched the skills
- Q6. Ability to compete with your peers from other Universities
- Q7. The curriculum relevant to job and future aspirations

Analysis of Overall Feedback given by the Alumni on R 16

| Parameters | Strongly Agree | Agree | Moderate | Disagree | Strongly Disagree | Avg. Rating | Grade |
|------------|----------------|-------|----------|----------|-------------------|-------------|-----------|
| Q1 | 0 | 73.5 | 26.5 | 0 | 0 | 3.735 | Very Good |
| Q2 | 23.5 | 17.6 | 47.1 | 11.8 | 0 | 3.528 | Very Good |
| Q3 | 17.6 | 41.2 | 29.4 | 0 | 11.8 | 3.528 | Very Good |
| Q4 | 54.4 | 8.8 | 36.8 | 0 | 0 | 4.176 | Excellent |
| Q5 | 25 | 48.5 | 26.5 | 0 | 0 | 3.985 | Very Good |
| Q6 | 16.2 | 25 | 58.8 | 0 | 0 | 3.574 | Very Good |
| Q7 | 23.5 | 47.1 | 29.4 | 0 | 0 | 3.941 | Very Good |

Itemized responses given to the suggestions of Alumni

Suggestion: Include renewable energy subjects

Action Taken: Introduced specialized stream on Automation and Energy Systems in departmental electives to cover courses related to renewable energy systems.

Suggestion: Include more advanced lab sections

Action Taken: Increased number of hours for laboratory courses by integrating theory with lab and introduced Power systems laboratory and Electric drives Laboratory.

Suggestion: Improve more practical sections

Action Taken: Increased number of hours for laboratory courses by integrating theory with lab

Suggestion: add industry based courses from III year onwards

Action Taken: Modular courses are offered as a one-credit course and every student must undergo at least one modular course taught by industry person. The primary objective of modular courses is to have the hands-on knowledge in emerging technologies used in industry like data visualization tools, rapid web development tools, and design & analysis tools for software development.

- Q1. Course Contents of Curriculum in tune with the Program Outcomes
- Q2. The depth of the course content is adequate to have significant learning outcomes.
- Q3. Curriculum insufficient to bridge the gap between industry standards /current global scenarios and academics
- Q4. The practical's enable to develop experimental, design, problem solving and analysis skills of the students.

Q5.The timely coverage of syllabus is possible in the mentioned number of hours.

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

Q7.Rate the capability of the curriculum for improving ethical values in students

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

Q9.Electives enable the passion to learn new technologies in emerging area

Analysis of Overall Feedback given by the Faculty on R 16

| Parameters | Strongly Agree | Agree | Moderate | Disagree | Strongly Disagree | Avg. Rating | Grade |
|------------|----------------|-------|----------|----------|-------------------|-------------|-----------|
| Q1 | 58.6 | 34.5 | 6.9 | 0 | 0 | 4.517 | Excellent |
| Q2 | 51.7 | 48.3 | 0 | 0 | 0 | 4.517 | Excellent |
| Q3 | 48.3 | 51.7 | 0 | 0 | 0 | 4.483 | Excellent |
| Q4 | 44.8 | 34.5 | 20.7 | 0 | 0 | 4.241 | Excellent |
| Q5 | 65.5 | 31 | 3.4 | 0 | 0 | 4.617 | Excellent |
| Q6 | 51.7 | 34.5 | 13.8 | 0 | 0 | 4.379 | Excellent |
| Q7 | 55.2 | 31 | 13.8 | 0 | 0 | 4.414 | Excellent |
| Q8 | 51.7 | 48.3 | 0 | 0 | 0 | 4.517 | Excellent |
| Q9 | 48.3 | 34.5 | 13.8 | 3.4 | 0 | 4.277 | Excellent |

Itemized responses given to the suggestions of Faculty

Suggestion: introduction of new technologies as part of curriculum

Action Taken: Introduced new courses Electric Vehicles, Smart Grid Technologies, Green Energy Technologies which are related to new technologies.

Suggestion: Assignments have to be given such that students focus on additional skills more focus on skill oriented programs

Action Taken: Credits are assigned for self learning through swayam and MOOCS platforms to improve their additional skills.

