

**DEPARTMENT OF MECHANICAL ENGINEERING****Action Taken Report on B.Tech Mechanical Engineering Program R16  
Feedback**

Implemented in R19 introduced in the AY 2019 – 20

**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 R16**

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	63.6	36.4	0	0	0	4.636	Excellent
Q2	75.2	23.8	0	0	1	4.722	Excellent
Q3	40.7	59.3	0	0	0	4.407	Excellent
Q4	20	79.2	0	0	0.8	4.176	Excellent
Q5	20.5	79.5	0	0	0	4.205	Excellent
Q6	76.5	23.5	0	0	0	4.765	Excellent
Q7	24.3	75.7	0	0	0	4.243	Excellent
Q8	25.1	74.9	0	0	0	4.251	Excellent

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

**Suggestion:** Burden on the students need to be decreased as per the new guidelines of AICTE

**Action Taken:** 195 credits have been reduced to 170 credits in R19 curriculum compared to the previous one



**Suggestion:** Courses on current trends are to be offered.

**Action Taken:** Artificial Intelligence for Mechanical Engineers, Field and service robots are offered as electives.

**Suggestion:** In-house training to be provided for facing competitive exams.

**Action Taken:** Practices already started with R16 regulations and are continued in this regulation too.

**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 Alumni:***

- 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 R16**

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	51.2	41.6	7.2	0	0	4.44	Excellent
Q2	52.8	44	1.6	1.6	0	4.48	Excellent
Q3	77.6	21.6	0.8	0	0	4.768	Excellent
Q4	64.8	33.6	1.6	0	0	4.632	Excellent
Q5	57.6	31.2	10.4	0.8	0	4.456	Excellent
Q6	60.8	30.4	8.8	0	0	4.52	Excellent
Q7	59.2	28	12.8	0	0	4.464	Excellent



### Itemized responses given to the suggestions of Alumni

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

**Action Taken:** As continue with previous regulations Honour degree has been offered to the fast learners who has zero backlog history with 8.0 CGPA till end of second year.

**Suggestion:** Students need to be work on real time problems faced by current industry and society.

**Action Taken:** Concept of Project based learning has been introduced in which projects related to interdisciplinary and societal and industry oriented are to be carry out by students in respective semesters.

**Suggestion:** Courses on current trends are to be offered.

**Action Taken:** Artificial Intelligence for Mechanical Engineers, Field and service robots are offered as electives.

**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 R16**

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	95	0.8	4.2	0	0	4.921	Excellent
Q2	96.7	3.3	0	0	0	4.967	Excellent
Q3	5.8	94.2	0	0	0	4.058	Excellent
Q4	100	0	0	0	0	5	Excellent
Q5	0	100	0	0	0	4	Excellent
Q6	75	25	0	0	0	4.75	Excellent
Q7	100	0	0	0	0	5	Excellent
Q8	71.7	28.3	0	0	0	4.717	Excellent

**Itemized responses given to the suggestions of Faculty**

**Suggestion:** Standards of materials, designation of materials and grades of alloys are need to be taught

**Action Taken:** These topics are covered in Advance materials and characterization which is offered as mandatory course

**Suggestion:** Activities related to lifelong learning are to be imparted

**Action Taken:** To make students self-learned Swayam course have been introduced as mandate

**Suggestion:** Benefits of 3D printing need to be provided to all the students irrespective of discipline

**Action Taken:** Concepts of 3D printing have been incorporated in manufacturing technology (mandate course), 3D printing and Design offered as professional elective

**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 R16**

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	51.6	29	19.4	0	0	4.322	Excellent
Q2	32.3	58.1	6.5	0	0	4.134	Excellent
Q3	54.8	29	16.1	0	0	4.383	Excellent
Q4	54.8	35.5	9.7	0	0	4.451	Excellent
Q5	25.8	58.1	9.7	6.5	0	4.035	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:** Awareness on machine maintenance should be given to the students.

**Action Taken:** A course on Maintenance Engineering is been introduced.

**Suggestion:** Courses on current trends are to be offered.

**Action Taken:** Artificial Intelligence for Mechanical Engineers, Field and service robots are offered as electives.

**Suggestion:** In-house training to be provided for facing competitive exams.

**Action Taken:** Practices already started with R16 regulations and are continued in this regulation too.

**Suggestion:** Standards of materials, designation of materials and grades of alloys are need to be taught.

**Action Taken:** These topics are covered in Advance materials and characterization which is offered as mandatory course.

**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 R16**

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	17.3	76	6.7	0	0	4.106	Excellent
Q2	18	74.7	2.7	4	0	4.084	Excellent
Q3	56	44	0	0	0	4.56	Excellent
Q4	25.3	65.3	6.7	2.7	0	4.132	Excellent
Q5	29.3	64	4	2.7	0	4.199	Excellent

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

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

**Action Taken:** Concept of Modular course has been continued from previous regulations with more emphasis towards practices followed by industries.

**Suggestion:** Students need to be work on real time problems faced by current industry and society.

**Action Taken:** Concept of Project based learning has been introduced in which projects related to interdisciplinary and societal and industry oriented are to be carry out by students in respective semesters.

**Suggestion:** Students should be cautious about their physical fitness.

**Action Taken:** A Credit course has been introduced for sports and physical fitness to make students health conscious.

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

**Action Taken:** As continue with previous regulations Honour degree has been offered to the fast learners who has zero backlog history with 8.0 CGPA till end of second year.

Signature