



NEW HORIZON
COLLEGE OF ENGINEERING
New Horizon Knowledge Park, Ring Road, Marathalli
Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC
Accredited by NAAC with 'A' Grade. Accredited by NBA

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

10th BOARD OF STUDIES MEETING

DATE : 29.06.2024
VENUE : Schneider Electric Laboratory
(Room No: B-001)
TIME : 10 AM – 1 PM

CONTENTS

Sl. No	PARTICULARS	Page No
1	Agenda for the meeting	3
2	List of Members	4
3	List of Members present	6
4	Agenda 1: Welcome address by Chairman of BOS and Introduction of members	8
5	Agenda 2: Approval of scheme and syllabus for the AY: 2024-2025, II year (III and IV semester) EEE Program.	8
6	Agenda 3: Approval of scheme and syllabus for the AY: 2024-2025, III year (V and VI semester) EEE Program.	9
7	Agenda 4: Approval of scheme and syllabus for the AY: 2024-2025, IV year (VII and VIII semester) EEE Program.	17
8	Agenda 5: Approval of Syllabus for Basic Electrical engineering –Common first year course	
9	Agenda 6: Revision of Vision, mission of the department	24
10	Recommendations of the Board	25
11	Vote of thanks by Chairman of BoS	26

AGENDA FOR THE MEETING

Agenda 1: Welcome address by BoS Chairman.

Agenda 2: Approval of scheme and syllabus for the AY: 2024-2025, II year (III and IV semester) EEE Program.

Agenda 3: Approval of scheme and syllabus for the AY: 2024-2025, III year (V and VI semester) EEE Program.

Agenda 4: Approval of scheme and syllabus for the AY: 2024-2025, IV year (VII and VIII semester) EEE Program.

Agenda 5: Approval of Syllabus for Basic Electrical engineering –Common first year course

Agenda 6: Revision of Vision, mission of the department

Agenda 7: Suggestions from BoS members.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

LIST OF MEMBERS- BOARD OF STUDIES AY: 2024-2025

S. No	Category	Nomination of the committee	Name of the person	Designation & Affiliation
1	Head of the Department	Chairperson	Dr.Sakthivel Aruchamy	HoD & Professor, NHCE, Bangalore
2	Special Invitees (one academician from Institution of National Eminence, IIT,NIT,IIM,IISC)	1	Dr. Manjunatha	Principal, NHCE
		2	Dr.R.J.Anandhi	Dean Academics, NHCE
		3	Dr.L.Umanand	Professor, Center for Electronics and Design Technology (CEDT), Indian Institute of Science, Bangalore, lums@iisc.ac.in
		4	Dr.Sanjeev Sharma	Dean – QA & IIE, NHCE
3	Faculty member at different level with different specialization	Members		
		1	Dr.Sujitha S	Professor, NHCE
		2	Dr.Vinoth Kumar K	Professor, NHCE
		3	Dr.Gunapriya B	Associate Professor, NHCE
		4	Dr.Mohan Das R	Associate Professor, NHCE
		5	Dr.Karthika M	Senior Assistant Professor, NHCE
4		Members		
	Subject expert from outside the college nominated by Academic Council	1.	Dr.Amuthan N	Professor Department of EEE AMC Engineering College , Bengaluru-560 083 amuthan.nallathambi@amceducation.in 9632284805
		2.	Dr.Surekha P	Asst. Professor (Sr. Gr) EEE, Amrita School of Engineering, Bengaluru, Amrita Vishwa Vidyapeetham, India. p_surekha@blr.amrita.edu 88847 33747
5		Member		

