VIGNAN'S
Foundation for Science, Technology & Research
UNIVERSITY
(Estd u/s 3 of UGC Act of 1956)

Department of Electrical and Electronics Engineering

Date: 03.04.2017

Minutes of the Board of studies (BoS) meeting held on 01/04/2017 at 10.00a.m in Simulation Lab (M.Tech- Power Electronics and Drives)

The following are the members presented for the meeting.

1) Mr.V.Nagesh - CTO, Chirra Engineering Pvt. Ltd. Bangalore
2) Mr.M.V.Rayudu - CEO, Chirra Engineering Pvt. Ltd. Bangalore
3) Mr.B.Murali Krishna - Engineering Technical Lead,Honeywell
4) Dr. G. Srinivasa Rao - Professor &Head, Dept. of EEE, Vignan's University
5) Mr. P. V. S. Sobhan - Assoc. Prof, EEE, Vignan's University
6) Dr.K.Mercy Rosalina - Asst. Prof, EEE, Vignan's University

The following are the views expressed by the external members

1) Mr. B. Murali Krishna insisted the exposure of industry practices for faculty, importance of feedback from old students & industrial persons.

2) Mr. B. Murali Krishna insisted about creating the interest among faculty to improve industrial exposure.

3) Board of members asked about clarification regarding Electives, and was asked to introduce innovative and emerging electives like Automotive Electronics, Smart Grid, Advanced DSP Applications etc.

4) Dr. G. Srinivasa Rao given clarification regarding advanced subjects proposed in new regulations, like Digital control of power electronics, Processor applications in electrical engineering, Smart power grid, SMPS based converters.

5) Mr. V.Nagesh has suggested to discuss about switching characteristics of IGBT/MOSFET , driver techniques and computing switching losses in the course Analysis of Power Electronic Converters.

6) Mr.M.V.Rayudu suggested adding resonant LLC converters in the course Analysis of Power Electronic Converters.

7) Dr.G.SrinivasaRao discussed about, the existing 2 courses on Machine Modeling and Analysis (EE 501) and Dynamics of Electrical Machines (EE506) has been merged as single subject by omitting some topics which are less importance. The new subject was named as Modeling and Dynamics of Electrical Machines and panel members expressed acceptance.

8) Mr. B. Murali Krishna expressed satisfaction for the courses Digital control of power electronics, Processor applications in electrical engineering.

9) Mr.B.Murali Krishna suggested adding limitations of Digital Control, Safety requirements of digital processor, hence coursing (Digital control of power electronics) content in UNIT-I have been modified.

10) Mr. M.V. Rayudu suggested adding Losses in transformer and temperatures effects, Introduce of EMI issues and filters, Design of snubber circuits in the course Design of Power Electronic System.

11) The Team suggested that the course Design of Power Electronic Systems should be covered through case studies.

12) Finally concluded that it has to be more strengthened and both faculty and students are to be made responsible for that.

Outcomes of the BoS Meeting:

1. BoS members approved the revised curriculum (Structure, Syllabus and regulations) of M.Tech , Power Electronics and Drives and it follows Choice Based Credit System . Structure is provided in Appendix A.
2. Major restructuring has taken place in the Curriculum with theory courses integrated with laboratory sessions.
3. All the Courses in the Curriculum are designed to fall under either of the domains of employability (or) skill development (or)Entrepreneurship. The mapping of the courses with employability or skill development is provided in Appendix B.
4. In all the courses of the revised curriculum (R17) substantial changes are made in the content. The percentage of revision in curriculum from R14 to R17 is 60%. The list of new courses provided in Appendix C.
5. Stakeholders feedback is analyzed in CDMC is placed before the BoS and given utmost priority while designing the curriculum and their suggestions are implemented.

