

**VIGNAN'S**

Foundation for Science, Technology &amp; Research

(Deemed to be University)

-Estd. u/s 5 of UGC Act 1956

**Department of Electronics & Communication Engineering.****Minutes of CDMC Meeting**

05-03-2019

The members of Curriculum Design and Monitoring Committee for MTech VLSI (VT) program met on 05-03-2019 at VSF - 04, 'H' block, of VFSTR. The following members attended the meeting.

S.No	Members	Designation	Signatures
1.	Mr. T. Pitchaiah	Chairman	
2.	Dr. N. Usharani	Member	
3	Dr.M.Sarada	Member	
4	Mr. P.J. Reginald	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 – MTech VLSI (VT)

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

Table 1: Analysis of feedback from Alumni 2018–19

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

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

The highest score of 4 were given to the parameters “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: Electives of Curriculum served the technical advancements needed to serve in the industry” and “Q5: Tools and Methodologies followed during practical sessions has enriched the required practical knowledge to serve in Industry” and has been rated as Excellent.

The parameter “Q6: Ability to compete with your peers from other Universities”, “Q7: The curriculum relevant to job and future aspirations”, has obtained the average scores of 0 and has been rated as Unsatisfactory.

### Feedback from Employer 2018-19 (Academic Year) - PG – MTech VLSI (VT)

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

Table 2: Analysis of feedback from Employer 2018–19

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	0	50	50	0	0	3.5	Very Good
Q2	50	0	50	0	0	4	Excellent
Q3	0	100	0	0	0	4	Excellent
Q4	0	100	0	0	0	4	Excellent
Q5	0	50	50	0	0	3.5	Very Good

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

- Q1. Course Contents of MTech VLSI Curriculum is in tune with the Program Outcomes
- Q2. Relevance of the Course Contents in tune with the VLSI and Allied Industry Demands.
- Q3. Elective are in-line with the technology advancements in Modelling and Design Sectors.
- Q4. Applicability of the tools and technologies described in the curriculum will be enough to practice in Industry.
- Q5. Suggest any other points to improve the quality of the curriculum.

The highest score of 4 were given to the parameter, “Q2: Relevance of the Course Contents in tune with the VLSI and Allied Industry Demands.”, “Q3 Elective are in-line with the technology advancements in Modelling and Design Sectors” and “Q4: Applicability of the tools and technologies described in the curriculum will be enough to practice in Industry” and has been rated as Excellent.

It is clearly visible from the table that the parameters,”Q1 : Course Contents of MTech VLSI Curriculum is in tune with the Program Outcomes” and “Q5: Suggest any other points to improve the quality of the curriculum”, obtained average scores 3.5 each and has been rated as Very Good.

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 ECE and its related Industries.

The feedback analysis given by employer reveals that by improving the required skills of Applicability and fulfilling the gap between industries to academia to enable Industry Demands helps the student to get placements.

#### **Feedback from faculty 2018-19 (Academic Year) - PG – MTech VLSI (VT)**

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

**Table 3: Analysis of feedback from faculty 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>	66.7	33.3	0	0	0	4.667	Excellent
<b>Q2</b>	100	0	0	0	0	5	Excellent
<b>Q3</b>	66.7	33.3	0	0	0	4.667	Excellent
<b>Q4</b>	66.7	33.3	0	0	0	4.667	Excellent
<b>Q5</b>	33.3	66.7	0	0	0	4.333	Excellent
<b>Q6</b>	33.3	33.3	33.3	0	0	3.996	Very Good
<b>Q7</b>	66.7	0	33.3	0	0	4.334	Excellent
<b>Q8</b>	66.7	33.3	0	0	0	4.667	Excellent

Feedback has been received from the Faculty on the following eight 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. Suggest any other points to improve the quality of the curriculum

The highest score of 5 was given to the parameter "Q2: Course Contents of Curriculum in tune with the Program Outcomes " and rated as Excellent.

The Parameters,"Q1: Curriculum designed is in tune with program Vision and Mission", "Q3 : Allocation of Credits to the Courses Satisfiable","Q4: Contact Hour Distribution among the various Course Components (LTP) is Satisfiable", and "Q8: Suggest any other points to improve the quality of the curriculum

It is clearly visible from the table that the parameters "Q5: Electives offered in the program makes the faculty to explore latest technologies ", and "Q7: Number of theoretical courses and laboratory sessions sufficient to improve the technical and research skills of students " obtained average scores 4.333, and 4.334 respectively and has been rated as Excellent.

The Parameter, "Q6: Curriculum providing opportunity towards self-learning to meet the expectations", with a score of 3.996 and rated as Very Good.

#### **Feedback from Parents 2018-19 (Academic Year) - PG – MTech VLSI (VT)**

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

Table 4: Analysis of feedback from Parents 2018–19

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	80	0	0	0	0	4	Excellent
Q2	40	40	0	0	0	3.6	Very Good
Q3	60	20	0	0	0	3.8	Very Good
Q4	60	20	0	0	0	3.8	Very Good
Q5	0	80	0	0	0	3.2	Good

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

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 wards competency with the students from other Institutes

Q5. Curriculum offered is in tune with current Industry needs

The highest score of 4 was given to the parameter "Q1: Satisfaction of Academic and Emotional Progression of your ward" and rated as excellent.

The parameters, "Q3: Overall assessment of technical knowledge acquired by your ward who is pursuing his/her program in our University", and "Q4 : Your wards competency with the students from other Institutes with a score of 3.8 and has been rated as Very Good.

It is clearly visible from the table that the parameters "Q5: Curriculum offered is in tune with current Industry needs " obtained average score 3.2 and has been rated as Good.

Time to time meetings were 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 – MTech VLSI (VT)**

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	42.9	42.9	14.3	0	0	4.29	Excellent
Q2	28.6	57.1	14.3	0	0	4.143	Excellent
Q3	0	42.9	42.9	0	14.3	3.146	Good
Q4	28.6	28.6	42.9	0	0	3.861	Very Good
Q5	28.6	42.9	14.3	14.3	0	3.861	Very Good
Q6	14.3	85.7	0	0	0	4.143	Excellent
Q7	0	85.7	14.3	0	0	3.857	Very Good
Q8	28.6	57.1	14.3	0	0	4.143	Excellent



- 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 VLSI 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 highest score of 4.29 was given to the parameter, "Q1: Course Contents of Curriculum in tune with the Program Outcomes" and rated as Excellent.

The score of 4.143 were given to the parameters, "Q2: Course Contents designed offered enriches Core Competencies", "Q6: Curriculum providing enable towards self-learning" and "Q8: No. of Laboratory sessions and Theory Courses have been sufficient to improve the technical and research skills", and rated with Excellent.

It is clearly visible from the table that the parameters "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"; "Q7: Electives have enabled the passion to learn new technologies in emerging and Interdisciplinary Areas obtained the average scores are 3.861, 3.861 and 3.857 respectively and has been rated as Very Good.

The Parameter, "Q3: Courses offered in the curriculum serves the needs of VLSI and Allied Industries", has scored 3.146 with has been rated as Good.

The following are the important points recommended by CDMC to incorporate in new curriculum

1. Curriculum should motivate students towards self-learning.
2. Provision of credits for online courses like MOOCs and NPTEL courses



3. Instead of minor projects, curriculum comprises of Projects oriented towards industrial and societal needs.
4. Decrement in the no of credits is suggested.
5. Introduce credits for physical fitness, sports and games.
6. Project-based learning approach.
7. The inclusion of Theory with Laboratory is giving overall development in the student.



Chairman, CDMC