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**SETHU INSTITUTE OF TECHNOLOGY,  
(An Autonomous Institution)  
PULLOOR, KARIAPATTI – 626 115**



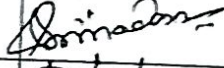
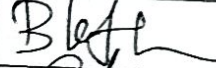
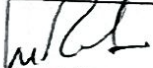


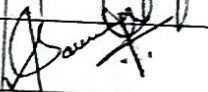
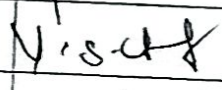
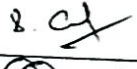

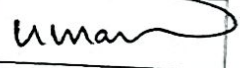
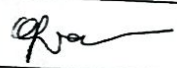
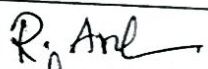


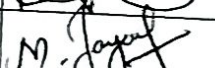
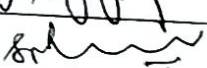
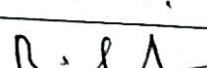

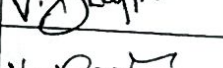


**MINUTES OF FIFTH MEETING OF BOARD OF STUDIES IN DEPARTMENT OF  
ELECTRICAL AND ELECTRONICS ENGINEERING HELD ON 29.06.2017**




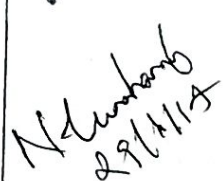
The Fifth Meeting of the Board of Studies in Department of Electrical and Electronics Engineering was held on 29.06.2017 in EEE Seminar Hall at Sethu Institute of Technology, Pulloor, Kariapatti.




The following members were present:

SL.NO.	NAME OF THE FACULTY	DESIGNATION & INSTITUTION	POSITION	SIGNATURE
1.	Dr. S. Nagalakshmi	Professor	Chairman	<i>S. Nagalakshmi</i>
2.	Dr.A.Srinivasan	Professor	Member	<i>A.Srinivasan</i>
3.	Dr.U.Suresh Kumar	Professor	Member	<i>U.Suresh Kumar</i>
4.	Dr.K. Kanimozhi	Professor	Member	<i>K. Kanimozhi</i>
5.	Mr. B. Meenakshi Sundaram	Associate Professor	Member	<i>B. Meenakshi Sundaram</i>
6.	Mrs.G.Soundra devi	Associate Professor	Member	<i>G. Soundra devi</i>
7.	Mrs. C. Rajeswari	Associate Professor	Member	<i>C. Rajeswari</i>
8.	Mrs. J. Rahila	Associate Professor	Member	<i>J. Rahila</i>
9.	Mrs. J. Radhalakshmi	Associate Professor	Member	<i>J. Radhalakshmi</i>
10.	Mr. G. Varathan	Asst.prof (Sr.Grade)	Member	<i>G. Varathan</i>
11.	Mr. J. Kumerasan	Asst.prof (Sr.Grade)	Member	<i>J. Kumerasan</i>
12.	Mr. S. Srinivasan	Asst.prof (Sr.Grade)	Member	<i>S. Srinivasan</i>
13.	Mrs. J. Jeyasanthi	Asst.prof (Sr.Grade)	Member	<i>J. Jeyasanthi</i>
14.	Mr. V. Kannan	Asst.prof (Sr.Grade)	Member	<i>V. Kannan</i>
15.	Mrs. R.C. Dhivya @ Ramcella	Asst.prof (Sr.Grade)	Member	<i>R.C. Dhivya</i>
16.	Mrs. V. Hema Maheswari	Asst.prof (Sr.Grade)	Member	<i>V. Hema Maheswari</i>

SL.NO.	NAME OF THE FACULTY	DESIGNATION & INSTITUTION	POSITION	SIGNATURE
17.	Ms. P. Meenalochini	Asst.prof (Sr.Grade)	Member	
18.	Ms. S. Rohini	Asst.prof (Sr.Grade)	Member	
19.	Mr. S. Kannadasan	Asst.prof (Sr.Grade)	Member	
20.	Mr. B. Karthikeyan	Asst.prof (Sr.Grade)	Member	
21.	Mr. M. Palpandian	Asst.prof (Sr.Grade)	Member	
22.	Mr. M. Ramuvel	Asst.prof	Member	
23.	Mr. M. Muhammed Alaudeen Ashiq	Asst.prof	Member	
24.	Ms .C. Sonia	Asst.prof	Member	
25.	Ms. V.S. Chitra	Asst.prof	Member	
26.	Mr. S. Gopi	Asst.prof	Member	
27.	Mr. K. Jeyakanth	Asst.prof	Member	
28.	Mr. K. Mahesh Kumar	Asst.prof(sr.grade)	Member	
29.	Mrs. G. Narmadha	Asst.prof(sr.grade)	Member	
30.	R. Archana	Asst.prof	Member	
31.	P.K.S. Suvithababu	Asst.prof	Member	
32.	Mr. K. Balaji	Asst.prof	Member	
33.	Ms. M. Jayashree	Asst.prof	Member	
34.	Mr.S.Sampath	Asst.prof	Member	
35.	Mr.B. Selvakumar	Asst.prof	Member	
36.	Mr.V. Dhayanithi	Asst.prof (SG)	Member	
37.	Mr.V.Balasundaram	Asst.prof (SG)	Member	



