

Mannivakkam, Chennai - 600 048

## (Approved by AICTE, Affiliated to Anna University & Accredited by NAAC) DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### I st Board of Studies (BOS) Meeting MINUTES OF MEETING

The first Board of Studies (BoS) meeting of the Department of Electrical and Electronics Engineering was conducted on **06-08-2024** at BETA Conference Hall at 2.00 p.m

(IST). The following members were present,	(IST).	The	following	members	were	present.
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S.No	Name of the Member	Designation	
1.	Dr.K. Deepa Professor, Department of Electrical and Electronics Engineering, PERI Institute of Technology.Chennai-600048	Chairman	
2.	Dr. S. V. Anbuselvi, Professor, Department of Electrical and Electronics Engineering, Anna University, Chennai – 600025	Subject Expert - University Nominee	
3.	Dr. R. Sridhar, Professor, Department of Electrical and Electronics Engineering, SRMIST, Kattankulathur, Chennai- 603203	External Subject Expert – Outside the Parent University	
4.	Dr. Sumathi V Professor, Department of Electrical and Electronics Engineering, VIT, Chennai - 632014	External Subject Expert – Outside the Parent University	
5.	Mr. Isaac Patturaja G B, HR Manager SANMINA, Chennai - 600032	Industrial Expert	
6.	Mr. Rajesh P, Subject Matter Expert, Flex India, Tharamani, Chennai - 600113	Alumnus	
7.	Dr.R. Kanthimathi	Internal Subject Expert	
8.	Ms. S.L. Sreedevi	Internal Subject Expert	
9.	Mr.R. Tamilamuthan	Internal Subject Expert	
10.	Ms.B. Pandyselvi	Internal Subject Expert	
11.	All faculty members 10 of Technolog	Member	

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#### Agenda:

- 1. Chairman's presentation of Curriculum and Syllabus both PG and UG
- 2. Discussion about the Curriculum and Syllabus.

#### Minutes Agenda:

- 1. Introduction and Welcome: The Chairperson welcomed the members and introduced the agenda.
- 2. Review of Current Curriculum: The HOD presented an overview of the current curriculum. Members discussed the strengths and weaknesses.
- 3. Proposed Changes to Curriculum: The HOD presented proposed changes. Members discussed and provided feedback.
- 4. Discussion on Industry-Academia Collaboration: Members discussed ways to enhance industry-academia collaboration.
- 5. Any Other Business: No other business was discussed.

#### Minutes:

**Dr.K. Deepa**, Chairman of the Board of Studies (BOS), commenced the meeting by extending a warm welcome and providing an overview of the Department of Electrical And Electronics Engineering. He also took the opportunity to introduce the external members to the internal members. The Chairman then presented the following agenda to guide the discussions and deliberations of the members. The meeting's proceedings and outcomes are summarized below, aligned with the agenda items that were circulated prior to the meeting.

The Board of Studies (BoS) members have reviewed the syllabus for the following courses and provided their comments and suggestions, which are detailed below.

#### General and Curriculum Comments:-

1. Update the headings of Unit 1 and Unit 4 to accurately reflect the subject matter, improving the organization and coherence of the basic electrical and electronics engineering course.



