

# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

# **BOARD OF STUDIES MEETING**

**DATE** : 05.06.2021

**VENUE** : Online platform-Google meet

Ring Road, Kadubisanahali Calle

TIME : 02.30 pm - 04.00pm

# CONTENTS

Sl. No	PARTICULARS	Page No	
	. E IBIONA I ANTONIO	3	
1	Agenda for the meeting		
		4	
2	List of Members		
		5	
3	List of Members present		
4	Welcome address by Chairman of BOS and Introduction of members	6	
	<b>Agenda 1:</b> Approval of Scheme & Syllabus of IV Year 2018-19 Batch (VII & VIII semesters)	6	
	Agenda 2: Approval of course outcomes of proposed courses and	6	
	<b>Agenda 3</b> : Approval of revision of courses in I, V and VI semester	6	
	Recommendations of the Board	11	
	Vote of thanks by Chairman of BoS	13	

# AGENDA FOR THE MEETING

Agenda 1: Approval of Scheme & Syllabus of IV Year-2018-19 Batch (VII & VIII semesters)

Agenda 2: Approval of course outcomes of proposed courses

Agenda 3: Approval of revision of courses in I, V and VI semester

# LIST OF BOS MEMBERS

SI. No	Category	Nomination of the Committee	Name of the Person
1	Head of the Department	Chairperson	Dr. Mahesh M
		Member	
		1	Dr. Guna Priya B
	Land Market State	2	Mr.Inbasakaran S
	Faculty members at different	3	Dr. Joshua Daniel Raj
2	level with different specialization	4	Dr. Vinoth Kumar K
	эрстангация	5	Mr.Satish Kumar D
		6	Ms.Karthika M
		7	Mr. Vinod kumar S
		Member	
3	Subject expert from outside the college nominated by Academic Council	1	Dr.K.Shanmukha Sundar Professor, Dayananda Sagar Academy of Technology and Management, Bengaluru -560082
	Experts from outside the	Member	
4	college nominated by Vice Chancellor	1	Dr. Lakshminarayana C, Professor, BMS college of Engineering, Bengaluru-560019
	Representative from Industry	Member	
5	/ Corporate sector / allied area related to placements, nominated by Academic Council	1	Mr. G M Suresh Senior Manager, Delta electronics India Pvt. Ltd. Bengaluru- 560100
		Member	
6	Post Graduate meritorious alumni nominated by Principal	1	Ms. Charushri M, Market Researc Analyst, Course5 Transformativ Intelligence, Bengaluru-560103
		1	Mr.Muniprakash T
7	Co-opted members	2	Ms.Kavitha Ch. Reddy
	Co opica inclination	3	Mr.Lithesh J
8	Training & Placement Officer	1	Mr.Binod Kumar Singh NHCE
	Officer	1	Dr. Sujitha S
9	R&D Coordinator	2	Dr. Prabhakaran N

# LIST OF MEMBERS PRESENT

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Sl. No.	Name and Designation	Nomination of the Committee	Molatul
1	Dr. Mahesh M,HoD-EEE	Chairman	Laker
2	Dr Lakshminarayana C, Professor, BMS college of Engineering, Bengaluru- 560019	VTU Nominec	- dor + 11 palul
	Dr.K. Shanmukha Sundar Professor, Dayananda Sagar Academy of Technology and Management, Bengaluru -	External Subject Expert	The case.
3	Mr. G M Suresh Senior Manager, Delta electronics India Pvt.	Industry Representation	
4	Ltd. Bengaluru- 560100  Dr. Guna Priya B, Ássociate Professor,	Faculty member	11.11.10
6	NHCE Dr. Vinodh Kumar K, Associate Professor, NHCE Dr. Joshua Daniel Raj, Senior Assistant	Faculty member Faculty member	
7	Professor, NHCE  Mr. Inbasakaran S, Senior Assistant	Faculty member	
8	Professor, NHCE Mr. Satish Kumar D, Senior Assistant	Faculty member	D. Satish Ka
9	Professor, NHCE  Ms. Karthika M, Senior Assistant Professor,	Faculty member	Outrio O
10	NHCE  Mr Vinod Kumar S, Senior Assistant	Faculty member	Alul!
11	Professor, NHCE  Mr. Muniprakash T, Senior Assistant	Co-opted member	1.10
12	Professor, NHCE	Co-opted member	Chitaldle
	Professor, NHCE 7  Mr. Lithesh J, Assistant Professor, NHCE	Co-opted member	1 15-1-3
14	Mr. Binod Kumar Singh, Training & Placement Officer, NHCE	Training & Placement Officer	107
15	Dr.Sujitha S, Associate Professor, NHCE	R&D Coordinator	Bulling
16 17	Dr. Prabhakaran N, Senior Assistant Professor, NHCE	R&D Coordinator	

## WELCOME ADDRESS BY THE CHAIRMAN OF BOS AND INTRODUCTION OF MEMBERS

#### Minutes

Dr.Mahesh M, 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 3: Approval of revision of courses in V and VI semester Approval of Scheme & Syllabus of IV Year-2018-19 Batch (VII & VIII semesters) Minutes

- Scheme & Syllabus of IV-year -2018-19 Batch (VII & VIII semesters) has been reviewed.
- Suggestions from BoS members have been acknowledged and discussed in detail.
- The Scheme & Syllabus has been unanimously approved by all the members.