SL.NO.	NAME OF THE FACULTY	DESIGNATION & INSTITUTION	POSITION	SIGNATURE
38.	Dr.K.Latha (University Nominee)	Associate Professor, Department of Electrical and Electronics Engineering, CEG Campus, Anna University, Chennai.Tamil Nadu, India.	Member nominated by VC	
39.	Dr.V.Gopala Krishnan (External Expert nominated by Academic Council)	Associate Professor, Department of Electrical and Electronics Engineering, ACCE Tech, Karaikudi. Tamil Nadu, India.	Member	
40.	Dr.D.Nelson Jeyakumar (External Expert nominated by Academic Council)	Assistant Professor, Department of Electrical and Electronics Engineering, Thiagarajar College of Engineering, Madurai. Tamil Nadu, India.	Member	
41.	Dr.N.Chandrasekaran (External Expert nominated by Academic Council)	Professor and Head, Department of Electrical and Electronics Engineering, PSNA College of Engineering and Technology	Member	

SL.NO.	NAME OF THE FACULTY	DESIGNATION & INSTITUTION	POSITION	SIGNATURE
42.	Dr.S.Selvaperumal (External Expert nominated by Academic Council)	Professor & Head, Department of Electrical and Electronics Engineering, Syed Ammal Engineering College Ramanathapuram-623 502,Tamil Nadu, India.	Member	
43.	Er.P.Saravanan (Expert from Industry Relating to Placement)	Managing Director, Solaritz Regen Technologies Pvt Ltd, Kovilpatti. Tamil Nadu, India.	Member	
44.	Ms.A.N.Manjula (Under Graduate Alumni)	Quality Control Inspector Delphi-TVS Diesel Systems Ltd., SIPCOT Industrial Park, Oragadam, Kancheepuram. Tamil Nadu, India.	Member	

The Chairman welcomed the members and presented the Curricula and Syllabi which are being followed from the academic year 2015-16 under Autonomous Regulations for B.E. Electrical and Electronics Engineering and M.E. Power Electronics and Drives (Full Time & Part Time).

**B.E. Electrical and Electronics Engineering – 2015-16 under Autonomous Regulation**  
**R-2015:**

The members discussed thoroughly the new curriculum and Syllabi for B.E. Electrical and Electronics Engineering which is being followed from the academic year 2015-16 under autonomous regulation and offered useful suggestions.



Based on the suggestion given by the members, the following resolutions are made:

- Vision, Mission, PEOs, POs and PSOs of the UG Programme are presented and approved by the members.
- The action taken based on the suggestions given by the stakeholders are analyzed and concluded.
- Mapping of curriculum components with PEOs and POs and mapping of curriculum and syllabi with Programme Specific Criteria are presented and discussed.
- Problem based learning and project based learning courses were presented and discussed.
- DAB members suggested to include Variable Frequency drives (VFD) as an Industry Oriented course in the curriculum. But BOS members suggested that it is already available in "Advanced Electrical Drives and control" and hence no need to offer Variable Frequency drives (VFD) as an Industry Oriented course in the curriculum.
- The BOS members suggested to rename the title of the course "15UEE925 – Erection, Testing and Commissioning" to "15UEE925 – Erection, Testing and Commissioning of Electrical Equipment".
- The BOS resolved and suggested to introduce two new courses namely "15UEE926 - PLC and SCADA Applications" & "15UEE927 - Power Plant Instrumentation and Control" as Industry, involved professional elective courses.
- The BOS resolved to approve the classification of courses which focus on Employability / Entrepreneurship / Skill Development and is given in annexure.

**1. Dr. K. Latha suggested that**

- 15UEE501-POWER ELECTRONICS: Uncontrolled Rectifiers and Filter circuits may be made as Unit I. The semiconductor devices operation may be included in the appropriate units corresponding to the choice of the converter. Topics on Voltage / Current / Load Commutation may be removed.
- 15UEE503-MICROPROCESSORS AND MICROCONTROLLER PROGRAMMING: The syllabus statement in Unit 4 may be checked and rewritten.
- 15UEE601-ADVANCED ELECTRIC DRIVES AND CONTROL: The following topics may be included in the syllabus
  - Drive Characteristics and selection of drives
  - Classes of duty and Ratings
  - Multi quadrant operation
  - Steady state stability
- 15UEE906-SPECIAL ELECTRICAL MACHINES: The flow of Units may be modified. The following topics may be included in the syllabus.
  - PM materials
  - BH Curve
  - Magnetic circuits
- 15UEE907-COMPUTER AIDED DESIGN OF ELECTRICAL APPARATUS: This course may be offered as integrated course with 3 credits (LTPC : 2 0 2 3).
- A course on Energy storage systems may be included in the curriculum.

