#### DEPARTMENT OF MECHANICAL ENGINEERING

## Action Taken Report on B. Tech ME Program R13 Feedback Implemented in R16 introduced in the AY 2016 – 17

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

- Q1. Course Contents of Curriculum in tune with the Program Outcomes
- Q2. Course Contents designed and value added courses offered enriches Core Competencies
- Q3. Courses offered in the curriculum serves the needs of both Mechanical Industries and IT sector
- Q4. Contact Hour Distribution among the various Course Components (LTP) is Satisfiable
- Q5. Electives have enabled the passion to learn new technologies in emerging and Interdisciplinary Areas
- Q6. Curriculum providing enable towards self-learning
- Q7. Composition of Basic Sciences, Engineering, Humanities and Management Courses is a right mix and satisfiable
- Q8. No. of Laboratory sessions and Theory Courses have been sufficient to improve the technical skills

### Analysis of Overall Feedback given by the Students on R13

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	75.2	24.8	0	0	0	4.752	Excellent
Q2	89.9	9.4	0.1	0	0.3	4.877	Excellent
Q3	38.8	60.6	0	0	0	4.364	Excellent
Q4	20.2	79	0.4	0	0.3	4.185	Excellent
Q5	13.9	86.1	0	0	0	4.139	Excellent
Q6	89.6	10.2	0.1	0	0	4.891	Excellent
Q7	18.9	80.8	0	0	0.3	4.18	Excellent
Q8	18.2	81.8	0	0	0	4.182	Excellent

#### Itemized responses given to the Suggestions of Students

Suggestion: Special focus need to be given to fast learners.

Action Taken: Honour degree has been offered to the fast learners who has zero

backlog history with 8.0 CGPA till end of second year.



**Suggestion:** Apart from curriculum training by Industrial Expert is to be given to students.

**Action Taken:** Concept of Modular course has been introduced in III Year in which expert from Industry will take up a course and was introduced for 1 credit.

Suggestion: Recent trends on manufacturing technologies is to be emphasised.

**Action Taken:** Courses like Computer Integrated manufacturing, Additive Manufacturing, Flexible Manufacturing systems and advanced manufacturing process are offered as manufacturing stream electives.

Suggestion: The curriculum must improve the placements of the department

Action Taken: Modular courses are offered as a one-credit course and every student must undergo at least one modular course taught by an external expert from Industry. Along with that courses from APSSDC are offered to improve the knowledge on software packages as an add-on course in the curriculum

### Action taken based on the suggestions from Alumnia

- Q1. Curriculum has paved a good foundation in understanding the basic engineering concepts
- Q2. Course Contents of Curriculum fulfilled the specified Program Outcomes
- Q3. Curriculum imparted all the required Job Oriented Skills / prerequisite to pursue higher education
- Q4. Electives of Curriculum served the technical advancements needed to serve in the industry
- Q5. Tools and Methodologies followed during practical sessions has enriched the required practical knowledge to serve in Industry
- Q6. Competency with your peers from other Institutions
- Q7. Current curriculum meets the present industry demands

### Analysis of Overall Feedback given by the Alumni on R13

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	63.3	30	6.7	0	0	4.566	Excellent
Q2.	73.3	23.3	0	3.3_	0.	4.663	Excellent
Q3.	83.3	16.7	ž. <b>O</b> .	0	0	4.833	Excellent
Q4	83.3	16.7	0	0	0	4.833	Excellent
Q5	63.3	30	6.7	0	0	4.566	Excellent
Q6	86.7	13.3	.0	0	0	4.867	Excellent
Q7	83.3	3.3	13.3	0	0	4.696	Excellent



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

**Suggestion**: In-depth knowledge of casting, welding and machining has to be imparted.

**Action Taken:** Casting process, Theory of metal cutting and welding technology are introduced as electives.

**Suggestion:** Analysis softwares to be offered exclusively without combining modelling aspects.

Action Taken: FEM Course is integrated with ANSYS lab and minor project is as included to improve analysing skills.

Suggestion: More emphasis on communication and technical terminologies.

**Action Taken:** Certifications like PET and BEC, CRT and life skills have been offered throughout the program at different stages.