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- The introduction to electrical and electronics profession should include analytical derivations to facilitate question mapping and deepen understanding of fundamental concepts.
- 3. Add analytical topics to Unit 5 Electric Vehicle in the introduction to electrical and electronics course for a more comprehensive learning experience.
- 4. **Basic electrical and electronics engineering** can omit topics on inventions, assuming prior knowledge from students' school education.
- 5. Expand the curriculum to include key topics like Power Factor Correction, Single Phase and Three Phase systems, and Delta-Star connections, providing a comprehensive foundation in basic electrical and electronics engineering.
- 6. Strengthen the foundational knowledge in basic electrical and electronics engineering by adding the analytical topics to Unit 1 and providing fundamental problems for Mesh and Nodal Analysis to reinforce understanding.
- 7. Sequence **the Idea Lab experiments** to start with fundamental topics: Series and Parallel Connection, Godown Wiring, and Basic Household Wiring, before moving on to the remaining experiments.
- 8. Assign a **total of 4 credits** to the combined topic of DC and AC Machines, reflecting its importance and depth in the curriculum.
- 9. Consult with industry experts to validate and refine the E-CAD topics, ensuring they align with current industry standards and practices.
- 10. Substitute ARM processor for 8085 and 8086 in MPMC to reflect modern industry standards.
- 11. Restructure the curriculum to offer electrical and electronics subjects in parallel across each semester, promoting a balanced learning experience.
- 12. Enhancing Control Systems content.
- 13. Revise the **Digital Logic Circuits curriculum** to introduce VHDL in Unit 2, creating a more cohesive and structured learning experience.
- 14. **Rearrange** the subject order and prerequisites to provide a logical progression of knowledge and skills, culminating in the application of Power Electronics to Solar and Wind Energy Systems.

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- 15. Enrich the curriculum by incorporating crucial topics such as Doubly Fed Induction Generator (DFIG) and Permanent Magnet Synchronous Generator (PMSIG), and consult with industry experts to ensure relevance and accuracy.
- 16. **Provide** High Voltage Engineering as an optional course, allowing students to explore this specialized field and expand their knowledge and skills.
- 17. Update the curriculum by substituting **Embedded C Programming with Python for Embedded Control**, and enhance the course by incorporating essential topics on Serial Peripheral Interface (SPI) and Inter-Integrated Circuit (I2C) communication protocols.
- 18. **Rearrange the subject sequence** in each semester to optimize the learning progression and ensure a logical flow of courses.

#### **Resolutions in Meeting:**

BoS resolved to recommend the following to the Academic Council for further approval.

- i) Curriculum for Professional core courses of B.E Electrical and Electronics Engineering as enclosed in Annexure I
- ii) List of Professional and Open Elective Courses in B.E. Electrical and Electronics Engineering Programme as enclosed in **Annexure II**
- iii) Syllabus for I<sup>st</sup> to 8<sup>th</sup> Semester of B.E Electrical and Electronics Engineering courses as enclosed in Annexure III to XI.
- iv) Curriculum for core courses of M.E. Power Electronics and Drives as enclosed in Annexure XII.
- v) Curriculum for Professional elective and open elective courses of M.E. Power Electronics and Drives as enclosed in Annexure XIII.

Meeting then ended with a vote of thanks by Mrs.S.L.Sreedevi, Assistant Professor/EEE.





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S.V. Anbuselvi,

Professor.

Subject Expert - University Nominee, Department of Electrical and Electronics Engineering, Anna University, Chennai - 600025

Dr. R. Sridhar,

Professor, External Subject Expert, Department of Electrical and Electronics Engineering,

SRMIST, Kattankulathur, Chennai-603203

G3. Stevening a Mr. Isaac Patturaja G B,

Industry Expert, HR Manager SANMINA.

Chennai-600032

Dr.R. Kanthimathi

Asso.Professor

Department of Electrical and Electronics

Engineering,

Peri Institute of Technology Tambaram, Mannivakkam, Chennai-48

Mr.R. Tamilamuthan

Asst. Professor

Department of Electrical and Electronics

Engineering,

Peri Institute of Technology

Tambaram, Mannivakkam, Chennai- 48

Professor, External Subject Expert Department of Electrical and Electronics Engineering, VIT, Chennai-632014

Alumnus, Subject Matter Expert,

Flex India,

Tharamani, Chennai - 600113

Head & Asst. Professor.

Department of Electrical and Electronics

Engineering,

PERI Institute of Technology, Tambaram, Mannivakkam, Chennai-48

Ms.B. Pandyselvi

Asst. Professor

Department of Electrical and Electronics

Engineering,

Peri Institute of Technology

Tambaram, Mannivakkam, Chennai- 48

Dr.K. Deepa

Professor,

Department of Electrical and Electronics Engineering,

Peri Institute of Technology

Tambaram, Mannivakkam, Chennai-48 CHAIRMAN

Board of Studies

Department of EEE PERI Institute of Technology (A)

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Based on the minutes of BOS meeting -1. The following modifications were made

- The curriculum has been redesigned to provide a parallel delivery of electrical and electronics courses across semesters, fostering a well-rounded learning experience.