**2. Dr.V.Gopala Krishnan suggested that**

- 15UEEC621- SIGNAL PROCESSING: Any one specific processor study may be included in Unit-5. The reference and text books may be updated
- 15UEE602- Protection and Switch Gear: The course title may be modified as Power system Protection and Switch Gear

**3. Dr.D.Nelson Jeyakumar suggested that**

- 15UEE703- Electric Power Utilization and Energy Conservation : The course title may be modified as Electric Energy Utilization

**4. Dr.S.Selvaperumal suggested that**

- 15UEE905- SOFTWARE CIRCUIT FOR SIMULATION: This course may be offered as integrated course with 3 credits
- A course on Energy storage systems may be included in the curriculum and offered as one credit course

**5. Dr.N.Chandrasekaran suggested that**

- Bio medical Instrumentation may be included in the curriculum
- 15UEE501- POWER ELECTRONICS: Uncontrolled Rectifiers may be included. The book "POWER ELECTRONICS by M.D.Singh" may be included in the reference.
- 15UEE703- Electric Power Utilization and Energy Conservation : The course title may be modified as Electric Energy Utilization

**6. Er.P.Saravanan suggested that**

- Following one credit courses may be offered.
  - Energy storage systems
  - Controlling and monitoring of electrical equipments using mobile applications
- 15UEE601- ADVANCED ELECTRIC DRIVES AND CONTROL : Variable frequency drives may be included

**7. Ms.A.N.Manjula suggested that**

- More design oriented courses may be offered

The Board of Studies of Department of Electrical & Electronics Engineering approves and recommends the Curriculum and Syllabi of B.E. Electrical & Electronics



Engineering which is being followed from the academic year 2015-16 under autonomous regulations with the above modifications.

**M.E. Power Electronics and Drives (Full Time & Part Time) – 2015-16 under Autonomous Regulation R-2015:**

The members discussed thoroughly the new curriculum and Syllabi for M.E. Power Electronics and Drives (Full Time & Part Time) which is being followed from the academic year 2015-16 under autonomous regulation and offered useful suggestions.

Based on the suggestions given by the members, the following resolutions are made:

- Following Two Elective Courses may be included :
  1. Fault Identification in Electrical machines
  2. Special topics in Power Electronics

The Board of Studies of Department of Electrical and Electronics Engineering approves and recommends the Curriculum and Syllabi of M.E. Power Electronics and Drives (Full Time & Part Time) which is being followed from the academic year 2015-16 under autonomous regulations with the above modifications.

The Chairman thanked the members for their contribution and suggestions in framing the curriculum and syllabi for B.E. Electrical and Electronics Engineering and M.E. Power Electronics and Drives (Full Time & Part Time) which is being followed from the academic year 2015-16 under Autonomous regulations.

  
Chairman

Board of Studies  
Electrical and Electronics Engineering



# SETHU INSTITUTE OF TECHNOLOGY

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

MINUTES OF THE BOARD OF STUDIES MEETING – 29.06.2017



### Annexure

#### COURSE CATEGORIZATION - EMPLOYABILITY / ENTREPRENEURSHIP / SKILL DEVELOPMENT

S.No	Course Code	Course Name	Category
1	14UEE702	Power System Operation and Control	Employability
2	14UEE703	Special Electrical Machines	Employability
3	14UEE704	Electric Power Utilization and Energy Conservation	Employability
4	14UEE904	Non-Conventional Energy Resources	Employability
5	14UEE908	Operation and Maintenance of Electrical Equipments	Employability
6	14UEE707	Power System Simulation Laboratory	Employability & Skill development
7	15UEE702	Power System Operation and Control	Employability
8	15UEE703	Electric Energy Utilization	Employability
9	15UEE706	Power System Simulation Laboratory	Employability & Skill development
10	15UEE906	Special Electrical Machines	Employability
11	15UEE501	Power Electronics	Employability
12	15UEE502	Power System Analysis	Employability
13	15UEE503	Microprocessors and Microcontroller Programming	Employability
14	15UEE504	Electrical Machine Design	Employability
15	15UEE507	Power Electronics Laboratory	Employability & Skill development
16	15UEE508	Microprocessors and Microcontroller Programming Laboratory	Employability & Skill development
17	15UEE509	Electrical Machine Design Simulation Laboratory	Employability & Skill development



S.No	Course Code	Course Name	Category
18	15UEE903	High Voltage Engineering	Employability
19	15UEE924	Energy Audit	Employability
20	15UEE302	DC Machines and Transformers	Employability
21	15UEE303	Field Theory	Employability
22	15UEE304	Power System Generation	Employability
23	15UEE305	Semiconductor Devices and Circuits	Employability / Skill Development
24	15UEE306	Digital Logic Circuits	Employability
25	15UEE307	DC Machines and Transformers Laboratory	Employability
26	15UEE308	Semiconductor Devices and Circuits Laboratory	Employability
27	15UEE918	Power Quality	Employability / Entrepreneurship
28	15UEE804	Project Work	Employability / Entrepreneurship / Skill Development
29	15UEE601	Advanced Electric Drives and Control	Employability
30	15UEE602	Protection and Switch Gear	Employability
31	15UEE608	Technical Project	Employability / Entrepreneurship / Skill Development
32	15UEE915	Neural Network and Fuzzy Systems	Employability / Skill Development
33	15UEE926	PLC and SCADA Applications	Employability / Skill Development
34	15UEE402	AC Machines	Employability
35	15UEE403	Control Systems	Employability
36	15UEE404	Transmission and Distribution	Employability
37	15UEE405	Analog Integrated Circuits	Employability

