

## Minutes of First Board of Studies (BoS) Meeting of BE Electronics Engineering (VLSI Design and Technology) held on 18/06/2024 in online Mode

18/06/2024

## **Members Present:**

S. no.	Name	Designation & Details
1.	Prof. Shiv Govind Singh	Professor, Electrical Engineering, IIT Hyderabad
2.	Prof. S. Anuradha	Professor, ECE Dept. NIT Warangal
3.	Prof. P. Chandrashekar	Professor,, ECE, Dept. UCE, OU, Hyderabad
4.	Dr. Jyoti Mansukhani	Scientist F, DRDL, Kanchanbagh, Hyderabad.
5.	Mr. Deepak Raya	Ph.D. Scholar (PMRF), Neuroscience, IISC Bangalore
6.	Ms. R Hari Chandana	Sr. Engineer, Mistral Solutions Pvt. Ltd., Bangalore
7.	Ms. Kilaru Susrutha Reddy	Silicon Design Engineer, AMD, Hyderabad
8.	Dr. N. V. Koteswara Rao	Professor of ECE Department, CBIT
9.	Dr. D. Krishna Reddy	Professor of ECE Department, CBIT
10.	Dr. P. Narahari Sastry	Professor of ECE Department, CBIT
11.	Dr. M.Sushanth Babu	Professor of ECE Department, CBIT
12.	Dr.Vivek Singh Kushwah	Professor of ECE Department, CBIT
13.	Dr. A.D. Sarma	Professor of ECE Department, CBIT
14.	Dr. B. Khaleelu Rehman	Associate Professor of ECE Department, CBIT
15.	Mr. M.Z.Jahangir	Assistant Professor of ECE Department, CBIT
16.	Dr. K. Vasanth	Chairman BoS
	Dr.M.L.N Charyulu, Dr. M.	
	Ramana Reddy , Mr.A. Krishna	
17.	Kumar , Mr.N. Jagan Mohan	Invited Faculty of CBIT (CEG Group)
	Reddy, Mr.P. Chandra sekhar,	
	Mr.E Chandrasekhar	

## Members on Leave of Absence:

S. no.	Name	Organization
1	Dr. M. A. Mushahid Majeed	CAD Software Developer and Application Manager, NXP Semiconductors Ltd., Hyderabad.
2	Dr. C.V.Narasimhulu	Principal & Professor ECE, CBIT

Chairman, BoS warmly welcomed the Board of Studies (BoS) members. The Chairman, BoS informed that the curriculum is developed considering the recently released AICTE model curriculum and syllabus of standard institutions. He also enumerated the various VLSI area clusters used for designing the specialized curriculum and presented the agenda.

## Minutes of the meeting:

Ι	To Brief the Scheme of the Program from I semester to VIII Semester under R22(A) Regulation		
	This item is approved with the following recommendations:		
	(i) Prof. Shiv Govind Singh recommended renaming the course "Electronic Devices" as " <b>Physical Electronics</b> ".		
	Action Taken: The fundamentals of Semiconductor physics is part of a Physics course titled "Electromagnetic theory and Quantum Mechanics" offered by department of Physics. Also the course "Electronic Devices" deals only about devices of electronics. Hence, it is recommended to retain the course title as "Electronic Devices".		
	(ii) Prof. Singh enquired about the inclusion of <b>"Probability Theory and Stochastic Process"</b> as a core course.		
	Action Taken: Chairman BoS informed that PTSP course included as core course in IV semester.		
	(iii) He also suggested to offer " <b>VLSI Technology</b> " as a core course instead of program elective. <b>Action Taken:</b> As per the suggestion, the Point is noted. The " <b>VLSI Technology</b> " Course will be accommodated as a core course in upcoming semesters.		
	(iv) Prof. Singh recommended to include Design tape-out so that the student will be aware of the complete process. He suggested to use the facility from Semi-Conductor Laboratory, Chandigarh. <b>Action Taken:</b> As per the suggestion, the same will be included in the lab course " <b>SoC lab</b> ".		
	(v) Prof. Singh suggested that "VLSI Interconnects" might not be a justifiable course for 3 credits. He also suggested to include the following topics such as 2D Materials for VLSI, Single integrity, Thermal Integrity, Power aware Interconnect" and rename the course as " <b>Neuromorphic</b> <b>Circuits</b> ".		
	Action Taken: As per the suggestion, the Course "VLSI Interconnects" is renamed to "Neuromorphic Circuits"		
	(vi) Prof. S. Anuradha suggested to include a chapter on " <b>Information Theory</b> " in <b>"Analog and Digital Communication"</b> course or make it a separate course or offer the subject as part of Professional elective.		
	Action Taken: A chapter on Information Theory is already part of "Analog and Digital Communication" course. Further, a course titled "Coding theory and techniques" is included as part of the Professional Electives.		
	(vii) Ms. R Hari Chandana suggested to include FPGA Programming. Action Taken: Chairman, BoS informed that the same is included in HDL laboratory and VLSI circuit verification.		
	(viii) Prof. P. Chandrashekar appreciated CBIT for taking initiative to start B.E Electronics Engineering - (VLSI Design and Technology). He recommended to go ahead with the proposed structure and syllabus of I to IV Semesters. He also added to give scope for further modifications in scheme and syllabus of V to VIII semesters in forthcoming BoS meetings.		

	Action Taken: Chairman, BoS has informed that the draft copy of the structure is prepared for V to VIII semesters. Recommendations/modifications shall be incorporated in next BoS meeting.	
II	To discuss the Syllabus of I to IV semesters of BE Electronics Engineering (VLSI Design and Technology) R-22(A) Regulations.	
	A detailed discussion on syllabus is carried out about all the courses being offered from I to IV semesters of R-22(A) regulation with the following recommendations:	
	(i) Prof.S.Anuradha suggested to include Logic families in the course " <b>Digital Electronics</b> " Action Taken: As per the suggestion, the syllabus is modified and the topics on " <b>logic families</b> and memories'' are included.	
	<ul> <li>(ii) Dr.Jyothi enquired about the boards being used in HDL Lab. She also asked for the use of "Zynq Boards" in student projects.</li> <li>Action Taken: Chairman, BoS presented about the boards that are used in HDL Lab. He also stated the use of "Zynq boards" by students during their Projects.</li> </ul>	
	The Syllabus of I to IV semesters is approved.	
III	Any other item with the permission of chair	
	Nil.	
	BoS Chairman would like to seek the approval through E-mail from the members of BoS for any further modifications in the curriculum, if required.	

The members are requested to offer the comments, if any, within a week from the date of receipt of this communication. If no comments are received, the minutes will be taken as confirmed.

Copy to: 1. Members of BoS

2. Principal for BoS

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Head and Chairman, BoS Dept. of ECE

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