



**VIGNAN'S**

Foundation for Science, Technology & Research

(Deemed to be UNIVERSITY)

-Estd. u/s 3 of UGC Act 1956





## Department of Electronics and Communication Engineering

### Minutes of CDMC Meeting

05-03-2019

The members of Curriculum Design and Monitoring Committee for M.Tech. Embedded Systems (ES) met on 05-03-2019 in HOD Chamber, Department of ECE, H-Block, VFSTR. The following members attended the meeting.

S.No	Members	Designation	Signatures
1.	Mr. T. Pitchaiah	Chairman	
2.	Dr. N. Usharani	Member	
3.	Mr. P.J. Reginald	Member	
4.	Mr. P. Krishna Chaitanya	Member	

### **Agenda of the meeting**

1. Analysis of the feedback collected from various stakeholders such as Alumni, Employers, Faculty, Parents and Students during the academic year 2018-19.

The following are the important points of analysis obtained from various stakeholders:

1. Employers suggested the following,
  - a. Better to include Embedded Systems and IoT related fundamental courses in the curriculum.
  - b. Must design project-based curriculum.
2. Alumni suggested the following
  - a. Add more case studies for every laboratory course to enable the skills in students
  - b. Need for the tools used for designing the experiments in terms of existing practices in the Embedded Systems.
3. Faculty suggested the following
  - a. Introduce Technical seminars with the industrial experience person
  - b. Students need to work on communication and presentation skills.
4. Parents suggested the following
  - a. Need to organize technical activities on emerging technologies apart from the syllabus.
  - b. Need to get real-time exposure and design & solve the local problems.

5. Students suggested the following

- a. The curriculum will be more practical oriented than theory and suitable for project-oriented learning
- b. The curriculum must improve the placements of the department.

Detailed feedback analysis report is enclosed as Annexure-I

The outcomes of the meeting will be placed before the BoS for further discussion and recommendations.



Chairman, CDMC

## Annexure 1

### Feedback from Alumni Students 2018-19 (Academic Year) - PG – M. Tech (ES)

Feedback has been received from the Alumni students on the following five parameters:

- Q1. Curriculum has paved a good foundation in understanding the 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

Feedback Analysis is carried based on Average Satisfaction Rating. Rating categorization is carried based on Excellent ( $\geq 4$ ); Very Good ( $\geq 3.5$  &  $< 4$ ); Good ( $\geq 3$  &  $< 3.5$ ); Moderate ( $> 2$  &  $< 3$ ) and Unsatisfactory ( $< 2$ )

The result derived in terms of percentage of students with common views, average score, and ratings are presented in Table 1.

**Table 1: Analysis of feedback from Alumni 2018-19**

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	100	0	0	0	0	5	Excellent
Q2	100	0	0	0	0	5	Excellent
Q3	0	100	0	0	0	4	Excellent
Q4	100	0	0	0	0	5	Excellent
Q5	0	100	0	0	0	4	Excellent

The highest score of 4.667 was given to the parameters “Curriculum imparted all the required Job Oriented Skills / prerequisite to pursue higher education”, and “Tools and Methodologies followed during practical sessions has enriched the required practical knowledge to serve in Industry” has been rate as Excellent.

The parameters “Electives of Curriculum served the technical advancements needed to serve in the industry” and “Tools and Technologies learnt during laboratory sessions has enriched the problem-solving skills” obtained the scores of 5 respectively and has been rated as Excellent

### Feedback from Employer 2018-19 (Academic Year) - PG – M. Tech (ES)

Feedback has been received from the employer on the following five parameters:

Q1: Course Contents of M.Tech Embedded System Curriculum is in tune with the Program Outcomes

Q2: Relevance of the Course Contents in tune with the Embedded System Industry Demands

Q3: Elective are in-line with the technology advancements in Modeling and Design Sectors

Q4: Applicability of the tools and technologies described in the curriculum will be enough to practice in Industry

Q5: Applicability of the domains and the tools used for designing the experiments in terms of existing practices in the Embedded and Allied Industry.

The categorization of rating is as follows: Strongly Agree (5), Agree (4), Moderate (3), Disagree (2) and Strongly Disagree (1).

Feedback Analysis is carried based on Average Satisfaction Rating. Rating categorization is carried based on Excellent ( $\geq 4$ ); Very Good ( $\geq 3.5$  &  $< 4$ ); Good ( $\geq 3$  &  $< 3.5$ ); Moderate ( $> 2$  &  $< 3$ ) and Unsatisfactory ( $< 2$ )

The result derived in terms of percentage of employer with common views, average score, and ratings are presented in Table 2.

**Table 2: Analysis of feedback from Employer 2018-19**

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	100	0	0	0	0	5	Excellent
Q2	50	50	0	0	0	4.5	Excellent
Q3	0	50	0	0	0	2	Moderate
Q4	50	50	0	0	0	4.5	Excellent
Q5	50	50	0	0	0	4.5	Excellent

The highest score of 5 was given to the parameter “Course Contents of M.Tech Embedded System Curriculum is in tune with the Program Outcomes” followed by “Relevance of the Course Contents in tune with the Embedded System Industry Demands” with a score of 4.5 and has been rated as Excellent.

The parameter “Elective are in-line with the technology advancements in Modeling and Design Sectors” and “Applicability of the tools and technologies described in the curriculum will be enough to practice in Industry” obtained the scores of 4 and 4.5 and has been rated as Excellent which will be considered and benefit the students

Time to time meetings were conducted at the department level to leverage new and advanced techniques to improve the problem solving skills and soft skills of the students which enable them to be placed in Electronic and Embedded System industries

The feedback analysis given by employer reveals that by improving the required skills of Electronic and Embedded System industries and Electronic and Embedded System enabled Industry Demands helps the student to get placements.

