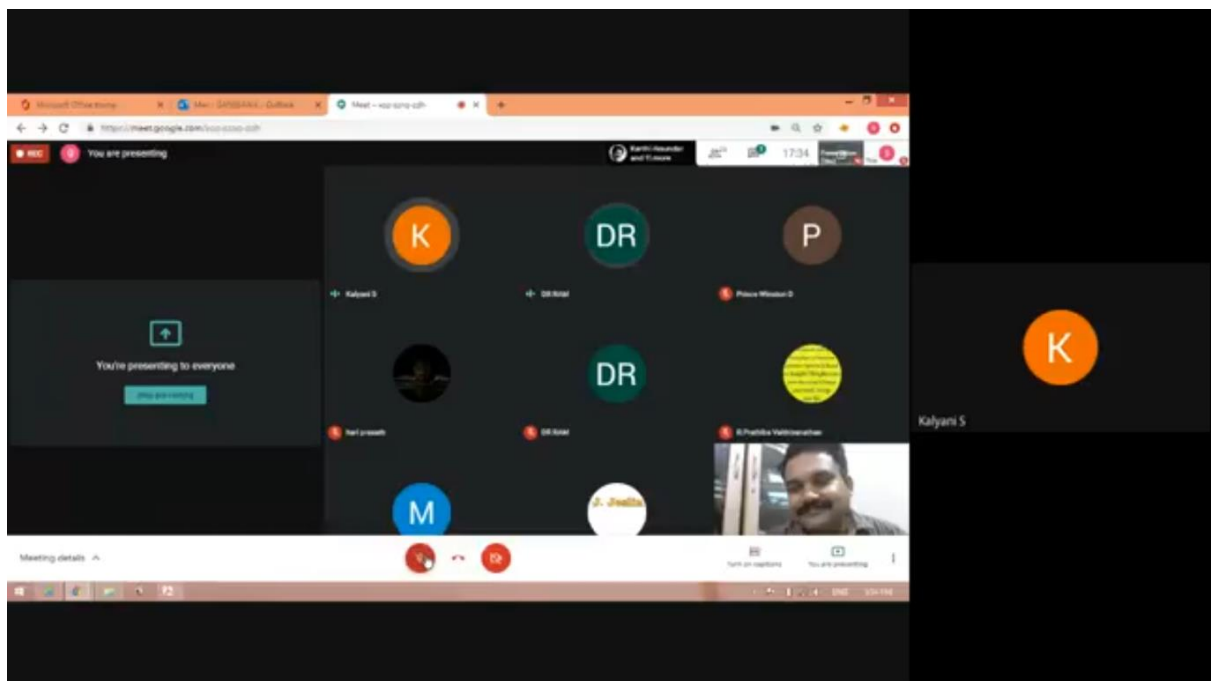




(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)  
S.P.G.Chidambara Nadar - C.Nagammal Campus  
S.P.G.C.Nagar, K.Vellakulam - 625 701, (Near Virudhunagar), Madurai District.

## ANNEXURE VII

### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING





**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**Minutes of Meeting – 05<sup>th</sup> August, 2020**

**MINUTES OF THE 1<sup>st</sup> ONLINE MEETING**

**BOARD OF STUDIES ELECTRICAL AND ELECTRONICS ENGINEERING**

**DATE: 05-08-2020**

**TIME: 3.00 pm to 5.00 pm**

**Platform: Google Meet**

**Meeting Link: [meet.google.com/xoz-sznq-zdh](https://meet.google.com/xoz-sznq-zdh)**

**IN ATTENDANCE:**

S. No.	Name of the Expert	Designation	Capacity
1.	Dr. M. Saravanan	Professor Department of EEE Thiagarajar College of Engineering, Madurai.	AU Nominee
2.	Dr. Sishaj P Simon	Associate Professor Department of EEE National Institute of Technology, Trichy.	Academic Council nominated BoS Members
3.	Dr. S. Jeevananthan	Professor Department of EEE Pondicherry Engineering College, Pondicherry.	
4.	Dr. K. Janakiraman	Head – Technical M/s. OBO BETTERMANN India Pvt. Ltd., Chennai	Industrialist
5.	Er. R.V. Prathiba	Research Scholar Department of EEE Thiagarajar College of Engineering, Madurai.	Alumni



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**Minutes of Meeting – 05<sup>th</sup> August, 2020**

