



Department of Electrical and Electronics Engineering

M.Tech. Power Electronics and Drives

Action Taken Report on Feedback Obtain in AY 2020-21

19-04-2021

Stakeholder	Comments/ Suggestions	Action Taken
Employers	Focus on Artificial Intelligence applications in the field of Electrical Engineering especially in Power Electronics domain	Majority of student are doing projects in the area of fuzzy logic and neural networks applications to power electronics.
	Impart the knowledge of solar photovoltaic conversion systems along with different MPPT Techniques in order to compete with the industrial demands.	Solar Energy Conversion course is introduced in R20 curriculum to impart knowledge on PVs.
	Give Emphasis to computer programming	Two MOOCS courses are introduced in R20 curriculum, will encourage them to learn programming courses.
Alumni	Conduct any job orientation programs for second year students.	Employment Orientation Program is there in curriculum with 2 credits to train students related to job orientation.
Faculty	There will be a huge demand for power electronics design engineering roles as the renewable and EV sector taking off slowly. Adding an Advanced course on power converter modeling and control would be a great training and will be helpful to students to attend interviews.	Advanced courses like digital control of power electronics and drives system and processor applications in electrical engineering courses are there in R20 curriculum. More number of courses will be added in revised curriculum.
Students	possible to offer electric vehicle course in core course	In R20 Electric vehicle course is offered as elective.

Following Suggestions need to be discuss in-depth during the next CDMC

1. Equip the students with knowledge of Machine Learning as it is the need of the hour in the industry.
2. Include labs on Electric Vehicles.
3. Add some courses related embedded systems, robotics and automation.

A handwritten signature in blue ink, consisting of a stylized 'H' and 'E' followed by a long, sweeping flourish that extends upwards and to the right.

HoD, EEE



Department of Electrical and Electronics Engineering

Minutes of CDMC Meeting

17-04-2021

The members of Curriculum Design and Monitoring Committee for M.Tech. Power Electronics and Drives program met on 17-04-2021 in HOD Chamber, Department of EEE, H-Block, VFSTR. The following members attended the meeting.

S.No	Members	Designation	Signatures
1.	Dr. G. Srinivasa Rao Professor & HOD	Chairman	
2.	Dr. P.V.S.Sobhan Assoc. Professor	Member	
3.	Dr. M. SubbaRao Assoc. Professor	Member	
4.	Dr. B. Satish Babu Lead Engineer, GE, Bangalore	Member	

Agenda of the meeting

Analysis of the feedback collected from various stakeholders such as Alumni, Employers, Faculty and Students during the academic year 2020-21.

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

- a. Employers suggested the following,
 - a. Present course curriculum is very good Improve technical courses.
 - b. Give Emphasis to computer programming.
 - c. Equip the students with knowledge of Machine Learning as it is the need of the hour in the industry.
 - d. Impart the knowledge of solar photovoltaic conversion systems along with different MPPT Techniques in order to compete with the industrial demands.
 - e. Focus on Artificial Intelligence applications in the field of Electrical Engineering especially in Power Electronics domain.
- b. Alumni suggested the following
 - a. Present course curriculum is very good Improve technical courses
 - b. Include labs on Electric Vehicles
 - c. Conduct any job orientation programs for second year students

c. Faculty suggested the following

- a. Introduction of Machine learning related courses is required for power electronics and drives specialization students.
- b. There will be a huge demand for power electronics design engineering roles as the renewable and EV sector taking off slowly. Adding an Advanced course on power converter modeling and control would be a great training and will be helpful to students to attend interviews.

d. Students suggested the following

1. include some courses related to machine learning
2. possible to offer electric vehicle course in core course
3. add some courses related embeded systems, robotics and automation

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

Feedback from Alumni Students 2020-21 (Academic Year) - PG – M. Tech (PED)

Feedback has been received from the Alumni on the following seven 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
- Q6. Competency with your peers from other Institutions.
- Q7. Current curriculum meets the present industry demands

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 2020-21

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Average Score	Rating
Q1	83.3	16.7	0	0	0	4.833	Excellent
Q2	100	0	0	0	0	5	Excellent
Q3	50	50	0	0	0	4.5	Excellent
Q4	83.3	16.7	0	0	0	4.833	Excellent
Q5	100	0	0	0	0	5	Excellent
Q6	66.7	33.3	0	0	0	4.667	Excellent
Q7	83.3	16.7	0	0	0	4.833	Excellent

The highest score of 5 was given to the parameter “Course Contents of Curriculum fulfilled the specified Program Outcomes” and “Tools and Methodologies followed during practical sessions has enriched the required practical knowledge to serve in Industry “followed by “Electives of Curriculum served the technical advancements needed to serve in the industry” , “Current curriculum meets the present industry demands and “Curriculum has paved a good foundation in understanding the concepts” with a score of 4.833 and has been rated as Excellent.

It is clearly visible from the table that the parameter “Competency with your peers from other Institutions” obtained the scores of 4.667 respectively and has been rated as Excellent.