#### **Feedback from faculty 2018-19 (Academic Year) - PG – M. Tech (ES)**

Feedback has been received from the Faculty on the following eight parameters:

Feedback has been received from the Faculty on the following seven parameters:

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: Number of theoretical courses and laboratory sessions sufficient to improve the technical and research skills of students

Q8: Courses with laboratory sessions are sufficient to improve the technical skills of students.

The result derived in terms of percentage of faculty with common views, average score, and ratings are presented in Table 3.

**Table 3: Analysis of feedback from faculty 2018–19**

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	80	20	0	0	0	4.8	Excellent
Q2	80	20	0	0	0	4.8	Excellent
Q3	60	40	0	0	0	4.6	Excellent
Q4	40	60	0	0	0	4.4	Excellent
Q5	20	80	0	0	0	4.2	Excellent
Q6	60	40	0	0	0	4.6	Excellent
Q7	40	60	0	0	0	4.4	Excellent
Q8	40	60	0	0	0	4.4	Excellent

The highest score of 4.8 was given to the parameter Q1: Curriculum designed is in tune with program Vision and Mission",Q2: Contents of the curriculum enhances the core competencies and employability skills" followed by " Q3: Allocation of Credits to the Courses Satisfiable", Curriculum providing opportunity towards self-learning to meet the expectations " with a scores of 4.6 and has been rated as Excellent.

The parameters " Q4: Contact Hour Distribution among the various Course Components (LTP) is Satisfiable " and " Number of theoretical courses and laboratory sessions sufficient to improve the technical and research skills of students" obtained average scores of 4.4 and" Q5: Electives

offered in the program makes the faculty to explore latest technologies" having average score of 4.2 has been rated as Excellent.

#### **Feedback from Parents 2018-19 (Academic Year) - PG – M. Tech (ES)**

Feedback has been received from the parents on the following five parameters:

Q1. Curriculum enhances the intellectual aptitude of your ward

Q2. Satisfaction with the offered curriculum for your wards future endeavors.

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.

The result derived in terms of percentage of Parents with common views, average score, and ratings are presented in Table 4.

**Table 4: Analysis of feedback from Parents 2018 – 19**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Moderate</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Avg. Rating</b>	<b>Grade</b>
<b>Q1</b>	75	25	0	0	0	4.75	Excellent
<b>Q2</b>	25	75	0	0	0	4.25	Excellent
<b>Q3</b>	75	25	0	0	0	4.75	Excellent
<b>Q4</b>	75	25	0	0	0	4.75	Excellent
<b>Q5</b>	50	25	25	0	0	4.25	Excellent

The highest score of 4.75 was given to the parameter "Satisfaction of Academic and Emotional Progression of your ward" followed by "Overall assessment of technical knowledge acquired by your ward who is pursuing his/her program in our University and "Your wards competency with the students from other Institutes" with a score of 4.75 and has been rated as Excellent.

The parameter "Satisfaction with the offered curriculum for your wards future endeavours" and "Curriculum offered is in tune with current Industry needs" obtained the score of 4.25 and has been rated as excellent which clearly reflects the benefit towards the parent's expectations.

Time to time meetings was conducted at the department level to leverage new and advanced techniques to combat the learning difficulties of the students.



### Feedback from Students 2018-19 (Academic Year) - PG – M. Tech (ES)

Feedback has been received from the students on the following eight parameters:

Q1.Course Contents of Curriculum in tune with the Program Outcomes

Q2. Course Contents designed offered enriches Core Competencies

Q3.Courses offered in the curriculum serves the needs of Embedded and Allied Industries

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.Electives have enabled the passion to learn new technologies in emerging and Interdisciplinary Areas

Q8.No. of Laboratory sessions and Theory Courses have been sufficient to improve the technical and research skills.

The result derived in terms of percentage of students with common views, average score, and ratings is presented in Table 5.

**Table 5: Analysis of feedback from students 2018 – 19**

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	100	0	0	0	0	5	Excellent
Q2	66.7	33.3	0	0	0	4.667	Excellent
Q3	66.7	33.3	0	0	0	4.667	Excellent
Q4	50	50	0	0	0	4.5	Excellent
Q5	50	50	0	0	0	4.5	Excellent
Q6	33.3	66.7	0	0	0	4.333	Excellent
Q7	33.3	66.7	0	0	0	4.333	Excellent
Q8	33.3	66.7	0	0	0	4.333	Excellent

The highest score of 5 was given to the parameters “Q1.Course Contents of Curriculum in tune with the Program Outcomes” and followed by “Q2. Course Contents designed offered enriches Core Competencies and Q3.Courses offered in the curriculum serves the needs of Embedded and Allied Industries”; with a score of 4.667 and has been rated as Excellent.

It is clearly visible from the table that the parameters “Q4.Contact Hour Distribution among the various Course Components (LTP) is Satisfiable, and Q5.Electives have enabled the passion to learn new technologies in emerging and Interdisciplinary Areas” and obtained the average scores of 4.5 are and has been rated as Excellent.

The parameters “Q6.Curriculum providing enable towards self-learning, Q7.Electives have enabled the passion to learn new technologies in emerging and Interdisciplinary Areas and Q8.No. of Laboratory sessions and Theory Courses have been sufficient to improve the technical and research skills.” obtained the scores of 4.333 respectively and has been rated as Excellent.

  
Chairman, CDMC