S. No.	Name of the Faculty	Designation
1.	Dr. S.Kalyani	Professor & Head / EEE Chairman, Board of Studies (EEE Board)
2.	Dr. D. Prince Winston	Professor / EEE
3.	Dr. M. Sudalaimani	Assistant Professor / EEE
4.	Dr. S. Rajesh Babu	Assistant Professor / EEE
5.	Dr. J. Jeslin Drusila Nesamalar	Assistant Professor / EEE
6.	Mrs. B. Noorul Hamitha	Assistant Professor / EEE
7.	Mrs. V. Chandra	Assistant Professor / EEE
8.	Mr. B. Guru Karthik Babu	Assistant Professor / EEE
9.	Mr. A. Azarudeen	Assistant Professor / EEE
10.	Mr. D. Mariappan	Assistant Professor / EEE
11.	Mr. K. Ganesan	Assistant Professor / EEE
12.	Mr. A. Karuppasamy	Assistant Professor / EEE
13.	Mr. S. Jegan	Assistant Professor / EEE
14.	Mrs. S. Vimala Devi	Assistant Professor / EEE
15.	Mrs. C. Nagadevi	Assistant Professor / EEE
16.	Mr. A. Karthikeyan	Assistant Professor / EEE
17.	Mr. R. Ganesan	Assistant Professor / EEE
18.	Ms. R. Reenu	Assistant Professor / EEE
19.	Mr. T. Hari Prasath	Assistant Professor / EEE



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**Minutes of Meeting – 05<sup>th</sup> August, 2020**

**THE MINUTES:**

The meeting is called for considering the Undergraduate and Postgraduate curriculum & syllabi in R2020 Regulations.

**DISCUSSIONS:**

1. The meeting started in online mode in Google meet platform at 03.00pm.  
**Dr. S. Kalyani**, Professor & Head / EEE gave a warm cordial welcome to all the members of the Board of Studies.
2. **Dr. S. Kalyani**, Professor & Head / EEE gave a brief presentation about the institution & the department and its accomplishments. Members appreciated for a nice presentation briefing about the institution and department.
3. **Dr. S. Kalyani**, Professor & Head / EEE discussed about the Proceedings of 1<sup>st</sup> Academic Council Meeting held on 17<sup>th</sup> July 2020 to the experts. The highlights of the discussion were as follows:

	<p><b>Recommendations from the Governing Body and Academic Council for Framing UG Curriculum:</b></p>	<ol style="list-style-type: none"> <li>1. Credit range: 165 – 170</li> <li>2. 20 – 24 credit per Semester.</li> <li>3. VIII Sem Project Work: 8 – 10 credits</li> <li>4. Online Course (Maximum 6 credits)</li> <li>5. Audit Course (Mandatory non credit)</li> <li>6. First semester is common for all Programme</li> <li>7. First year credit range : 40 – 42</li> <li>8. Engineering Graphics to be in II Semester</li> <li>9. Programme specific papers could be offered in II Sem.</li> <li>10. AICTE &amp; AU 2019 curriculum could be taken as base for framing curriculum.</li> <li>11. III Sem Mathematics (Programme specific) Mandatory</li> </ol>
--	---	---



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**Minutes of Meeting – 05<sup>th</sup> August, 2020**

	<p><b>Recommendations from the Governing Body and Academic Council for Framing PG Curriculum:</b></p>	<ol style="list-style-type: none"> <li>1. Credit range : 70 – 75</li> <li>2. 20 – 22 credit per semester.</li> <li>3. Online Course (Max 3 credits)</li> <li>4. Open Elective: Industry Certification Courses</li> <li>5. AU R2017 &amp; AU R2019 curriculum could be taken as base for framing curriculum</li> <li>6. Project Work Phase I : 6-8 credit</li> <li>7. Project Work Phase II : 12-14 credit</li> <li>8. II Sem Mathematics (Programme specific) Optional</li> <li>9. Over and above credit will appear in transcript</li> <li>10. 1 Tutorial period = 1 credit</li> </ol>
--	---	---

4. **Dr. D. Prince Winston**, Professor / EEE presented the PG curriculum with detailed syllabi for semester 1 to semester 4 including Professional Elective Courses.
5. Members asked to verify / check the no. of hours allocated in **L T P C** both in the curriculum table and syllabus carefully and also need to be cross checked with the credits. One Lecture hour accounts to 1 credit, one tutorial hour accounts to 1 credit and two practical hours accounts to 1 credit.
6. Members suggested that the unique course code for the various courses based on proper guidelines need to be added. It must be ensured that courses common to one or two programmes must be given the same course code.
7. Members suggested that the Text books and References given at the end of the syllabus for each course can be renamed as Learning Resources. Recent Edition must be included for all text books / reference books.
8. Members suggested to include IEC standards / IEEE references in the syllabus of courses wherever applicable.
9. Members suggested that the Name of the courses offered in PG should not be same as that offered in UG curriculum.



