

Department of Electrical and Electronics Engineering

MINUTES 15th Meeting of the Board of studies held on
25th June 2021 at 02.00 PM

Meeting Mode: Through online (GoogleMeet)

Google Meet Link: <http://meet.google.com/jyk-mapj-tki>

National Engineering College, K.R.Nagar, Kovilpatti – 628 503

(An Autonomous Institution - Affiliated to Anna University, Chennai)

www.nec.edu.in

Department of Electrical and Electronics Engineering

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14th Board of studies Meeting in the Department of Electrical and Electronics Engineering

Meeting Mode: Through online (GoogleMeet)

Google Meet Link: <http://meet.google.com/jyk-mapj-tki>

Date & Time: 25.06.2021 & 02.00 PM

AGENDA

- BoS / EEE 15.1 : Welcome address and Opening Remarks by Chairman, Board of studies in the Department of Electrical and Electronics Engineering
- BoS / EEE 15.2 : Confirmation of the Minutes of the 14th meeting of Board of Studies in the Department of Electrical and Electronics Engineering held on 29th December 2020, and Action Taken report of 14th meeting of Board of studies
- BoS / EEE 15.3 : Business brought forward by the Chairman, Board of studies
15.3.1 Introduction of a new elective course “Mobile Robots and Control” in curriculum for UG degree programmes under R-2019
15.3.2 Programme elective courses for UG degree programmes under R-2019
- BoS / EEE 15.4 : Any other items
- BoS / EEE 15.5 : Suggestions given by the BoS Members

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F. No. 1-1/NEC/EEE.

25th June, 2021

Dear Sir/Madam,

Sub: Minutes of the 15th Meeting of the Board of studies in the EEE-Reg.

Kindly find attached herewith the Minutes of the 15th Meeting of Board of studies of the Electrical and Electronics Engineering of the National Engineering College, K.R.Nagar, Kovilpatti – 628 503 held on 25th June, 2021 at 02.00 PM in National Engineering college, through GoogleMeet. Hard copy of the Minutes is also being sent to you by speed post.

It is requested that comments on the Minutes, if any, may please be sent by email at hodeee@nec.edu.in or by post, at the earliest. If no comments are received, within ten days, the Minutes shall be taken as confirmed. With Kind Regards,

Yours Sincerely


Dr.M.Willjuice Iruthayarajan

Department of Electrical and Electronics Engineering

MINUTES OF THE MEETING

The 15^h Meeting of the Board of studies of the Electrical and Electronics Engineering was held on 25th June, 2021 at 02.00 PM in National Engineering college, through GoogleMeet.

The following members were present:

1.	Dr.M.Willjuice Iruthayarajan Professor and Head/ EEE	Chairman
2.	Dr.L.Kalaivani Professor/ EEE	Internal Members
3.	Dr.R.V.Maheswari Professor/ EEE	
4.	Dr.M.Ravindran Associate Professor (S.G) / EEE	
5.	Dr.N.B.Prakash Associate Professor / EEE	
6.	Dr.M.P.E.Rajamani Assistant Professor (S.G) / EEE	Academic Expert
7.	Dr. V. Suresh Kumar, Professor, Department of Electrical and Electronics Engineering, Thiagarajar College of Engineering, Madurai, Tamilnadu.	
8.	Dr. Rajesh Joseph Abraham Associate Professor, Department of Avionics, Indian Institute of Space Science and Technology, Valiamala P.O., Thiruvananthapuram, Kerala.	University Nominee
9.	Dr. S. Usa, Professor, Department of Electrical and Electronics Engineering, CEG Campus, Anna University, Chennai.	
10.	Dr. S. Paramasivam, R&D Head, Electrical Drives, Danfoss Industries Ltd., Chennai	Industrial Expert