The following are the members present for the board of studies meeting held at Department of Electrical and Electronics Engineering on 01-07-2017

External Members :

Sl. No.	Name of the Member	Designation	Signature
1.	Mr. V. Nagesh	CTO, Chirra Engineering Pvt. Ltd., Bangalore	
2.	Mr. M.V. Rayudu	CEO, Chirra Engineering Pvt. Ltd., Bangalore	
3.	Sri. B.Murali Krishna	Engineering Technical Lead, Honey well, Hyderabad Ph:9000707043	

Internal Members :

Sl. No.	Name of the Member	Designation	Signature
1.	Dr. G. Srinivasa Rao	Professor and HOD	
2.	Mr. P.V.S. Sobhan	Assoc. Professor	
3.	Dr. K. Mercy Rosalina	Asst. Professor	

Appendix A
Course Structure -M.Tech(Power Electronics and Drives)
2017 Regulation

I Year-I Semester

Course Title	L	T	P	C
Analysis of Power Electronic Converters	3	-	2	5
Electric Drives-I	3	-	2	5
Flexible AC Transmission Systems	3	1	-	4
Modeling & Dynamics of Electrical Machines	3	1	-	4
Elective Course -I	3	-	-	3
Elective Course-II	3	-	-	3
Total Credits	**18**	**2**	**4**	**24**

I Year-II Semester

Course Title	L	T	P	C
Research Methods	3	-	-	3
Employment Orientation Program	2	-	-	2
Digital Control of Power Electronics	3	-	2	5
Electric Drives-II	3	-	2	5
HVDC Transmission System	3	1	-	4
Design of Power electronic Systems	3	1	-	4
Elective Course -III	3	-	-	3
Elective Course- IV	3	-	-	3
Total Credits	**23**	**2**	**4**	**29**

II Year- I & II Semesters

Course Title	L	T	P	C
Project/ Internship Phase - I	-	-	-	15
Project/ Internship Phase - II	-	-	-	15

The courses that are highlighted denote implementation of 'ChoiceBased Credit System (CBCS)'

Electives Courses

Course Title
Neural, Fuzzy Systems
Processor Applications in Electrical Engineering
New and renewable Energy Sources and Technologies
Modern Control Theory
Optimization Techniques
Energy Conservation Systems
Power Quality
Programmable Logic Controllers and their Applications
Analysis of Inverters
Power Semiconductor Devices and Passive Components
Smart Power Grids
SMPS Based Converters
Solar Energy Conversion
Microprocessors & Microcontrollers

Chairman, BoS

APPENDIX – B

List of courses that enable employability or entrepreneurship or skill development in the R-17 M.Tech – Power Electronics and Drives

Sl.	Course Name	Employability / Skill Development/Entrepreneurship
1	Analysis of Power Electronic Converters	Skill development
2	Digital Control of Power Electronics	Employability
3	Electric Drives-I	Employability
4	Electric Drives-II	Employability
5	Flexible Ac Transmission Systems	Skill development
6	HVDC Transmission System	Skill development
7	Modeling & Dynamics of Electrical Machines	Skill development
8	Design of Power Electronic Systems	Employability
9	Neural, Fuzzy Systems & Genetic Algorithms	Skill development
10	Processor Applications in Electrical Engineering	Employability
11	New Renewable Energy Sources & Technology	Entrepreneurship
12	Modern Control Theory	Skill development
13	Optimization Techniques	Skill development
14	Energy Conversion Systems	Skill development
15	Power Quality	Skill development
16	Programmable Logic Controllers and Their Applications	Employability
17	Analysis of Inverters	Employability
18	Power Semiconductor Devices and Passive Components	Skill development
19	Smart Power Grids	Employability

20	SMPS Based Converters	Entrepreneurship
21	Solar Energy Conversion	Entrepreneurship
22	Microprocessor & Microcontrollers	Employability
23	Project	Employability
24	Internship	Skill Development

Chairman, BoS

APPENDIX – C
List of new courses in the R-17 Regulations
M.Tech – Power Electronics and Drives

Sl.	Course Name
1	Analysis of Power Electronic Converters
2	Electric Drives-I
3	Flexible AC Transmission Systems
4	Modeling & Dynamics of Electrical Machines
5	Digital Control of Power Electronics
6	Electric Drives-II
7	HVDC Transmission System
8	Design of Power electronic Systems
9	Neural, Fuzzy Systems
10	Processor Applications in Electrical Engineering
11	New and renewable Energy Sources and Technologies
12	Modern Control Theory
13	Optimization Techniques
14	Energy Conservation Systems
15	Power Quality
16	Programmable Logic Controllers and their Applications
17	Analysis of Inverters
18	Power Semiconductor Devices and Passive Components
19	Smart Power Grids
20	SMPS Based Converters
21	Solar Energy Conversion
22	Microprocessors & Microcontrollers
23	Project
24	Internship