S.No	Course Code	Course Name	Category
38	15UEE406	Electrical Measurements and Instrumentation	Employability
39	15UEE408	AC Machines Laboratory	Employability
40	15UEE409	Control and Instrumentation Laboratory	Employability
41	15UEE410	Digital and Analog Integrated Circuits Laboratory	Employability
42	15UEE209	Electric Circuits	Employability
43	15UEE211	Electric Circuits Laboratory	Employability
44	15UEE910	VLSI Design and Architecture	Employability & Skill development
45	15UEE864	Solar Photovoltaic Technology	Skill Development
46	15UEE865	Industrial Safety Measures	Employability
47	15UEE867	Energy Storage Systems	Employability







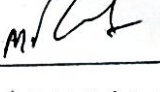

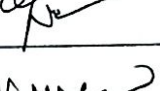
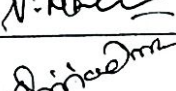
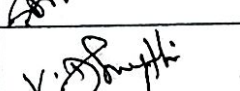
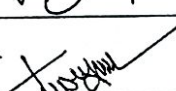
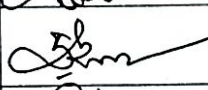
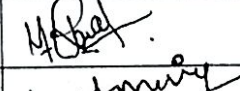


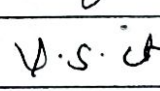
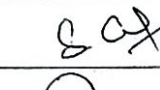
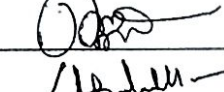
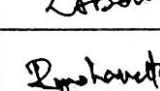

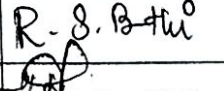
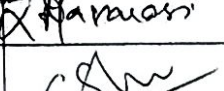

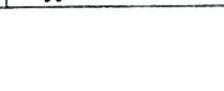


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**MINUTES OF SEVENTH BOARD OF STUDIES MEETING IN DEPARTMENT OF  
ELECTRICAL AND ELECTRONICS ENGINEERING HELD ON 30.08.2019**




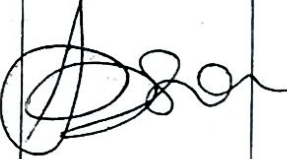

The Seventh Board of Studies (BoS) Meeting in Department of Electrical and Electronics Engineering was held on 30th August, 2019 in EEE Seminar Hall at Sethu Institute of Technology, Pulloor, Kariapatti.

The following members were present:

S.NO	FACULTY NAME	DESIGNATION	POSITION	SIGNATURE
1.	Dr.A.Srinivasan	Professor & Head	Chairman	
2.	Dr.B.Meenakshi Sundaram	Professor	Member	
3.	Dr.J.Bastin Solai Nazaran	Professor	Member	
4.	Mrs.G.Soundra Devi	Associate Professor	Member	
5.	Mrs.J.Rahila	Associate Professor	Member	
6.	Dr.S.Vijayarajan	Associate Professor	Member	
7.	Dr.R.M.Sasi Raja	Associate Professor	Member	
8.	Dr.A.Marikannan	Associate Professor	Member	
9.	Dr.M.Abdul Kareem	Associate Professor	Member	
10.	Mr.J.Kumaresan	Assistant Professor (Sr.Grade)	Member	
11.	Mrs.J.Jeyashanthi	Assistant Professor (Sr.Grade)	Member	
12.	Mr.V.Kannan	Assistant Professor (Sr.Grade)	Member	
13.	Mrs.V.Hema Maheshwari	Assistant Professor (Sr.Grade)	Member	
14.	Mrs.P.Meenalochini	Assistant Professor (Sr.Grade)	Member	

