

## DEPARTMENT OF CIVIL ENGINEERING

### Action Taken Report on M. Tech Structures Program R 17 Feedback Implemented in R20 introduced in the AY 2020- 21

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

- Q1.The Course Contents of Curriculum are in tune with the Program Outcomes
- Q2.The 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.Electives have enabled the passion to learn new technologies in emerging areas of Structural Engineering
- Q6.The Curriculum is providing opportunity towards Self learning to realize the expectations of present trend in design and research needs
- Q7.Inclusion of Employability Orientation Program and Research Methodology in the curriculum is useful in career enhancement
- Q8.No. of Laboratory Sessions Integrated with Theory Courses have been sufficient to improve the technical as well as practical skills in Structural Engineering
- Q9.Introducing Mini Projects and Socio-centric Projects along with Theory Courses improved the research competency and leadership skills among the students

#### Analysis of Overall Feedback given by the Students on R 17

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	76.9	23.1	0	0	0	4.769	Excellent
Q2	64.1	28.2	0	0	7.7	4.41	Excellent
Q3	39.7	43.6	11.5	5.1	0	4.176	Excellent
Q4	39.7	32.1	23.1	0	5.1	4.013	Excellent
Q5	28.2	50	11.5	2.6	7.7	3.884	Very Good
Q6	17.9	46.2	33.3	2.6	0	3.794	Very Good
Q7	26.9	51.3	19.2	0	2.6	3.999	Very Good
Q8	21.8	57.7	15.4	2.6	2.6	3.938	Very Good
Q9	23.1	47.4	24.4	5.1	0	3.885	Very Good

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

**Suggestion:** Need Training on Building Information Modelling

**Action Taken:** Planned Value added courses on Revit Architecture, Structures and BIM

**Suggestion:** Require Beam Testing Machine

**Action Taken:** Purchased Loading Frame with the help of SOFFIL

**Suggestion:** Conduct Industrial visits

**Action Taken:** Integrated all the laboratory courses with theory to enhance practical exposure

**Suggestion:** Need practical experiences and hands-on.

**Action Taken:** In core courses activities are introduced to give practical exposure and make the student's industry ready and also introduced socio-centric and Industry Oriented mini projects.

**Suggestion:** Need Spacious labs

**Action Taken:** Established individual lab for Structural Engineering and purchased RCPT, ACPT, Rebound Hammer equipment

***Action taken based on the suggestions from Alumni:***

Q1.The Curriculum has paved a good foundation in understanding the basic Structural Engineering Concepts

Q2.The Course Contents of Curriculum are in tune with the Program Outcomes

Q3.The Curriculum is imparting all the required Job and Research Oriented Skills

Q4.Professional and Open Electives of Curriculum have served the technical advancements needed to serve in the Structural Design Requirements and Research Methodologies

Q5.Tools and Technologies learnt during laboratory sessions has enriched the problem solving skills and research abilities

Q6.Competing with your peers from other Universities

Q7.Current Curriculum is superior than your studied Curriculum

**Analysis of Overall Feedback given by the Alumni on R 17**

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	63.9	27.8	5.6	2.8	0	4.531	Excellent
Q2	69.4	25	2.8	2.8	0	4.61	Excellent
Q3	50	41.7	8.3	0	0	4.417	Excellent
Q4	55.6	44.4	0	0	0	4.556	Excellent
Q5	47.2	25	25	2.8	0	4.166	Excellent
Q6	41.7	44.4	13.9	0	0	4.278	Excellent
Q7	38.9	52.8	2.8	5.6	0	4.253	Excellent

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

**Suggestion:** Give more trainings on Finite Element Software

**Action Taken:** In view of ongoing demand and usage of finite element software ANSYS structures licensed version was purchased and included as MMFEA Lab component

**Suggestion:** Improve the Structural Engineering Lab with advanced equipment

**Action Taken:** Purchased loading frame and similar advanced equipment

**Suggestion:** Need more diversified electives in to curriculum

**Action Taken:** Increased pool of electives with inclusion of emerging courses like Fibre Reinforced Polymers,

**Suggestion:** Need more training on Employability Orientation

**Action Taken:** Introduced EOP as one credit course to increase the effectiveness of orientation program

**Suggestion:** Provide the durability tests and equipment

**Action Taken:** Proposed to purchase durability equipment like RCPT, ACPT and planning to incorporate those experiments in the curriculum