Feedback from Employer 2020-21 (Academic Year) - PG – M. Tech (PED)

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

- Q1. Course Contents of M.Tech. Power Electronics and Drives Curriculum is in tune with the Program Outcomes.
- Q2. Relevance of the Course Contents in tune with the Power electronics 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. Applicability of the domains and the tools used for designing the experiments in terms of existing practices in the Electrical and Electronics Industry.

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

Table 3: Analysis of feedback from Employer 2020-21

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Average Score	Rating
Q1	100	0	0	0	0	5	Excellent
Q2	80	20	0	0	0	4.8	Excellent
Q3	60	40	0	0	0	4.6	Excellent
Q4	60	40	0	0	0	4.6	Excellent
Q5	0	100	0	0	0	4	Excellent

The highest scores of 5 was given to the parameter “Course Contents of M.Tech. Power Electronics and Drives Curriculum is in tune with the Program Outcomes” and followed by “Relevance of the Course Contents in tune with the Power electronics Industry Demands” has been rated as Excellent.

It is clearly visible from the table that the parameters “Course Contents of M.Tech Power Electronics and Drives Curriculum is in tune with the Program Outcomes” and “Relevance of the Course Contents in tune with the Power electronics Industry Demands” obtained average scores 4.6 and 4 respectively and has been rated as Excellent.

The parameters “Applicability of the tools and technologies described in the curriculum will be enough to practice in Industry” obtained the scores of 4.143 respectively and has been rated as Excellent which clearly reflects the benefit towards the student expectations.

Feedback from faculty 2020-21 (Academic Year) - PG – M. Tech (PED)

Feedback has been received from the Faculty on the following nine 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.
- Q9. Inclusion of Minor Project/ Mini Projects improved the technical competency and leadership skills among the students.

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

Table 5: Analysis of feedback from faculty 2020-21

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Average Score	Rating
Q1	85.7	14.3	0	0	0	4.857	Excellent
Q2	85.7	14.3	0	0	0	4.857	Excellent
Q3	85.7	14.3	0	0	0	4.857	Excellent
Q4	85.7	14.3	0	0	0	4.857	Excellent
Q5	85.7	14.3	0	0	0	4.857	Excellent
Q6	100	0	0	0	0	5	Excellent
Q7	85.7	14.3	0	0	0	4.857	Excellent
Q8	85.7	14.3	0	0	0	4.857	Excellent
Q9	0	100	0	0	0	4	Excellent

The highest score of 5 was given to the parameter “Curriculum providing opportunity towards self-learning to meet the expectations” has been rated as Excellent.

It is clearly visible from the table that the parameters “Curriculum designed is in tune with program Vision and Mission”, “Contents of the curriculum enhances the core competencies and employability skills”, “Allocation of Credits to the Courses Satisfiable”, “Courses with laboratory sessions are sufficient to improve the technical skills of students” and “Number of theoretical courses and laboratory sessions sufficient to improve the technical and research skills of students” obtained average scores 4.857 respectively and has been rated as Excellent.

Average scores of 4 was obtain for the parameter “Inclusion of Minor Project/ Mini Projects improved the technical competency and leadership skills among the students” is Satisfiable”. 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 2020-21 (Academic Year) - PG – M. Tech (PED)

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

- Q1.Course Contents of Curriculum are in tune with the Program Outcomes.
- Q2.Course Contents designed offered enriches Core Competencies
- Q3.Courses offered in the curriculum serves the needs of Electrical 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.No. of Laboratory sessions and Theory Courses have been sufficient to improve the technical and research skills.
- Q8.Research Projects improved the technical competency and leadership skills.
- Q9.Tools and technologies described in the curriculum are enough to design and develop new applications.

The result derived in terms of percentage of students with common views, average score, and ratings is presented in Table 8.

Table 8: Analysis of feedback from students 2020-21

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	66.7	33.3	0	0	0	4.667	Excellent
Q2	66.7	33.3	0	0	0	4.667	Excellent
Q3	100	0	0	0	0	5	Excellent
Q4	50	50	0	0	0	4.5	Excellent
Q5	83.3	0	16.7	0	0	4.666	Excellent
Q6	66.7	16.7	16.7	0	0	4.504	Excellent
Q7	50	33.3	16.7	0	0	4.333	Excellent
Q8	0	100	0	0	0	4	Excellent
Q9	0	100	0	0	0	4	Excellent

The highest score of 5 was given to the parameter “Courses offered in the curriculum serves the needs of Electrical and Allied Industries” followed by “Course Contents of Curriculum in tune with the Program Outcomes”, "Course Contents designed offered enriches Core Competencies " and “Electives have enabled the passion to learn new technologies in emerging and Interdisciplinary Areas” with a score of 4.667 and has been rated as Excellent.

It is clearly visible from the table that the parameters “Contact Hour Distribution among the various Course Components (LTP) is Satisfiable” and “Curriculum providing enable towards

self-learning” obtained average scores 4.5 and 4.505 respectively and has been rated as Excellent.

Average scores of 4 and 4 were obtained by the parameters “Research Projects improved the technical competency and leadership skills” and "Tools and technologies described in the curriculum are enough to design and develop new applications".

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

The feedback analysis reveals that laboratory sessions help to improve the students technical skills and the courses placed in the curriculum supports both the advanced learners as well as slow learners.



HoD, EEE