S.NO	FACULTY NAME	DESIGNATION	POSITION	SIGNATURE
15.	Mrs.S.Rohini	Assistant Professor (Sr.Grade)	Member	
16.	Mr.B.Karthikeyan	Assistant Professor (Sr.Grade)	Member	
17.	Mr.M.Palpandian	Assistant Professor (Sr.Grade)	Member	
18.	Mr.K.Mahesh Kumar	Assistant Professor (Sr.Grade)	Member	
19.	Dr.G.Narmadha	Assistant Professor (Sr.Grade)	Member	
20.	Mr.V.Muthuvel	Assistant Professor (Sr.Grade)	Member	
21.	Mr.S.Kannadasan	Assistant Professor (Sr.Grade)	Member	
22.	Mr.V.Dhayanithi	Assistant Professor (Sr.Grade)	Member	
23.	Mr.T.Murugan	Assistant Professor (Sr.Grade)	Member	
24.	Mr.S.Sugumar	Assistant Professor (Sr.Grade)	Member	
25.	Mr.M.Ramuvel	Assistant Professor	Member	
26.	Mr.M.Muhammed Aladueen Ashiq	Assistant Professor	Member	
27.	Ms.C.Sonia	Assistant Professor	Member	
28.	Mr.T.Harish Babu	Assistant Professor	Member	
29.	Ms.V.S.Chithra	Assistant Professor	Member	
30.	Mr.S.Gopinath	Assistant Professor	Member	
31.	Mr.K.Jeyakanth	Assistant Professor	Member	
32.	Mr.S.Syed Abdul Haq	Assistant Professor	Member	
33.	Mr.R.Mohammed Abdullah	Assistant Professor	Member	
34.	Mr.C.Immanuvel	Assistant Professor	Member	
35.	Mrs.R.S.Bharathi	Assistant Professor	Member	
36.	Mrs.K.Elavarasi	Assistant Professor	Member	
37.	Mr.C.Shiva	Assistant Professor	Member	
38.	Mrs.V.Vaishnavi	Assistant Professor	Member	



SL.NO	FACULTY NAME	DESIGNATION	POSITION	SIGNATURE
39.	DR.V.MALATHI	Professor & Dean Department of Electrical and Electronics Engineering, Anna University Regional Campus, Madurai – 625019 Tamil Nadu , India.	Member nominated by VC	
40.	DR. RAJAN PRAKASH	Assistant Professor Department of Electrical and Electronics Engineering, Thiagarajar College of Engineering, Madurai, Tamilnadu	Member	
41.	DR. G.Y. RAJAA VIKHRAM	Assistant Professor Department of Electronics and Instrumentation Engineering, Tech Park 14 <sup>th</sup> Floor, SRM Institute of Science and Technology, Potheri, Kattankulathur – 603203, Kancheepuram, Tamilnadu	Member	
42.	MR. A. EASWARAN (Expert from Industry Relating to Placement)	Proprietor Jothi Electrical Industries, No.2, RC Street, Pazhanganatham, Madurai – 625003.	Member	
43.	J. VIMALRAJ (Under Graduate Alumni)	R & D, Premier Evolvics Pvt. Ltd., SF No.79/6, Kulathur Road, Venkitapuram Post, Irugur, Coimbatore – 641062, Tamilnadu.	Member	

The Chairman welcomed all the members to the Seventh Board of Studies Meeting and presented the Curricula and Syllabi of First year courses which are being followed from the academic year 2019-2020 under Autonomous Regulations 2019 (R2019) for B.E. Electrical and Electronics Engineering. He also presented the proposed Curriculum structure of R2019. The Curricula and Syllabi of M.E. Power Electronics and Drives (Full time) has also been presented to the Board of Studies Members.

After the presentation, the following resolutions have been made by the Board of Studies Members.

**B.E. Electrical and Electronics Engineering – 2019-20 under Autonomous Regulation R-2019**

**1. Revised Department Vision, Mission, Program Educational Objectives (PEO), Program Outcomes (PO) and Program Specific Outcomes (PSO) of the UG Programme**

- The Board of Studies Chairman presented the revised Vision, Mission, PEOs, POs and PSOs of the UG Programme.
- Dr.V.Malathi queried that the revised PSO of the UG Programme should match with the courses of R2019 Curriculum.
- Board of Studies Chairman clarified the query which has been raised by Dr.V.Malathi by showing the evident courses of R2019 related to PSO.

*Board of Studies resolved to approve and recommend the revised Vision, Mission, PEOs, POs and PSOs of the UG Programme to the Academic Council. The Vision, Mission, PEOs, POs and PSOs of the UG Programme are given in Annexure I.*

**2. Analysis of Stakeholders feedback regarding curriculum and syllabi**

- The Board of Studies Chairman presented the stakeholders' feedback regarding curricula and syllabi of R2015. The reflections of the stakeholders' feedback in the R2019 Curriculum structure are given in Annexure II.
- Dr.G.Y.RajaaVikhraminsisted to get some more feedback from the eminent alumni who are working in core companies.



- Board of Studies Chairman accepted to get the feedback from eminent alumni who are working in core companies regarding curriculum and syllabi

*Board of Studies resolved to approve the modifications based on the stakeholders' feedback in R2019 curriculum structure.*

### **3. Multi/Inter disciplinary Theory courses**

- The Board of Studies Chairman presented the Multi/Interdisciplinary theory courses which will be offered by the Department of Electrical and Electronics Engineering and is given in Annexure III.
- Mr.A.Easwaran suggested to offer project based Multi/Interdisciplinary courses for enhancing the project based learning through Product Development.
- Board of Studies Chairman clarified the suggestion given by Mr.A.Easwaran.