#### AGENDA -2

#### Approval of course outcomes of proposed courses

#### Minutes

- Course outcomes of IV-year -2018-19 Batch (VII & VIII semesters) has been reviewed.
- Suggestions from BoS members have been acknowledged and discussed in detail.
- Course outcomes has been unanimously approved by all the members.

#### AGENDA -3

## Approval of revision of courses in I, V and VI semester

• Scheme & Syllabus of I semester, V semester and VI semester courses were revised. The details are given below:

# Percentage Of Syllabus Change Recommended and Approved

UG Program: BE-EEE

Year	Semester	Current Course Code and Course Name (Before BOS)	Proposed Course Code and Course Name (After BOS)	Percentage change of syllabus	Remarks if any
1 Year	1&11	19EEE15/25- Basic Electrical Engineering	21EEE15A/25A- Basic Electrical Engineering	20%	> As per the industry requirement Electro chemical power sources are included.
I Year	1 & 11	19EEL17/27- Basic Electrical Engineering Laboratory	21EEL17A/27A- Basic Electrical Engineering Laboratory	-	Course code has been changed for 160 credit scheme
III Year	V	20EEE561- Data structure and Algorithm	21EEE561- object- oriented programming using C++ and JAVA	40 %	> The course name is changed as object-oriented programming using C++ and JAVA. > The data structures were implemented using C language in the course 20EE561 (Data structure and Algorithm) in the previous syllabus. > As the object-oriented programming (OOPs) concept dominates the present programming domain, the pythor programming is introduced to implementhe data structure in V semester. > Hence it is proposed to introduce the object oriented programming concepts in the Semester using C++ and JAVA. > It provides the complet insights about OOPs.
ear VI		20EEE641- object- oriented	21EEE641- Data Structure and Algorithm using Python	100%	<ul> <li>➤ The course name to changed as Date structure and Algorithm using Python.</li> <li>➤ The required OOF concepts were covered to the course 21EEE56 (object-oriented programming using C+and JAVA) in V semestered in order to cope up with present programming trends, the Python introduced in Date</li> </ul>

				structure and Algorithm.  The python language is introduced to implement stack, queues, linked list, tree and graph data structures in the course 21EEE641 (Data structure and Algorithm using Python).
III Year VI	20EEE652- VLSI design	20EEE652A- CMOS VLSI design	85%	➤ The reframed CMOS VLSI syllabus focusses on CMOS technology. Design of combinational and sequential circuits and timing analysis of logic circuits ➤ In order to meet the requirements of semiconductor industries the revised syllabus focusses on advances in Al, EV, and smartphone technologies which demands VLSI engineers at IC design companies. ➤ Hence the course name and course content of VLSI design is changed as CMOS VLSI design.

- Suggestions from BoS members have been acknowledged and discussed in detail.
- The Scheme & Syllabus has been unanimously approved by all the members.

# VII semester Courses:

S.No	Course Code	Course Name
1	20EEE71A	Special Electrical Machines
2	20EEE72A	Relay and High voltage Engineering
3	20EEE73A	Electrical Drives and vehicles
4	20EEE74XA	Professional Elective -IV
5	20EEE75XA	Professional Elective -V
6	20NHOP70XX	Open Elective- II
7	20EEL76A	Relay and High voltage Engineering laboratory

8	20EEL77A	Simulation tools for Electrical Engineering laboratory
9	20EEE78A	Project Phase - I

## **Professional Elective-IV**

S.No	Course Code	Course Name
1	20EEE741A	Digital Signal Processing
2	20EEE742A	FACTS and HVDC transmission
3	20EEE743A	Testing and Commissioning of electrical Equipment
4	20EEE744A	Energy Auditing and Demand side Management

## **Professional Elective-V**

S.No	Course Code	Course Name
1	20EEE751A	Utilization of Electrical Energy
2	20EEE752A	Power System Operation and Control
3	20EEE 753A	Professional Ethics
4	20EEE 754A	Artificial Neural network and Fuzzy logic