11.	Dr. Santosh Kumar Annadurai GE T&D Ltd., GIS R&D Centre, Unit R&D Head, Padappai, Chennai.	
12.	Mr. M. Ramesh Senior Technical Engineer, Hardware Design and Development, Data Patterns India Pvt. Ltd., Chennai.	
13.	Mr. J. S. Jekhan, Second Year / EEE	Student Members
14.	Ms. J. Joyslin Janet, Second Year / EEE	

The Internal Member, Dr.G.Kannayeram Assistant Professor(S.G) / EEE, Industrial Experts Dr. Hariram Satheesh, Principal Scientist, ABB Global Industries and Services Ltd, Bangalore & Mr.S.Subramanian, Senior Maintenance Engineering (I), Kudankulam Nuclear Power Project, Kudankulam, the Meritorious Alumnus Mr. R. Jayakumar, Assistant Vice President, Wipro Technology Ltd., Bangalore could not attend the meeting due to his prior commitments and unavoidable reasons and were granted leave of absence.

BoS / EEE 15.1	:	WELCOME ADDRESS AND OPENING REMARKS BY CHAIRMAN, BOARD OF STUDIES IN THE DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
		The Chairman, BOS of the Electrical and Electronics Engineering welcomed and introduced the members of 15 th Board of Studies and thanked each one of them for sparing their valuable time to attend the meeting.
BoS / EEE 15.2	:	TO CONFIRM THE MINUTES OF FOURTEENTH BOS MEETING HELD ON 29 th DECEMBER 2020
		The minutes of the Fourteenth Board of Studies meeting held on 29 th December 2020 were communicated to the members vide letter No. F. No. 1-1/NEC/EEE, Dated 29.12.2020. The comments received have been incorporated and placed for confirmation. The same was approved by the 14 th Academic council. <u>Action Taken Report</u> (Enclosed in Annexure I)

BoS / EEE 15.3.1	:	TO CONFIRM AND APPROVE THE INTRODUCTION OF NEW ELECTIVE COURSE IN CURRICULUM FOR UG (B.E. – EEE) PROGRAMME UNDER R-2019
		RESOLVED TO approve the introduction new elective course “Mobile Robots and Control” in curriculum for UG (B.E. – EEE) PROGRAMME under R-2019.
Bos/EEE 15.3.2	:	TO CONFIRM AND APPROVE THE SYLLABUS OF PROGRAMME ELECTIVE COURSES FOR UG (B.E. – EEE) PROGRAMME UNDER R-2019
		RESOLVED TO approve the syllabus of programme elective courses for UG (B.E. – EEE) PROGRAMME under R-2019.
Bos/EEE 15.4	:	ANY OTHER ITEMS, IF ANY, WITH THE PERMISSION OF THE CHAIRMAN OF THE BOS
15.4.1	:	The course “Switchgear and Protection Laboratory” is suggested to give as one credit elective laboratory course instead of core course in seventh semester.
Bos/EEE 15.5	:	SUGGESTIONS GIVEN BY THE BOS MEMBERS
15.5.1	:	In the course “Special Electrical Machines”, topics such as PCB motor and flux switch machine may be included in Unit – V.
15.5.2	:	In the course “Power Electronics for Renewable Energy Systems”, the content of the syllabus may be framed with broad concepts of converters and inverters.
15.5.3	:	In the course “Power Electronics for Renewable Energy Systems”, the content related to generators may be reduced in the syllabus.
15.5.4	:	In the course “Power System Transients”, Unit – III may be included with the contents of Grounding and Earthing requirements, Earthing resistance, and Safety measures against lightning.
15.5.5	:	In the course “Power System Transients”, Unit – IV may be