	Experts from outside the college nominated by VTU	1	Dr.Samanvitha N	Professor, NITTE Meenakshi Institute of Technology, Bengaluru-560064 samanvitha.n@nmit.ac.in 9731777517
6	Representative from Industry / Corporate sector / allied area related to placements, nominated by Academic Council	Members		
		1	Dr.B.Hariram S Satheesh	R&D Team Manager MOSE - IN Modernization Digital R&D, ABB Global Industries and Services Private Ltd, Bengaluru. Hariram.satheesh@in.ABB.com 7609 98708
		2	Mr.K.Jeykishan Kumar	Engineering Officer, Central Power Research Institute, Energy efficiency & Renewable Division, CPRI, PB NO.8066, Prof.Sir. CV Raman road, Bangalore-560080, Karnataka. jeykishan@cpri.in 9953795473
7	Under Graduate meritorious alumni nominated by Principal	Members		
		1	Mr.Thomas Allwin Anto	Embedded Software Engineer, Bosch Automotive Industry, Bangalore, thomasallwinanto@gmail.com 9148249642
		2	Ms.Rachna Palli	Graduate Engineer Trainee PLM Indishtech Pvt. Ltd. Thamarai Kannan Rd, Halasuru, Murphy Town, Bengaluru, Karnataka 560008 rachnapalli@gmail.com 9448491013
8	Co-opted members	Members		
		1	Ms.Anitha A	Senior Assistant Professor, NHCE
		2	Mr.Sunil S K	Senior Assistant Professor, NHCE
		3	Mr.Vinod kumar S	Senior Assistant Professor, NHCE
		4	Mr.Kartheek vankadara	Assistant Professor, NHCE
		5	Ms.Sangeetha C N	Assistant Professor, NHCE
		6	Ms.Soumya K V	Assistant Professor, NHCE
		7	Ms.Anitha Nair A S	Assistant Professor, NHCE



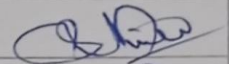
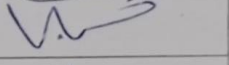

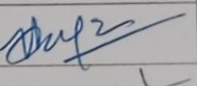
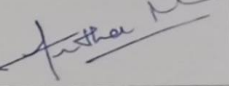
NEW HORIZON
COLLEGE OF ENGINEERING
New Horizon Knowledge Park, Ring Road, Marathalli
Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC
Accredited by NAAC with 'A' Grade. Accredited by NBA

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

LIST OF BOS MEMBERS PRESENT IN THE MEETING (AY: 2024-2025)-29.06.2024

S.NO	NAME	DESIGNATION & AFFILIATION	SIGNATURE
BoS Chairman			
1	Dr. Sakthivel Aruchamy	HoD/Professor, NHCE, Bangalore	
Special Invitees			
2	Dr. Manjunatha	Principal, NHCE	
3	Dr. R. J Anandhi	Dean Academics, NHCE	
4	Dr. L Umanand	Professor, Center for Electronics and Design Technology (CEDT), Indian Institute of Science, Bangalore, lums@iisc.ac.in	ON LINE
5	Dr. Sanjeev Sharma	Dean – QA & IIE, NHCE	
Academic Expert			
6	Dr. Amuthan N	Professor Department of EEE AMC Engineering College , Bengaluru-560 083 amuthan.nallathambi@amceducation.in 9632284805	ON LINE
7	Dr Surekha P	Asst. Professor (Sr. Gr) EEE, Amrita School of Engineering, Bengaluru, Amrita Vishwa Vidyapeetham, India. p_surekha@blr.amrita.edu 88847 33747	ON LINE
VTU nominee			
8	Dr. Samanvita N	Professor, NITTE Meenakshi Institute of Technology, Bengaluru-560064 samanvita.n@nmit.ac.in 9731777517	 29/6/24

Industry Experts			
9	Dr B Hariram S Satheesh	R&D Team Manager MOSE - IN Modernization Digital R&D, ABB Global Industries and Services Private Ltd, Bangaluru. Hariram.satheesh@in.ABB.com 7609 98708	ON LINE
10	Mr K Jeykishan Kumar	Engineering Officer, Central Power Research Institute, Energy efficiency & Renewable Division, CPRI, PB NO.8066, Prof.Sir. CV Raman road, Bangalore- 560080, Karnataka. jeykishan@cpri.in 9953795473	<i>Alhan</i> 29/06/24
Faculty member at different level with different specialization			
11	Dr.Sujitha S	Professor, NHCE	ABSENT
12	Dr.Vinoth Kumar K	Professor, NHCE	<i>Vinoth</i> 29/6/24
13	Dr.Gunapriya B	Associate Professor, NHCE	<i>Gunapriya</i> 29/6/24
14	Dr. Mohan Das R	Associate Professor, NHCE	<i>M R</i> 29/6/24
15	Dr.Karthika M	Senior Assistant Professor, NHCE	<i>Karthika</i>
Meritorious alumni			
16	Mr Thomas Allwin Anto	Embedded Software Engineer, Bosch Automotive Industry, Bangalore, thomasallwinanto@gmail.com 9148249642	<i>Allwin</i>
17	Ms.Rachna Palli	Graduate Engineer Trainee PLM Indishtech Pvt. Ltd. Thamarai Kannan Rd, Halasuru, Murphy Town, Bengaluru, Karnataka 560008 rachnapalli@gmail.com 9448491013	<i>Rachna</i>
Co-opted faculty members			
18	Ms Anitha A	Senior Assistant Professor, NHCE	<i>Anitha</i>
19	Mr Sunil S K	Senior Assistant Professor, NHCE	<i>Sunil</i>