## VIII semester Courses:

S.No	Course Code	Course Name
1	20EEE 81XA	Professional Elective –VI
2	20EEE 82XA	Professional Elective –VII
3	20EEE 83A	Internship .
4	20EEE 84A	Project Phase -II

# **Professional Elective-VI**

S.No	Course Code	Course Name
1	20EEE811A	Estimation and Costing of electrical systems
2	20EEE812A	Smart Grid technologies
3	20EEE813A	Dower Quality
4	20EEE814A	Integration of distributed generation

# **Professional Elective-VII**

S.No	Course Code	Course Name
1		Photo Voltaic Systems and Applications
2		Simulation of Power Electronics
3	LOBE	Biomedical Instrumentation  Applications of IOT in Electrical Engineering
4	20EEE824A	Applications of 101 in Electrical Engineer

# LIST OF OPEN ELECTIVES

Open Elective II	
Course Code	Course
20NHOP701	Big Data Analytics using HP Vertica-1
20NHOP702	VM Ware Virtualization Essentials-1
20NHOP704	Big Data Analytics using HP Vertica-2
20NHOP705	VM Ware Virtualization Essentials-2
20NHOP707	SAP
20NHOP708	Schneider-Industrial Automation
20NHOP709	Cisco-Routing and Switching-1
20NHOP710	Data Analytics
20NHOP711	Machine learning
20NHOP712	CISCO-Routing and switching - 2
20NHOP713	IIOT Embedded System
20NHOP714	Block Chain
20NHOP715	Product Life cycle management
20NHOP717A	Network Security and Cryptography
20NHOP718A	Physical Design
20NHOP719A	AI Data Analysis with Python

#### RECOMMENDATIONS OF THE BOARD

The agenda was already circulated among the committee members and the following discussions were made based on the agenda.

Dr Lakshminarayana C, Professor in EEE, BMS College of Engineering, Bangalore and the VTU nominee attended the meeting along with Dr.K. Shanmukha Sundar Professor, Dayananda Sagar Academy of Technology and Management, Bengaluru, Professor in EEE, REVA University, Bangalore and Mr. G M Suresh Senior Manager, Delta electronics India Pvt. Ltd. Bengaluru-. The members appreciated the curriculum and syllabi.

#### Subject 1: 20EEE754A- Artificial Neural network and Fuzzy logic

Dr Lakshminarayana C recommended that the professional elective-V, 20EEE754A-Artificial Neural network and Fuzzy logic course name can be changed into Artificial intelligence technique to power system. It is informed that the analogy of course content with the course name will be discussed with the power system module co ordinators and course coordinators and based on their inputs the suggestion will be considered.

#### Subject 2: 20EEE822A-Simulation of Power Electronics

Dr.K. Shanmukha Sundar recommended to revisit the course name of 20EEE822A-Simulation of Power Electronics as Advanced Power Electronic Systems. It is informed to discuss with the module and course coordinators for the same.

#### Subject 3: Subject 2: 20EEE823A- Biomedical Instrumentation

Dr Lakshminarayana C opined that the course 20EE823A -Biomedical Instrumentation can be replaced with Electric and Hybrid vehicles due to the recent advancement in the field of electric vehicles.

## Subject 4: Tutorial hours for numerical subjects:

The VTU nominee suggested to provide tutorial hours for numerical subjects to improve the practising skill of students. It was clarified that the number of credits could not be revised since the overall credits for the semester can be only 23. However, exclusive tutorial hours will be included during framing of timetable.

## Subject 5:CO-PO mapping-Revisit

The VTU nominee mentioned to reduce the number of CO to four CO based on the RBT levels and Dr.K. Shanmukha Sundar acknowledged this observation. Dr.K. Shanmukha Sundar suggested to revisit the CO-PO mapping of all the courses and could be reviewed properly. He opined that the subject teachers have to give justification for their course CO-PO mapping and he mentioned that the RBT levels can be included in the syllabus. This

observation is acknowledged and informed that it would be discussed in the appropriate forum.

#### Subject 6: Internship and Project

Dr Lakshminarayana C observed that the credits allotted to mini project can be reduced and more weightages can be given to project. He advised to split up the Project into 4 phases from 5<sup>th</sup> semester to 8<sup>th</sup> semester and the students should be guided with literature survey, problem statement analysis, software, and hardware implementation. Dr.K. Shanmukha Sundar suggested to introduce technical seminar with few credits. Mr Suresh G suggested to consider project as the data collection of industries in EV, Power, Tele communication and the standards can be framed on the basis of data collection.

#### Subject 7: Approval of Scheme and Syllabi

Mr.Binod Kumar Singh, appreciated the contents and endorsed the views of BoS members. The BoS members unanimously approved the scheme and syllabi for VII and VIII semesters for 2018-2019 batch.

## 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 syllabi for 2018-2019 batch.



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