		completely changed to incorporate the contents such as protection and suppression of transients.
15.5.6	:	In the course "Power System Transients", Unit – V may be included with the contents of Modelling of Lightning and over-voltage scenario.
15.5.7	:	In the course "Power Quality", course content may be expanded with other key elements related to power quality as per IEEE1159 standard.
15.5.8	:	In the course "Power Quality", the contents such as Application of Power factor adjustments in power plants, permitted load curves and PF, Generator vibration and VAR load may be included in Unit – III.
15.5.9	:	In the course "Power Quality", the title of Unit – IV may be changed.
15.5.10	:	For the course "CAD of Electrical Apparatus", L T P C may be changed to convert the course for incorporating tutorial classes.
15.5.11	:	In the course "CAD of Electrical Apparatus", the title of Unit – II may be changed.
15.5.12	:	In the course "CAD of Electrical Apparatus", Unit – IV and Unit – V may be given equal weightage to include application related topics.
15.5.13	:	In the course "CAD of Electrical Apparatus", some more reference books may be added.
15.5.14	:	In the course "Insulation Technology", the additional content of moisture interaction with insulation may be added in Unit – II.
15.5.15	:	In the course "Insulation Technology", the contents of effect of moisture and importance of purity may be added in Unit – IV.
15.5.16	:	In the course "Insulation Technology", some contents may be added related to alternate insulation, and degradable and non degradable insulation.
15.5.17	:	In the course "Logic and Distributed Control System", the content of Unit – I may be included with Scan time and Scan

		cycle, Case study of multiple parameters and logics and Inputs-Outputs.
15.5.18	:	In the course “Logic and Distributed Control System”, contents such as Time synchronization, Time stamping of events may be included in Unit – III.
15.5.19	:	In the course “Logic and Distributed Control System”, the content of Unit – IV may be included with the topics such as Watchdog controller for error detection, H/W or S/W defects, and Master slave concept.
15.5.20	:	In the course “Logic and Distributed Control System”, the contents such as Topology of lower and upper level controls and monitoring, GPS clock synchronizer in DCS may be included in Unit – V.
15.5.21	:	In the course “Digital Signal Processing”, the content of Unit – V may be modified with latest processor used by industry in motor control and multiprocessing applications.
15.5.22	:	In the course “Robotics and Automation”, some more reference books may be included.
15.5.23	:	In the course “Mobile Robots and Control”, the contents related to remote control through wireless communication and connected robots may be added in Unit – V
15.5.24	:	Contents in the course “Advanced Microprocessor and Microcontroller” in the course may be changed to incorporate the latest processor and technology used in industry.
15.5.25	:	In the course “Advanced Microprocessor and Microcontroller”, the content such as Industrial applications, Data processing and controls, and Data acquisition utilities may be included.
15.5.26	:	In the course “Advanced Microprocessor and Microcontroller”, the content related to Building logics and controls with Arduino for applications may be included in the application portion of Arduino.
15.5.27	:	In the course “Automotive Electrical and Electronics”, wireless charging technology may be included in Unit – III.

The members had a brainstorming discussion and interaction among themselves. After discussion, fruitful suggestions were incorporated appropriately in the Curriculum and Syllabi. Based on the suggestions given by the members, BOS resolved to recommend the following to the Academic Council for further approval.

Dr. M. Bakrutheen, Assistant Professor (Senior Grade) /EEE thanked all the members for their kind cooperation and the meeting came to an end.

M. Bakrutheen
25/10/2021
CHAIRMAN
BOARD OF STUDIES

Annexure – I

Action Taken on Suggestions from 14th BOS Meeting

Suggestions	Action Taken
In the course Power Systems-II, the topic SCADA and wide area monitoring system may be included.	Corrections are incorporated in the curriculum and syllabus
In the course Switchgear and Protection, the topic integration of SCADA along with wide area monitoring system may be included.	
The course Title, "Protection and Switchgear Laboratory" may be renamed as " Switchgear and Protection Laboratory"	
The one credit courses "Computational Fluid Dynamics" and "Electrical Stress Analysis", may be given as 3 credit programme elective courses with additional contents.	The following suggestions will be incorporated in the next BOS meeting
In the one credit course "Digital substation", the contents GOOSE, Substation communication and protocol, may be removed.	
The course related to network and communication may be given as one credit course.	
The effort taken by faculty for their own video lectures, conducting assessments for the courses is appreciated by the external members.	Thanks for the compliments.


EEE Board Chairman