20	Mr Vinod Kumar S	Senior Assistant Professor, NHCE	
21	Mr Kartheek Vankadara	Assistant Professor, NHCE	
22	Ms Sangeetha C N	Assistant Professor, NHCE	
23	Ms Soumya K V	Assistant Professor, NHCE	
24	Ms Anitha Nair A S	Assistant Professor, NHCE	

NEW HORIZON COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
WELCOME ADDRESS BY THE CHAIRMAN OF BOS AND INTRODUCTION OF MEMBERS

Minutes

Dr.Sakthivel Aruchamy, Chairman of BOS, welcomed the BoS members and introduced the significance of autonomy in the context of engineering education from industry perspective. The chairman briefed the gathering about the various regulations being followed in the department and emphasized the need for revision in curriculum and syllabi based on the inputs from various stake holders.

AGENDA -2

**Approval of scheme and syllabus for the AY: 2024-2025, II year (III and IV semester)
EEE Program**

Minutes

- *Scheme & Syllabus of II-year -2023-2027 Batch (III & IV semesters) has been reviewed.*
- *Suggestions from BoS members have been acknowledged and discussed in detail.*
- *Scheme & Syllabus of II Year 2023-2027 Batch (III & IV semesters) has been unanimously approved by all the members.*

AGENDA -3

**Approval of scheme and syllabus for the AY: 2024-2025, III year (V and VI semester)
EEE Program.**

Minutes

- *Scheme & Syllabus of III-year -2022-2026 Batch (V & VI semesters) has been reviewed.*
- *Suggestions from BoS members have been acknowledged and discussed in detail.*
- *Scheme & Syllabus of III Year 2022-2026 Batch (V & VI semesters) has been unanimously approved by all the members.*

AGENDA -4

**Approval of scheme and syllabus for the AY: 2024-2025, IV year (VII and VIII
semester) EEE Program.**

Minutes

- *Scheme & Syllabus of IV-year -2021-2025 Batch (VII & VIII semesters) has been reviewed.*
- *Suggestions from BoS members have been acknowledged and discussed in detail.*

- *Scheme & Syllabus of IV-year -2021-2025 Batch (VII & VIII semesters) has been unanimously approved by all the members.*

AGENDA -5

Approval of Syllabus for Basic Electrical engineering –Common first year course

- *Syllabus of 1 year course Basic Electrical Engineering of 2024-2028 Batch (I & II semesters) has been reviewed.*
- *Suggestions from BoS members have been acknowledged and discussed in detail.*
- *Syllabus of 1 year course Basic Electrical Engineering of 2024-2028 Batch (I & II semesters) has been unanimously approved by all the members.*

AGENDA -6

Revision of Vision, mission of the department-Any

- *All the BoS members are agreed to retain the Vision and Mission of the department and suggested to make modifications in the Program Specific Outcomes.*



Department of Electrical and Electronics Engineering
BoS meeting-AY: 2024-2025

RECOMMENDATIONS OF THE BOARD

The agenda and scheme and syllabus were already circulated among the committee members and the following recommendations were by external BoS members.

Suggestions from Dr Samanvita N, VTU nominee, Professor in EEE, NITTE Meenakshi Institute of Technology, Bengaluru

1. Recommended that the Ability enhanced courses-Embedded systems and Microcontroller can be included as a core so that students can have a broad knowledge in microcontroller coding.
2. Suggested to include Measurements and Instrumentation and Signals and Systems as a Professional core course instead of elective course. Since, the course is important for GATE exam preparation and for getting placed in industries and for higher education.
3. The courses on sustainability and certification on those course has to be included to give more weightage for the global requirements.

