

(Estd u/s 3 of UGC Act of 1956)

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING Action Taken Report on B. Tech EEE Program R 13 Feedback Implemented in R16 introduced in the AY 2016 - 17

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 13

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly	Avg.	Grade
Q1	10.7	87.4	1.9	0	Disagree	Rating	
Q2	13.7	84.4		0	0	4.088	Excellent
Q3			1.9	0	0	4.118	Excellent
	7.7	92.3	0	0	0	4.077	Excellent
Q4	8.8	89.7	1.5	0	0	4.073	
Q5	11.1	86.3	2.6	0	0		Excellent
Q6	13.5	82	4.5		0	4.085	Excellent
Q7	12			0	0	4.09	Excellent
		84.4	3.6	0	0	4.084	Excellent
Q8	3.9	93.6	2.6	0	0	4.017	Excellent
Q9	4.3	82.2	13.5	0	0		
temized resr	onege gives			U	U	3.908	Very Good

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 13

Parameters	Strongly Agree	Agree	Moderate	Disagree	he Alumni		_
				Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	0	93.3	6.7	0	O	- 0	., .
Q2	33.3	56.7		0	U	3.933	Very Good
Q3			10	0	0	4.233	Excellent
	13.3	70	16.7	0	0	3.966	Very Good
Q4	50	36.7	13.3	0	0		
Q5	23.3	63.3	13.3	0	0	4.367	Excellent
Q6				0	0	4.096	Excellent
	16.7	53.3	30	0	0	3.867	Very Good
Q 7	26.7	53.3	20	0	0	4.067	Excellent

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 issufficient 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 13

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongle	Avg. Rating	Grade
Q1	45.2	45.2	9.7	0	0	4.359	Excellent
Q2	51.6	45.2	3.2	0	0	4.484	Excellent
Q3	51.6	48.4	0	0	0	4.516	Excellent
Q4	45.2	32.3	22.6	0	0	4.23	Excellent
Q5	58.1	38.7	3.2	0	0	4.549	Excellent
Q6	48.4	41.9	9.7	0	0	4.387	Excellent
Q7	48.4	41.9	9.7	0	0	4.387	Excellent
Q8	45.2	41.9	12.9	0	0	4.42	Excellent
Q9	100	0	0	0	0	5	Excellent

Itemized responses given to the suggestions of Faculty

Suggestion: introduce enhanced practical sessions

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

Suggestion: Introduction of new technologies as part of curriculum

Action Taken: Employability and skill-based courses were introduced in every semester to make the students industry ready.

Suggestion: Introduce Technical seminars with the with industrial experience person

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.

Suggestion: have to maintain Communication skills one of the subject in the part of the curriculum

Action Taken: Introduced 3 courses related to communication skills improvement. Those are English proficiency and communication skills, Soft skills and Professional communication laboratory course.

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 13

Parameters	C4	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	47.8	43.5	8.7	0	0	4.391	Excellent
Q2	47.8	52.2	0	0	0	4.478	Excellent
Q3	47.8	43.5	8.7	0	0	4.391	Excellent
Q4	52.2	43.5	4.3	0	0	4.479	
Q5	39.1	47.8	13	0	0	4.257	Excellent Excellent

Itemized responses given to the suggestions of Employers

Suggestion: student need to work on real time applications

Action Taken: Introduced minior projects for majority of courses to get real time exposure.

Suggestion: current technologies need to be addressed

Action Taken: Courses like AI techniques in Electrical Engineering, SMPS based converters, Analysis of inverters are introduced to reach current technologies.

Suggestion: Hands on experience of trouble shooting of house hold equipment

Action Taken: Introduced Basic Engineering products courses to get hands on experience on trouble shooting of house hold appliances.

Suggestion: Specific knowledge is required in UPS technology.

Action Taken: Analysis of inverters are introduced to get awareness on UPS technology.

Suggestion: To familiarize of every student with energy audit, conservation and management

Action Taken: energy audit, conservation and management course is introduced.

Suggestion get expertise on a specific area.

Action Taken: Specialized streams are introduced in department electives to get expertise in specific field of electrical engineering.

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 13

Parameters	Strongly Agree	Agree	Moderate		Strongly Disagree	Avg. Rating	Grade
Q1	38.9	38.9	22.2	0	0	4.167	Excellent
Q2	18.5	48.1	33.3	0	0	3.848	Very Good
Q3	16.7	51.9	31.5	0	0	3.856	Very Good
Q4	46.3	20.4	33.3	0	0	4.13	Excellent
Q5	38.9	38.9	22.2	0	0		Excellent

Itemized responses given to the suggestions of Parents

Suggestion: Give more importance for problem solving skills in curriculum.

Action Taken: Programming Language courses like computer programming, Data Structures are included from the 1st year onwards to improve problem solving skills.

Suggestion: The curriculum should be more practical oriented than theory and suitable for project-oriented learning

Action Taken: Lab integrated with Theory and Minor projects along with core courses transform the students as industry ready.

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: Need more improvement by adding industry-oriented courses

Action Taken: Modular courses are offered as a one-credit course and every student must undergo at least one modular course. The primary objective of modular courses is to have the expertise on emerging technologies used in electrical and allied industries and specialized electives are introduced related to electrical industry.

HoD, EEE