Suggestion: Add employability courses in curriculum

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

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

- Q1. Curriculum designed is in tune with program Vision and Mission
- Q2. Contents of the curriculum enhances the core competencies and employability skills
- Q3. Allocation of Credits to the Courses Satisfiable
- Q4. Contact Hour Distribution among the various Course Components (LTP) is Satisfiable
- Q5. Electives offered in the program makes the faculty to explore latest technologies
- Q6. Curriculum providing opportunity towards self-learning to meet the expectations
- Q7. Composition of Basic Sciences, Engineering, Humanities and Management Courses Satisfiable
- Q8. Number of theoretical courses and laboratory sessions sufficient to improve the technical skills of students

### Analysis of Overall Feedback given by the Faculty on R13

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	94.9	1.7	3.4	€0	0	4.915	Excellent
Q2	91.5	6.8	0_	1.7	<sup>*</sup> 0	4.881	Excellent
Q3	. 6.8	93.2	. 0	.0	0	4.068	Excellent
Q4	100	0	0	0	0	5	Excellent
Q5_	- 0-	100	. 0	0-	0	4	Excellent
Q6	74.6	25.4	£ 0	<b>⊬</b> 0	0 <	4.746	Excellent
Q7	100	0	0	0	0	5	Excellent
Q8	71.2	28.8	0	0	0	4.712	Excellent

### Itemized responses given to the suggestions of Faculty

**Suggestion**: Students should correlate the theoretical knowledge and practical applications

Action Taken: Theory courses are integrated with lab courses where ever possible with an inclusion of minor project to impart skill based learning

Action Taken: Hands on sessions on modelling softwares are planned to offered as value added courses

Suggestion: More choices should be offered for choosing electives

Action Taken: Stream wise electives courses have been offered as department electives and open electives broadening the selection window based on their own interest

Suggestion: Knowledge on wear and lubrication of materials is to be needed

**Action Taken:** Tribology, Surface Engineering has been offered as a professional elective in design stream and materials stream

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

- Q1. Course Contents of B.Tech Mechanical Engineering Curriculum is in tune with the Program Outcomes
- Q2. Relevance of the Course Contents in tune with the Industry Demands
- Q3. Elective are in-line with the technology advancements in Modelling and Manufacturing Sectors
- Q4. Applicability of the tools and technologies described in the curriculum will be enough to practice in Industry
- Q5. Problem Solving and Soft Skills acquired by the students through the course contents will enable them to be placed in product and process industry

### Analysis of Overall Feedback given by the Employers on R13

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	0	100	0	10	0	4	Excellent
Q2	40	50	10	0	0	4.3	Excellent
Q3	40	30	20	10	0	4	Excellent
Q4	50	40	10	0	0	4.4	Excellent
Q5	50	40	0	10	0	4.3	Excellent

### Itemized responses given to the suggestions of Employers

Suggestion: More emphasis on communication and technical terminologies

**Action Taken:** Certifications like PET and BEC, CRT and life skills have been offered throughout the program at different stages

Suggestion: Recent trends on manufacturing technologies is to be emphasised

**Action Taken:** Courses like Computer Integrated manufacturing, Additive Manufacturing, Flexible Manufacturing systems and advanced manufacturing process are offered as manufacturing stream electives

**Suggestion:** Awareness on material property evaluation to be provided to improve the material characterization analysis

**Action Taken:** Planned to establish Centre of Excellence in material characterization within a year



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

- Q1. Satisfaction of Academic and Emotional Progression of your ward
- Q2. Satisfaction with the offered curriculum for your wards future endeavours?
- Q3. Overall assessment of technical knowledge acquired by your ward who is pursuing his/her program in our University
- Q4. Your ward's competency with the students from other Institutes
- Q5. Curriculum offered is in tune with current Industry needs

### Analysis of Overall Feedback given by the Parents on R13

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	61.7	35.2	3	0	0	4.583	Excellent
Q2·	44.7	52	3:2	0	0	4.411	Excellent
Q3	41.5	55.1	∆ 3:2	0.	0	4.375	Excellent
Q4	37.2	58.9	3.8	0	0	4.33	Excellent
Q5	63.2	31	5.9	0	0	4.577	Excellent

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

**Suggestion**: Give more importance for softwares in curriculum.

**Action Taken:** Advanced software packages are included from the 2nd year onwards to implement projects in various advanced areas.

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

**Action Taken:** Modular courses are offered as a one-credit course and every student must undergo at least one modular course.

Signature