*Board of Studies resolved to approve and recommend the presented Multi/Interdisciplinary theory courses in R2019 curriculum.*

### **4. Classification of courses having focus on employability/ entrepreneurship/ skill development**

- The Board of Studies Chairman presented the categorization of R2019 courses based on the employability/ entrepreneurship/ skill development as given in Annexure IV.
- Dr.G.Y.Rajaa Vikhram suggested to identify some more courses under entrepreneurship/ skill development.
- Board of Studies Chairman accepted the suggestion given by Dr.G.Y.Rajaa Vikhram.

*Board of Studies resolved to approve the classification of R2019 courses which focus on employability/ entrepreneurship/ skill development*

### **5. List of New Courses under Regulation 2019**

- Board of Studies Chairman presented the R2019 curriculum structure and also listed the new courses which have been proposed to include in new curriculum structure.

- Dr.V.Malathi suggested to shift the newly added Course “Smart Grid” from Seventh Semester to Professional Elective. She also suggested to include few IT related courses in Electives.
- Board of Studies members accepted the suggestions given by Dr.V.Malathi and the corresponding modifications are incorporated in R2019 model Curriculum.
- Dr.G.Y.RajaaVikhran suggested to include the course called “Advanced Control Theory” in the R2019 curriculum.
- Board of Studies chairman explained that the courses “Non-linear control systems” and “Digital Control Systems” which have been listed in the Professional Elective may be effective for the students instead of the course “Advanced Control Theory”.

*Board of Studies resolved to approve the following list of new courses that could be included in the R2019 Curriculum*

Newly Added Courses	
SEMESTER	NAME OF THE COURSE
I	1. Induction Programme 2. Problem solving and Python Programming 3. Problem solving and Python Programming Lab
II	1. Introduction to Electrical and Electronics Engineering 2. Introduction to Electrical and Electronics Engineering Lab
III	1. Seminar 2. Biology for Engineers
IV	1. Data Structures and Algorithm (Integrated Course) 2. Gender Equality
V	1. Internet of Things for Electrical Automation 2. Creative Thinking and Innovation
VI	1. Product Development Project 2. Interpersonal Skills Laboratory 3. Indian Constitution and Essence of Indian Traditional Knowledge in Electrical Engineering
VII	1. Electric Vehicles 2. Renewable Energy Laboratory 3. Summer Internship



<b>Professional Elective Courses</b>	<ol style="list-style-type: none"> <li>1. Electrical Safety</li> <li>2. Robotics and Automation</li> <li>3. Solar and Wind Energy Systems</li> <li>4. Application of Power Electronics to Power Systems</li> <li>5. Modern optimization techniques for Electric Power Systems</li> <li>6. Non-Linear Control Systems</li> <li>7. Digital Control Systems</li> <li>8. Design with PIC Microcontrollers</li> <li>9. Machine Learning</li> <li>10. EHV AC and DC Transmission</li> <li>11. Fuzzy systems and Genetic Algorithms</li> <li>12. Sensing Techniques and Sensor Systems</li> <li>13. Intelligent Motor Controllers</li> <li>14. Energy Efficient Motors</li> <li>15. Advanced Microprocessor and Microcontroller</li> <li>16. Consumer Electronics (Integrated Course)</li> <li>17. PCB Design (Integrated Course)</li> <li>18. PLC and SCADA Applications (Integrated Course)</li> <li>19. Smart Grid</li> <li>20. Analog and Mixed Mode VLSI Design</li> </ol>
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#### 6. Suggestions for improving the R2019 curriculum structure

- Dr.V.Malathi suggested to include the topic “How to write Project Proposal” in the course “Project Management and Finance” which will be offered by the Department of Mechanical Engineering. She also suggested to rename the Course “Signal Processing” as “Digital Signal Processing for Electrical Engineers” which will be offered by the Department of Electronics and Communication Engineering.
- Board of Studies members accepted the above suggestions and the Chairman agreed to intimate the above suggestions to the respective Board of Studies Chairman.

- Dr.R.RajanPrakash suggested to reduce the number of domains which have been presented by the Board of Studies Chairman.
- Dr.R.RajanPrakash also suggested to offer a crash course at the end of each year in order to recollect the concepts studied in that year.
- Board of Studies Chairman has agreed to include the above suggestions given by Dr.R.RajanPrakash in near future.
- Mr.A.Easwaran suggested to offer more number of value added courses to enhance the practical knowledge.
- Board of Studies members have accepted the suggestion and the chairman acknowledged to offer Value added Course in every semester.

*Board of Studies resolved to approve the above suggestions that could be incorporated in the R2019 curriculum of Electrical and Electronics Engineering.*

#### **7. Percentage if change in the Curriculum and for each course in Regulation 2019**

- When discussing the First and Second semester courses, Dr.V.Malathi suggested to rearrange the topics of the Course “Basic Electrical and Electronics Engineering” which will be offered the Department of EEE to other departments as follows
  - UNIT – I : DC and AC circuits
  - UNIT – II : DC Machines and Transformers
  - UNIT – III : AC Machines
  - UNIT – IV : Special Machines
  - UNIT – V : Introduction to Electronics
- Board of Studies members accepted the suggestion given by Dr.V.Malathi and the Chairman acknowledged to incorporate the corresponding modifications in the course “Basic Electrical and Electronics Engineering”.
- Percentage change in Syllabus of First and Second Semester courses as follows