  (Annexure I page no.1 to 4)
- The curriculum revision includes the addition of **Embedded C Programming** and **Python for Embedded Systems**, accompanied by the incorporation of vital topics on SPI and I2C communication protocols, enriching the course content. (Annexure I page no.1)
- The course order and prerequisites have been rearranged to provide a logical progression of knowledge and skills, culminating in the application of Power Electronics to Solar and Wind Energy Systems (Annexure I page no.1 to 4)
- A logical flow of courses has been established through the rearrangement of the subject sequence in each semester, optimizing the learning progression. (Annexure I page no.1 to 4)
- ➤ High Voltage Engineering course has been offered as an professional elective course, allowing students to explore this specialized field and expand their knowledge and skills. (Annexure II page no.5)
- The headings of Unit 1 and Unit 4 in the Basic Electrical and Electronics Engineering course have been updated. (Annexure III page no.8)
- In consideration of student's foundational knowledge gained in school, topics related to inventions have been removed from the course "Basic Electrical and Electronics Engineering." (Annexure III page no.8)
- The curriculum has been expanded to include key topics like Power Factor Correction, Single Phase and Three Phase systems, and Delta-Star connections, providing a comprehensive foundation in Basic Electrical and Electronics Engineering. (Annexure III page no.8)
- The foundational knowledge in **Basic Electrical and Electronics Engineering** has been strengthened by adding analytical topics to Unit 1, and is further reinforced by providing fundamental problems for Mesh and Nodal Analysis. (Annexure III page no.8)
- Analytical derivations have been incorporated into the 'Introduction to Electrical and Electronics Engineering Profession' course to facilitate question mapping and promote a deeper understanding of core concepts." (Annexure IV page no.11)
- Analytical topics have been integrated into Unit 5 Electric Vehicle, enriching the Introduction to Electrical and Electronics Engineering Profession' course with a more detailed and comprehensive exploration of electric vehicle concepts." (Annexure IV page no.11).





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- The experiments in the Idea Lab are arranged to begin with foundational topics such as Series and Parallel Connection, Godown Wiring, and Basic Household Wiring, followed by the remaining experiments, (Annexure V page no.14)
- The combined topic of course **DC** and **AC** Machines has been allocated 4 credits, acknowledging its significance and comprehensive coverage in the curriculum. (Annexure VI page no.17)
- E-CAD course topics have been validated and refined through consultation with industry experts, ensuring alignment with current industry standards and practices (Annexure VII page no.20)
- The 8085 and 8086 processors have been replaced with ARM processors in Microprocessor and Interfacing Techniques course, reflecting modern industry standards (Annexure VIII page no.23)
- Enhancements have been made to the Control Systems course content (Annexure IX page no.26)
- The **Digital Logic Circuits** course has been revised to introduce VHDL in Unit 2, creating a more cohesive and structured learning experience (Annexure X page no.29)
- The curriculum has been enriched by incorporating crucial topics such as Doubly Fed Induction Generator (DFIG) and Permanent Magnet Synchronous Generator (PMSIG) in the course Design Installation and Commissioning of Solar and Wind Energy Systems. (Annexure XI page no.32)
- The Curriculum for the **PG Program Power Electronics and Drives** upto 4<sup>th</sup> Semester was listed for approval by the Board of Studies Members. (Annexure XII page no.36)
- The List of Professional elective and open elective of **PG Program Power Electronics** and **Drives** Course upto 4<sup>th</sup> Semester was listed for approval by the Board of Studies Members. (Annexure XII page no.38)





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10.	Ms.B. Pandyselvi	Internal Subject Expert	B. Hulysels				