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

- Q1.The Course Contents of Curriculum are in tune with the Program Outcomes
- Q2.Course Contents can enhance the Problem Solving Skills and Core competencies
- Q3.Allocation of Credits to the Courses are Satisfiable
- Q4.Contact Hour Distribution among the various Course Components (LTP) is Satisfiable
- Q5.Electives enable the passion to learn new technologies in emerging areas of Structural Engineering
- Q6.The Curriculum is providing opportunity towards Self learning to realize the expectations of present trend in design and research needs
- Q7.The inclusion of Employability Orientation Program and Research Methodology in the curriculum satisfiable
- Q8.The number of theoretical courses amalgamated with laboratory sessions are sufficient to improve the technical skills of students
- Q9.Introducing Mini Projects and Socio-centric Projects along with Theory Courses improved the research competency and leadership skills among the students

### Analysis of Overall Feedback given by the Faculty on R 17

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	75	15.6	3.1	0	3.1	4.498	Excellent
Q2	68.8	25	0	3.1	0	4.502	Excellent
Q3	84.4	12.5	0	0	0	4.72	Excellent
Q4	65.6	28.1	3.1	0	0	4.497	Excellent
Q5	71.9	25	0	0	0	4.595	Excellent
Q6	75	15.6	3.1	3.1	0	4.529	Excellent
Q7	71.9	21.9	3.1	0	0	4.564	Excellent
Q8	68.8	21.9	6.3	0	0	4.505	Excellent
Q9	71.9	18.8	3.1	3.1	0	4.502	Excellent

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

**Suggestion:** Improve the structural engineering lab with advanced equipment

**Action Taken:** Established Structural Engineering Research laboratory with advanced equipment like 100 Ton Loading Frame etc

**Suggestion:** Provide more information on Structural Health Monitoring topics

**Action Taken:** Introduced Repair and Rehabilitation of Structures as core elective

**Suggestion:** Incorporate Lab Experiments on Micro Structure

**Action Taken:** Equipped Centre of Excellence with SEM and EDax to analyse micro structure of building materials

**Suggestion:** Provide training on Research Paper Writing

**Action Taken:** Research methodology course has been introduced as a one credit course in the second semester

**Suggestion:** Provide information on Non-Destructive Testing

**Action Taken:** Introduced UPV and Rebound Hammer Testing Techniques in Advanced Concrete Technology

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

- Q1.The Course Contents of Curriculum are in tune with the Program Outcomes
- Q2.The Course Contents are enriching the Construction Industry Demands and Research Needs
- Q3.Core Electives and Open Elective are in-line with the technology advancements
- Q4.Applicability of the tools and technologies described in the curriculum are sufficient to practice in Existing Construction Practices
- Q5.Problem Solving and Soft Skills acquired by the students through the course contents will enable them to be place in Public Sector Units, MNC's, Government Sectors and Research Agencies.

**Analysis of Overall Feedback given by the Employers on R 17**

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	84.7	15.3	0	0	0	4.847	Excellent
Q2	84.7	15.3	0	0	0	4.847	Excellent
Q3	69.5	30.5	0	0	0	4.695	Excellent
Q4	59.3	27.1	13.6	0	0	4.457	Excellent
Q5	30.5	28.8	27.1	13.6	0	3.762	Very Good

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

**Suggestion:** Conduct programming classes for M.Tech Students also

**Action Taken:** Introduced coding software MAT LAB in the lab component of Structural Dynamics

**Suggestion:** Provide more electives on structural health monitoring

**Action Taken:** Retrofitting of Structures due to Earthquake and Fire Damages course has been Introduced.

**Suggestion:** Provision of Durability Testing Equipment

**Action Taken:** Purchased durability equipment like RCPT, ACPT etc and included testing methods in the syllabus

**Suggestion:** Offer Internships in the second year

**Action Taken:** As per suggestions included Industry Internship is continued in this curriculum also.

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

1. Curriculum enhances the intellectual aptitude of your ward
2. Curriculum realizes the personality development and technical skilling of your ward
3. Satisfaction about the Academic, Emotional Progression of your ward
4. Competency of your ward is on par with the students from other Universities/Institutes
5. Course Curriculum is of the global standard and is in tune with the needs of construction Industry

**Analysis of Overall Feedback given by the Parents on R 17**

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	38.5	53.8	7.7	0	0	4.308	Excellent
Q2	38.5	38.5	23.1	0	0	4.158	Excellent
Q3	30.8	61.5	7.7	0	0	4.231	Excellent
Q4	46.2	46.2	7.7	0	0	4.389	Excellent
Q5	38.5	46.2	15.4	0	0	4.235	Excellent

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

**Suggestion:** Include online courses as a credit

**Action Taken:** Introduced MOOCS and NPTEL Courses as Inter and Intra Departmental Electives

**Suggestion:** Need interaction with Industries

**Action Taken:** Introduced Socio-centric and Industry oriented projects to cope up with industry needs

  
HoD, CE