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**Minutes of Meeting – 05<sup>th</sup> August, 2020**

10. Members suggested that the grouping of courses for each Professional Elective (PE) to be taken by student during each semester can be avoided and can be given as a complete list of students, so that students will have better choice of choosing the PE course.
11. Members suggested that the inputs can be obtained from industrialists to add more courses in PE list and a brainstorming session can be conducted among students and their suggestions also can be used in listing courses in PE.
12. Suggestions given by Experts for each PG course based on syllabus presented follows herein

S. No.	Name of the Course	Comments
1.	Applied Mathematics for Electrical Engineers	<ul style="list-style-type: none"> <li>• 3 L and 1 T to be mentioned.</li> <li>• Title to be changed as : Applied Mathematics for Power System Engineers</li> <li>• In Unit-IV, other Conventional optimization Techniques such as Quadratic Programming can be included apart from Linear Programming.</li> </ul>
2.	Computer Aided Power System Analysis	<ul style="list-style-type: none"> <li>• Unit 1 contains more of UG syllabus such as Newton Raphson and Fast Decoupled. Advanced Topics related to Load flow such as Single Phase AC and DC load flow can be included.</li> <li>• In unit 2, Single phase AC, DCOPF and three phase AC, DCOPF can be added.</li> <li>• In Unit-IV, Open circuit faults and its analysis can be added</li> <li>• 3-4 course outcomes can be written for the course.</li> </ul>



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**Minutes of Meeting – 05<sup>th</sup> August, 2020**

S. No.	Name of the Course	Comments
3.	Power System Operation and Control	<ul style="list-style-type: none"> <li>• Course name need to be changed as "Advanced Power System Operation and Control"</li> <li>• Topics of Economic Dispatch and Unit Commitment in Deregulated Environment can be include in Unit-I and Unit-II</li> <li>• In Text Books, Wood, Woolenberg &amp; Shebley (3<sup>rd</sup> Edition) – is suggested to be included.</li> </ul>
4.	Power System Transients	<ul style="list-style-type: none"> <li>• Name of the course can be changed as "Electromagnetic Transients in Power Systems"</li> </ul>
5.	Power System Dynamics	<ul style="list-style-type: none"> <li>• The contents in Unit-I and Unit-II needs to be reduced.</li> </ul>
6.	Extra High Voltage AC and DC transmission	<ul style="list-style-type: none"> <li>• Case studies of Typical HVDC and HVAC links available in India can be included in appropriate units.</li> </ul>
7.	Power System Deregulation	<ul style="list-style-type: none"> <li>• URL of the Indian Energy Market or Power Exchange (IEX) can be included in References</li> </ul>
8.	Advanced Power System Simulation laboratory	<ul style="list-style-type: none"> <li>• <b>L T P C</b> of the syllabus need to be corrected as 4 practical hours accounts to 2 credits.</li> <li>• For protection related experiments, experimental verification in hardware setup can be included, if equipments available.</li> <li>• Study of DFIG can be changed as Simulation of DFIG</li> </ul>
9.	Research Methodology / Intellectual Property Rights	<ul style="list-style-type: none"> <li>• Both the course syllabus can be merged together and proper allocation of <b>L T P C</b> can be given.</li> <li>• Introduction to Indian and US patents and patent filing process to be included</li> </ul>
10.	Computer Aided Design of Electrical Apparatus	<ul style="list-style-type: none"> <li>• Instead of CAD, ECAD can be mentioned to be more specific.</li> </ul>



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**Minutes of Meeting – 05<sup>th</sup> August, 2020**