S.No.	Name of the Course	Percentage change in Syllabus
1	Basic Electrical and Electronics Engineering	47%
2	Basic Electrical and Electronics Engineering Laboratory	54%



*Board of Studies resolved to approve and recommend the following Second Semester courses to the Academic Council*

Sl.No.	Department	Course Title	L	T	P	C
1	EEE	Introduction to Electrical and Electronics Engineering	3	0	0	3
2	EEE	Introduction to Electrical and Electronics Engineering Laboratory	0	0	3	1.5
3	Mech, Civil, Agri& Chemical	Basic Electrical and Electronics Engineering	3	0	0	3
4	Agri& Chemical	Basic Electrical and Electronics Engineering Laboratory	0	0	3	1.5

**8. Approval for the list of examiners from other colleges who could be invited for conducting practical examination/Project Viva, Question Paper Setting, Paper evaluation, Exam invigilation duties.**

- The Chairman presented the list of examiners from other colleges who could be invited for conducting practical examination/Project Viva, Question Paper Setting, Paper evaluation, Exam invigilation duties.
- Dr.V.Malathi suggested to consider the faculty competency and expertise for question paper setting.
- The Chairman explained the norms followed in the College for question paper setting in which faculty competency and expertise are also considered.

*Board of Studies resolved to approve the list of examiners from other colleges invited for conducting practical examination/Project Viva, Question Paper Setting, Paper evaluation, Exam invigilation duties.*

*The Board of Studies of Department of Electrical & Electronics Engineering resolved to approve and recommend the Curriculum (R2019) of B.E. Electrical & Electronics Engineering which is being followed from the academic year 2019-2020 under autonomous regulations with the above modifications to the Academic council.*

*The Board of Studies of Department of Electrical & Electronics Engineering resolved to approve and recommend the Syllabi of First year courses of B.E. Electrical & Electronics Engineering which is being followed from the academic year 2019-2020 under autonomous regulations with the above modifications to the Academic council.*

**M.E. Power Electronics and Drives (Full Time) – 2019-20 under Autonomous Regulation R-2019**

The members discussed thoroughly the new curriculum and Syllabi for M.E. Power Electronics and Drives (Full Time) which is being followed from the academic year 2019 - 2020 under autonomous regulation and offered useful suggestions.

**1. Multi/Inter disciplinary Theory courses**

- Dr. RajanPrakash suggested to include the IoT based course for improving the product development.
- Board of Studies Chairman confirmed that the IoT based course will be offered as open elective.

**2. Percentage of change in the Curriculum and for each course in Regulation 2019**

Board of Studies Chairman has listed the percentage of changes in the Core paper in second semester and elective syllabus of R2019 with reference to the syllabus of R2015.

**Percentage change in Syllabus of courses as follows**

S.No.	Course Code	Course Name	New Course / Old Course	Percentage change in Syllabus
1	19PPE201	Electric Drives System	DC Drives and Control & AC Drives and Control of R2015	

**3. List of New Courses under Regulation 2019**

- Dr. V. Malathi suggested to rename the course “English for Research Paper Writing” as Research Paper Writing.
- Board of Studies Chairman replied that the Course name has been fixed as per the AICTE 2018 PG Model Curriculum.

NEWLY ADDED COURSES	
SEMESTER	NAME OF THE COURSE
I	1. Power Quality Laboratory
II	1. Digital Control of Power Electronic and Drive systems 2. Embedded Control of Power Electronics and Drives Laboratory 3. Mini project with seminar



Program Electives	<ol style="list-style-type: none"> <li>1. Advanced Power Electronic Circuits</li> <li>2. Optimal and Adaptive Control</li> <li>3. Dynamics of Electrical Machines</li> <li>4. Harmonics Filter Design</li> <li>5. Advanced Control Of Electric Drives</li> <li>6. Automotive Electronics</li> <li>7. Switched Mode and Resonant Converters</li> <li>8. Modern Industrial Drives</li> <li>9. Advanced Digital Signal Processing</li> <li>10. Advanced Microcontroller based Systems</li> <li>11. SCADA Systems and Applications</li> <li>12. FACTS and Custom Power Devices</li> </ol>
Open Elective	Bio Energy From Waste

*Board of Studies resolved to approve the list of new courses that could be included in the R2019 Curriculum*

### 3. Suggestions for improving the R2019 curriculum structure

- Mr. A. Easwaran suggested to include the consultancy activity in the Power Quality Laboratory course.
- Board of Studies Chairman accepted and acknowledged to include the consultancy activity in the Power Quality Laboratory course.

*The Board of Studies of Department of Electrical and Electronics Engineering resolved to approve and recommend the Curriculum and Syllabi of M.E. Power Electronics and Drives (Full Time) which is being followed from the academic year 2019-20 under autonomous regulations with the above modifications to the Academic Council.*

The Chairman thanked the members for their contribution and suggestions in framing the curriculum and syllabi for B.E. Electrical and Electronics Engineering and M.E. Power Electronics and Drives (Full Time) which is being followed from the academic year 2019-20 under Autonomous regulations.

