



MAR BASELIOS COLLEGE OF ENGINEERING AND TECHNOLOGY(MBCET)
THIRUVANANTHAPURAM-695015

MINUTES OF MEETING OF THE FOURTH MEETING OF THE BOARD OF STUDIES
(AUTONOMOUS) HELD IN FARADAY HALL ON 10.08.2022 (WEDNESDAY) AT 10:15 AM

Members present:

1	Dr. Nisha G. K.	Chairman
2	Dr. K. K. Sasi (Attended Online)	Member
3	Dr. Isha T. B (Attended Online)	Member
4	Dr. I. Jacob Raglend (Attended Online)	Member
5	Mr. Premsagar B. (Attended Online)	Member
6	Mr. Nandagopal J L (Attended Online)	Member
7	Prof. Saju N. (Attended Online)	Member
8	Dr. S. Ushakumari	Member
9	Ms. Elizabeth Varghese	Member
10	Dr. Shalu George K	Member Secretary
11	Mr. R. S. Praveen Raj	Member
12	Ms. P. Sheenu	Member
13	Mr. F. R. Rejish Babu	Member
14	Ms. P. Sandhya	Member
15	Ms. A. V. Soumya	Member
16	Ms. Shyju Susan Mathew	Member
17	Ms. C. Sojy Rajan	Member
18	Ms. Vandana P.	Member
19	Mr. Aswin R. B.	Member
20	Ms. Archana A. N.	Member
21	Ms. Jeneena Babu	Member
22	Ms. Shilpa Susan Peter	Member
23	Ms. Shilpa George	Member
24	Mr. Ajish Ashok	Member
25	Ms. Anila A V	Member

Members on leave:

Dr. Paul K. Joseph



MINUTES

Agenda Note Item	Subject
EE:BS 4.01	<p>(a) Invocation (b) Welcome Note by Chair (c) Confirmation of the Minutes of the Third Meeting of the Board of Studies held on 19/11/2021.</p>
Gist	<p>The meeting started with a silent prayer. The Member Secretary apprised that there was quorum for the meeting as 25 members were present for the meeting. The Chairman welcomed all the Subject Experts and the faculty members to the Board of Studies. The Minutes of the Third Meeting of the Board of Studies held on 19/11/2021 was confirmed by the members.</p>
EE:BS 4.02	<p>Report on the actions taken/actions pending on the pertinent decisions in the Minutes of the Third Meeting of the Board of Studies held on 19/11/2021.</p>
Decision	<p>The Chairman presented the modifications made as per the suggestions given by the BoS in the last meeting. The BoS reviewed and accepted the same.</p>
EE:BS 4.03	<p>Report on overview of the achievements in the Department after the Third meeting of Board of Studies held on 19/11/2021.</p>
Decision	<p>The Chairman presented an overview of the achievements in the Department after the third meeting of Board of Studies held on 19/11/2021. The BoS noted the same.</p>
EE:BS 4.04	<p>Considering the B.Tech Curriculum 2022 for the new B.Tech programme in Electrical and Computer Engineering.</p>
Decision	<p>The Chairman presented the B.Tech Curriculum 2022 for the new B.Tech programme in Electrical and Computer Engineering. The following suggestions were given by the BOS members.</p> <ul style="list-style-type: none"> • The COs of Engineering Physics and Engineering Chemistry and the corresponding labs are to be modified. • In Programme Elective II, Illumination Engineering may be changed to Modern Illumination Control, which has scope for Sensor networks, Cloud Computing etc. Similarly, Electromagnetic Theory and Applications may be changed to Electromagnetic Compatibility. • In Programme Elective IV, Electrical Machine Design may be changed to Computer Aided Design of Electrical Machines. • In Minors Basket IV, the second, third and fourth subjects are almost similar, they need to be separated and make corrections later. • In Honours Group III, first course Network Analysis and Synthesis may be removed and Embedded System Applications in Smart Grid/Network Communication/Sensor and Networks/AI Applications in Smart Grids can be included.
EE:BS 4.05	<p>Considering the B.Tech first year syllabus for the new B.Tech programme in Electrical and Computer Engineering.</p>
Decision	<p>The Chairman presented the B.Tech first year syllabus for the new B.Tech programme in Electrical and Computer Engineering. Some rework is being performed in the Syllabus as per the suggestions from the BoS members and it will be brought back for approval of BoS.</p>