S. No.	Name of the Course	Comments
11.	Solar and Energy Storage Systems	<ul style="list-style-type: none"> <li>• Mathematical Modeling of PV cells to be included in Unit-I</li> <li>• Fuel cells, Ultra capacitor, super capacitor and Compressed air technologies can be included in Unit-V (Energy Storage Systems).</li> <li>• Pumped hydroelectric energy storage can be removed in Unit-IV.</li> <li>• In Unit 5, Applications need to be specific like Sizing of solar system for 5 HP motor pump</li> </ul>
12.	Flexible AC Transmission Systems	<ul style="list-style-type: none"> <li>• Dynamic FACTS devices such as DSTATCOM also can be added in appropriate units.</li> </ul>
13.	Energy Management and Auditing	<ul style="list-style-type: none"> <li>• Role of Energy Auditor and Energy Manager and the bureau standards for energy auditing process can be included at appropriate units</li> </ul>
14.	Wind Energy Conversion Systems	<ul style="list-style-type: none"> <li>• Word Spacing and Alignment needs to be checked.</li> </ul>
15.	AI Techniques for Power Systems	<ul style="list-style-type: none"> <li>• Recent books available for AI can be included.</li> </ul>
16.	Distributed Generation and Microgrid	<ul style="list-style-type: none"> <li>• Microgrid is a single word and needs to be combined.</li> </ul>
17.	Power Quality Assessment and Mitigation	<ul style="list-style-type: none"> <li>• Unit 5 Title to be given as Smart Grid</li> </ul>
18.	SCADA and DCS	<ul style="list-style-type: none"> <li>• One of the text book written by ex-NIT Trichy Director can be identified and included in references.</li> </ul>
19.	Energy Efficient Building Management System	<ul style="list-style-type: none"> <li>• In Unit 1, Green building and its introduction can be included. Standards as per Green Building Society of India for energy efficient buildings can also be included.</li> </ul>
20.	Internet of Things for Power Engineers	<ul style="list-style-type: none"> <li>• Course name can be changed as "IoT for Power Engineers"</li> </ul>





**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**Minutes of Meeting – 05<sup>th</sup> August, 2020**

13. **Dr. Jeslin Drusila Nesamalar**, AP / EEE presented the 1<sup>st</sup> Year Curriculum and Syllabi for UG Programme B.E. – Electrical and Electronics Engineering and Syllabus of the courses offered by EEE to other UG programmes during I year.
14. Members asked us to verify / check the no. of hours allocated in **L T P C** both in the curriculum table and syllabus carefully and also need to be cross checked with the credits. One Lecture hour accounts to 1 credit, One tutorial hour accounts to 1 credit and Two practical hours accounts to 1 credit
15. For II Sem UG (B.E.-EEE) programme, the curriculum with Program Specific Theory (Circuit Theory) and Laboratory (Electric Circuits Laboratory) was recommended by the BoS Experts.
16. Suggestions given by Experts for I year UG course based on Curriculum & Syllabus presented follows herein

S. No.	Name of the Course	Comments
1.	Basic Civil and Mechanical Engineering	<ul style="list-style-type: none"> <li>• Can be offered as Open Elective for EEE Students as the knowledge of this course is also required.</li> </ul>
2.	Circuit Theory	<ul style="list-style-type: none"> <li>• Although the no. of credits is 3, 4 hours can be allotted (3 Lecture Hours and 1 Tutorial Hour) as it is an Analytical course and involves lot of numerical problems to be solved.</li> </ul>
3.	Electric Circuit Analysis Laboratory	<ul style="list-style-type: none"> <li>• Some of the experiments mentioned as "Study of..." can be changed as "Simulation of ....".</li> <li>• The word study can be removed from all experiments as the experiments are performed either in simulation or hardware component.</li> </ul>



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**Minutes of Meeting – 05<sup>th</sup> August, 2020**

S. No.	Name of the Course	Comments
4.	Fundamentals of Electrical and Electronics Engineering	<ul style="list-style-type: none"> <li>• Topics related to Basics of house wiring, Electrical Safety and Basic of UPS can be included.</li> <li>• Few topics already given in the proposed syllabus can be removed, if required.</li> <li>• Can be offered as Open Elective for other UG programmes, if not offered as Core Paper.</li> </ul>
5.	Engineering Practice Laboratory	<ul style="list-style-type: none"> <li>• Study of UPS also can be included, if possible.</li> </ul>

17. **Mr. K.Ganesan**, Assistant Professor / EEE presented the UG Programme Curriculum for 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year of B.E. – Electrical and Electronics Engineering.

18. Members asked us to check / verify the flow of the courses and the pre requisites for each course offered in higher semesters can be checked thoroughly.

19. Suggestions given by Experts for I year UG course based on Curriculum & Syllabus presented follows herein

S. No.	Name of the Course	Comments
1.	AC Machines	<ul style="list-style-type: none"> <li>• Name of the course can be changed as "Induction and Synchronous Machines", if needed</li> </ul>

20. **Date of next meeting:** The next meeting will be held during the next even semester (tentatively, First Saturday of February, 2021).

21. **Dr. D. Prince Winston**, Professor / EEE proposed the vote of thanks to all the external and internal experts and the meeting adjourned