  
Chairman  
Board of Studies

**Electrical and Electronics Engineering**  
**Dr. A. SRINIVASAN M.E., Ph.D.,**  
PROFESSOR & HEAD  
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING  
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SETHU INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

MINUTES OF THE BOARD OF STUDIES MEETING – 30.08.2019

Annexure IV

**COURSE CATEGORIZATION - EMPLOYABILITY / ENTREPRENEURSHIP / SKILL DEVELOPMENT**



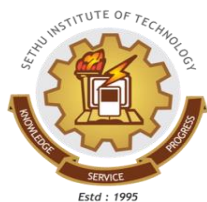
S.No	Course Code	Course Name	Category
1	19UEE302	Electrical Circuit Analysis	Employability
2	19UEE303	Electrical Machines - I	Employability
3	19UEE304	Analog Electronics	Employability
4	19UEE305	Electromagnetic Fields	Employability
5	19UEE306	Electrical Measurements and Instrumentation	Employability
6	19UEE308	Electric circuits Laboratory	Employability
7	19UEE309	Electrical Machines Laboratory - I	Employability
8	19UEE310	Analog Electronics Laboratory	Employability
9	19UEE307	Seminar	Employability, Entrepreneurship & Skill development
10	19UEE401	Electrical Machines - II	Employability
11	19UEE402	Control Systems	Employability
12	19UEE403	Principles of Digital Electronics	Employability
13	19UEE404	Electric Power Transmission and Distribution	Employability
14	19UEE406	Electrical Machines Laboratory - II	Employability
15	19UEE407	Control and Instrumentation Laboratory	Employability
16	19UEE408	Digital Electronics Laboratory	Employability
17	19UEE501	Power Electronics	Employability
18	19UEE502	Internet of Things for Electrical Automation	Employability / Entrepreneurship / Skill Development
19	19UEE503	Microprocessors and Microcontroller Programming	Employability



S.No	Course Code	Course Name	Category
20	19UEE909	Energy Audit	Employability
21	19UEE912	Robotics and Automation	Employability & Skill Development
22	19UEE507	Creative Thinking and Innovation	Employability / Entrepreneurship / Skill Development
23	19UEE508	Power Electronics Laboratory	Employability & Skill Development
24	19UEE509	Microprocessors and Microcontroller Programming Laboratory	Employability & Skill Development
25	19UEE601	Electric Drives and Control	Employability
26	19UEE602	Power System Analysis	Employability
27	19UEE902	High Voltage Engineering	Employability
28	19UEE904	Special Electrical Machines	Employability
29	19UEE607	Product Development Project	Employability & Skill Development
30	19UEE608	Electric Drives and Control Laboratory	Employability



**Chairman**  
**Board of Studies**  
**Electrical and Electronics Engineering**



**SETHU INSTITUTE OF TECHNOLOGY**  
(An Autonomous Institution)  
PULLOOR, KARIAPATTI – 626 115

**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**M.E., Power Electronics & Drives**

**Course categorization-Employability/Entrepreneurship/Skill Development**

S.No.	Category	Course Code	Name of the Course
1.	<b>Employability</b>	19PPE101	Power Electronic Converters
		19PPE102	Modeling and Analysis of Electrical Machines
		19PPE501	Advanced Power Electronic Circuits
		19PPE503	Dynamics of Electrical Machines
		19PPE505	Advanced Control Of Electric Drives
		19PPE506	Automotive Electronics
		19PPE507	Switched Mode and Resonant Converters
		19PPE508	Modern Industrial Drives
		19PPE511	SCADA Systems and Applications
		19PPE512	FACTS and Custom Power Devices
		19PPE604	Bio Energy From Waste
		19PPE301	Phase-I Dissertation
		19PPE101	Power Electronic Converters
		19PPE102	Modeling and Analysis of Electrical Machines
		19PPE501	Advanced Power Electronic Circuits
		19PPE503	Dynamics of Electrical Machines
		19PPE505	Advanced Control Of Electric Drives
		19PPE506	Automotive Electronics
		19PPE507	Switched Mode and Resonant Converters
		19PPE508	Modern Industrial Drives
		19PPE511	SCADA Systems and Applications
		19PPE512	FACTS and Custom



			Power Devices
		19PPE604	Bio Energy From Waste
		19PPE201	Electric Drives System
		19PPE205	Mini project with seminar
		19PPE401	Project Work (Phase-II)
2.	Entrepreneurship	19PPE301	Phase-I Dissertation
		19PPE519	Electric Power Quality
		19PPE401	Project Work (Phase-II)
		19PPE205	Mini project with seminar
3.	Skill Development	19PPE301	Phase-I Dissertation
		19PPE510	Advanced Microcontroller based Systems
		15PPE501	Power Electronics for PV and Wind energy systems
		15PPE604	Soft Computing
		19PPE510	Advanced Microcontroller based Systems
		19PPE401	Project Work (Phase-II)
		19PPE205	Mini project with seminar