Suggestions from Surekha P, Asst. Professor (Sr. Gr), EEE, Amrita School of Engineering, Bengaluru.,

3rd and 4th Semester Scheme & Syllabus

1. It is recommended to adopt the L-T-P-C pattern of 2-0-1-0 for Engineering Science Courses.
2. It is suggested to include an integrated laboratory component for the course on Numerical Methods.
3. The initiative to provide web links to online learning tools is commendable.
4. It is recommended to add an integrated lab with sensors and actuators, if not already available, to enhance students' practical understanding of the course.
5. Please consider introducing laboratory experiments related to Signals and Systems in the course "Introduction to MATLAB."
6. It is suggested to generalize references to specific software tools by removing names such as "MATLAB" and "SCILAB."

7. For the course “Programming of Internet of Things,” the content is appropriate; however, it is suggested to remove specific terms like Arduino and ESP32. Let the student be given the freedom to choose the hardware.
8. For the course “Advanced Arduino Programming,” it is suggested to change the title to “Advanced IoT.”

5th and 6th Semester Scheme & Syllabus

1. In the course “CMOS VLSI DESIGN” – kindly check the possibility to provide an overview of advanced CMOS concepts such as FinFET Technology and Gate All Around Technology.

7th Semester Scheme and Syllabus

2. In the course “MACHINE LEARNING FOR ELECTRICAL ENGINEERING” suggesting to include ML applications for Smart Grid in the last module

Suggestions from Dr. Amuthan N, Professor, AMC Engineering College, Bengaluru

1. The syllabus could benefit from a stronger emphasis on emerging technologies like renewable energy in electric charging, programming Language like Mojos, IoT, Hydrogen Energy and Prompt Engineering.
2. Consider incorporating project-based learning opportunities throughout the program to encourage problem-solving and innovation.
3. Explore options for introducing electives related to Prompt Engineering and Automation to equip students for the future workforce.
4. Reviewing course content for redundancy and ensuring a clear progression of difficulty across semesters.

Suggestions from Dr Hariram Satheesh (Industry Expert), R&D Team Manager MOSE - IN Modernization Digital R&D, ABB Global Industries and Services Private Ltd, Bengaluru

1. Digital Logic Design-Introduction to FPGA/CPLDS before HDL programming can be added.
2. Microcontroller and Embedded Systems Laboratory-An exposure to RTOS should help the student
3. Signals and Systems- Since the student would have gone through transforms in mathematics it is good to let the student learn application of transforms in time/frequency domain analysis.
4. Measurements and Instrumentation- exposing digital means for measurements and instrumentation
4. OOPs using Java- Can it be C++. Electrical Engineers getting into embedded type of job would benefit out of C++ than Java
5. Introduction to MATLAB- the name of the subject to be Introduction to Scientific Computing and use matlab inside the content.

Suggestions from K Jeykishan Kumar (Industry expert), Engineering Officer, Central Power Research Institute, Energy efficiency & Renewable Division, CPRI, Bengaluru

1. In electric vehicles, the charging technologies can be included with SoC, SoH
2. Instead of Induction motor drives BLDC and PMSM can be included
3. Fuel cell concepts has to be added
4. End of I year, students can be send to the internship on Government Organization (CPRI) to get exposure to the core related job opportunities

Suggestions from Mr. Thomas Allwin Anto (Meritorious alumni), Embedded Software Engineer, Bosch Automotive Industry, Bangalore, and Ms Rachana Palli, Graduate Engineer Trainee PLM Indishtech Pvt. Ltd. Thamarai Kannan Rd, Halasuru, Murphy Town, Bengaluru.

1. Students should focus on internship in Ultraviolet/ether companies to gain core knowledge
2. Power system protection can be a separate course
3. Students should have approved IEEE membership to get exposure to the advanced technologies
4. Flexi AI course can be added in the curriculum

Revision of Vision, Mission, PEOS and PSOs:

All the BoS members are agreed to retain the Vision and Mission of the department and suggested to make modifications in the Program Specific Outcomes (PSOs).

VOTE OF THANKS BY THE CHAIRMAN-BoS

The Chairman thanked all the members for having participated in the meeting and contributed in framing the curriculum and syllabus for 2021-2025 batch, 2022-2026 batch and 2023-2027 Batch.

Glimpses of BoS meeting for the AY: 2024-2025 –Dt: 29.06.2024