	<ul style="list-style-type: none"> • Engineering Graphics: Syllabus given is for Engineering Drawing, not for graphics as such. • Basics of Electrical and Electronics Engineering: CO2 shall be changed to Describe the AC fundamentals, instead of AC generation; also, CO3, it should not be principles of passive components.
EE:BS 4.06	Considering the revised Curriculum 2022 of M.Tech Programme in Power Control and Drives.
Decision	<p>The Chairman presented the revised Curriculum 2022 of M.Tech programme in Power Control and Drives under Autonomy.</p> <ul style="list-style-type: none"> • In the Question paper pattern, avoid mentioning 'numerical questions' in Part A. The evaluation pattern should be based on the COs and each question should specify the BTL targeted. This should be mentioned in the curriculum. • Drives and Simulation Lab could have been Electric Drives and Simulation Lab. <p>The BoS recommended Curriculum for the M.Tech Programme for further action.</p>
EE:BS 4 .07	Considering the full Syllabus 2022 of M.Tech Programme in Power Control and Drives.
Decision	<p>The Chairman presented the full syllabus for the M.Tech programme in Power Control and Drives. Some rework is being performed in the Syllabus as per the suggestions from the BoS members and it will be brought back for approval of BoS.</p> <ul style="list-style-type: none"> • The action words of COs of all courses and the corresponding BTLs are to be rewritten. It is not necessary that all COs should have 'Apply' level. When one batch is completed, check with the Question papers whether the COs were sufficient. • Research Methodology: CO3 of the course may be removed. • Power Electronics Lab: CO2 and CO3 should be Analyse the performance of the circuit, instead of Analyse the circuit. Also, Jone's chopper may be removed as it is hardly used for any application. • PWM schemes for Power Converters: CO2 should be Analyze the performance of single phase and three phase inverters. In CO3, the action verb shall be 'Select/Choose' instead of Interpret. • Dynamics of Linear Systems: Ogata is missing in References, which should be added as the first textbook. • Applications of Power Electronics in Power Systems: The action verb of CO1 should be changed to Explain and the level should be Understand. Similarly, CO6 also should be changed to Understand. • Modern Power converters and Switched mode Power converters, overlap of subject content is seen. CO1, CO2, CO3 are repetitions. Matrix converters are missing in Modern Power converters. • Power Electronics for Renewable Energy Systems: redrafting is required from Modules 3 to 5 in Course plan. • Power Quality in Electrical Systems: Module V can be applications of Fourier series, Fourier transforms etc. • Hybrid Electric Vehicles: Course title should be changed as Hybrid and Electric Vehicles. • SCADA Systems and Applications: syllabus second paragraph, spelling mistake found for advantages and disadvantages.



	<ul style="list-style-type: none">• Special Electric Machines: CO2 should be rewritten as 'Apply the knowledge of control and operating characteristics of various electric motors in different fields of application'.• Analysis, Design and Grid integration of PV systems: Design of solar cells should be changed as Construction of solar cells. CO1 should be changed as Examine the performance of the solar cell under various conditions.• Design Principles of Power Converters: here it means how to design power converters for an application. But the syllabus given is for design considerations. i.e., the things to be considered while designing power converters for an application. The course title and course objective have to be changed.• Solar and Wind Energy Conversion Systems: CO4 and CO5 have to be rewritten. Module 5 can be changed to Applications (grid connected and Stand-alone) and restructure the contents. Array based EV and PHEV Charging systems can be included among Applications. Others schemes like IPP schemes etc., regulations, policies etc. can be included.• Electric Vehicle Technology: COs should be fully rewritten.• Process Control and Automation: Automatic control techniques are discussed in the syllabus, but not reflected in the COs.• Smart Grid and Energy Storage Systems: COs 4 to 6 are on energy storage systems, so needs rewriting.• Drives and Simulation Lab: Simulation of chopper control Fed separately excited DC motor using MATLAB.• Mini Project: COs need to be rewritten. Analyse, Create and Evaluate levels, should appear in these courses. Presentation, Comprehension, Communication etc. should come as COs.• Dissertation Phase I and II: More COs should be included. Create level should come. Investigation of technical issues in designing experiments, Problem solving, etc are the capabilities and these along with communication should come as COs. <p>The BoS recommended Syllabus for the M.Tech Programme, with the suggestion to discuss with all faculty members and reframe the COs of all the courses.</p>
EE:BS 4.08	Any other matter with the permission of the Chair.
Decision	Nil

Meeting adjourned at 12.10 PM with thanks to the Chair.

Date. 19.08.2022


Member Secretary

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Approved with permission for circulation among the BoS Members.


CHAIRMAN