Suggestion: Introduce Technical seminars

Action Taken: Modular courses are offered as a one-credit course and every student must undergo at least one modular course taught by industry person and introduced two technical seminars courses to improve there skills.

Action taken based on the suggestions from Employers:

- Q1. Course Contents of Curriculum are in tune with the Program Outcomes
- Q2. Curriculum helps in bridging gap between industry and academic institution.
- Q3. Applicability of the domains and the tools used for designing the experiments in terms of existing practices in the Electrical and Electronics Industry.
- Q4. Professional and Open Electives are in relation to the Technological advancements and fulfilling the needs of electrical and allied industries.
- Q5. Curriculum develops skills to model and analyze the electrical and allied industrial issues.

Analysis of Overall Feedback given by the Employers on R 16

| Parameters | Strongly Agree | Agree | Moderate | Disagree | Strongly Disagree | Avg. Rating | Grade |
|------------|----------------|-------|----------|----------|-------------------|-------------|-----------|
| Q1 | 76.9 | 15.4 | 7.7 | 0 | 0 | 4.692 | Excellent |
| Q2 | 76.9 | 23.1 | 0 | 0 | 0 | 4.769 | Excellent |
| Q3 | 53.8 | 46.2 | 0 | 0 | 0 | 4.538 | Excellent |
| Q4 | 46.2 | 46.2 | 7.7 | 0 | 0 | 4.389 | Excellent |
| Q5 | 69.2 | 23.1 | 7.7 | 0 | 0 | 4.615 | Excellent |

Itemized responses given to the suggestions of Employers

Suggestion: programming skills need to be improved

Action Taken: Introduced C Programming for Problem Solving – I, C Programming for Problem Solving – II, Data Structures and Programming with Python courses in new curriculum to improve programming skills.

Suggestion: need to get practical exposure on ML

Action Taken: Courses related to machine learning are Soft computing Techniques, Statistics & Data Analytics, Deep Learning, Reinforcement Learning and Machine Learning introduced to get exposure on machine learning.

Suggestion: Add Machine learning basics as core course

Action Taken: Courses related to machine learning are Soft computing Techniques, Statistics & Data Analytics, Deep Learning, Reinforcement Learning and Machine Learning introduced to get exposure on machine learning.

Action taken based on the suggestions from Parents:

1. Your ward is sensitized towards issues like gender equality, environment and sustainability, ethics and values etc., through relevant courses in the curriculum
2. The academic flexibility embedded in the curriculum provides opportunities to students to pursue their interest by choosing from a vast number of pathways / electives from own area/specialization as well as from other areas.
3. Competency of your ward is on par with the students from other Universities/Institutes.
4. The curriculum has been designed to make your ward industry ready by imparting analytical and reasoning, language and soft skills in addition to technical competencies, as desired by the electrical and allied industries.
5. Course Curriculum is of the global standard and is in tune with the needs of electrical and allied industries.

Analysis of Overall Feedback given by the Parents on R 16

| Parameters | Strongly Agree | Agree | Moderate | Disagree | Strongly Disagree | Avg. Rating | Grade |
|------------|----------------|-------|----------|----------|-------------------|-------------|-----------|
| Q1 | 40 | 40 | 20 | 0 | 0 | 4.2 | Very Good |
| Q2 | 20 | 50 | 30 | 0 | 0 | 3.9 | Very Good |
| Q3 | 20 | 50 | 30 | 0 | 0 | 3.9 | Very Good |
| Q4 | 50 | 20 | 30 | 0 | 0 | 4.2 | Excellent |
| Q5 | 40 | 40 | 20 | 0 | 0 | 4.2 | Excellent |

Itemized responses given to the suggestions of Parents

Suggestion: Add employability courses in curriculum

Action Taken: Introduced employability and skill-based courses in every semester to make the student's industry ready.

Suggestion: Include physical activities

Action Taken: Credit based physical activities are introduced in new curriculum.

Suggestion: Project based curriculum must be implemented

Action Taken: R19 regulations based curriculum is project based curriculum. Credit based intra departmental; Inter departmental and societal centric projects are introduced.


HoD, EEE