



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Minutes of Board of Studies Meeting held on 07.02.2023

The BoS meeting of School of Electrical Engineering under Regulation 2020 conducted on 07.02.2023 at 10 a.m. in online mode.

- I. Dr.M K Ilampoornan, Dean (School of Electrical Sciences)and Dr.H.UmmaHabiba, HoD (Department of Electronics & Communication Engineering) welcomed all the members of the Board of Studies, Special Invitees and Faculty members of ECE department to the 4thBOS meeting.
- II. The following Board Members (expert members) were present in the online meeting, chaired by Dr.M K Ilampoornan, Dean (Electrical Sciences)/BIHER

Online Link: BIHER-ECE Zoom meeting.

Topic: ECE R2020 Board of studies meeting

Time: Feb 7, 2023 10:00 AM Mumbai, Kolkata, New DelhiJoin Zoom Meeting

<https://zoom.us/j/99990156178?pwd=a1dMejdvSFNQWIMzN3Vmakp6ZE1OUT09>

Meeting ID: 999 9015 6178

Passcode: KyG48R

- 1 Dr.M K Ilampoornan, Dean (Electrical Sciences)/BIHER, Chairman
- 2 Dr.H.UmmaHabiba, Professor & HOD/ECE, BIHER. (Internal Member)
- 3 Dr. K. Kavitha,Professor/ ECE, Kumaraguru College of Technology, Coimbatore- 641 049. (External Expert Member, Academics)
- 4 DipongakarChakraborty, Marvell semiconductor, SE(CXL) (Alumni member)
- 5 Mr.JeyaprakashSenior Architect at Ericsson (External Expert Member, Industry)
- 6 Dr.B Kalaiselvi, Assistant Professor/ECE/BIHER (Internal Member)
- 7 Dr S Prakash, Professor/ECE/BIHER (Internal Member)
- 8 Dr Vincy Floyd, Professor/ECE/BIHER (Internal Member)
- 9 Dr M Nagarajan, Associate Professor/ECE/BIHER (Internal Member)
- 10 Dr AhamedKandhu Sahib, Professor/ECE/BIHER (Internal Member)
- 11 Dr T Sivagami, Associate Professor/ECE/BIHER (Internal Member)
- 12 Dr Varalakshmi, Associate Professor/ECE/BIHER (Internal Member)
- 13 Dr S Arulselvi, Associate Professor/ECE/BIHER (Internal Member)

- 14 Ms. S.Saravanaselvi, Assistant Professor/ECE/BIHER (Internal Member)
- 15 Mr N R Satishkumar, Assistant Professor/ECE/BIHER (Internal Member)
- 16 Mr M Prabhu, Assistant Professor/ECE/BIHER (Internal Member)
- 17 Ms R RekhaSharmily, Assistant Professor/ECE/BIHER (Internal Member)
- 18 Mr Sivakumar, Assistant Professor/ECE/BIHER (Internal Member)
- 19 Ms G Jeyalakshmi,Assistant Professor/ECE/BIHER (Internal Member)
- 20 Ms I Jayasukumari, Assistant Professor/ECE/BIHER (Internal Member)
- 21 Ms Vanithamani, Assistant Professor/ECE/BIHER (Internal Member)
- 22 Ms K.Subbulakshmi, Assistant Professor/ECE/BIHER (Internal Member)
- 23 Ms Aruna Mary, Assistant Professor/ECE/BIHER (Internal Member)
- 24 Dr.Sudhagar, Associate Professor/ECE/BIHER (Internal Member)
- 25 Dr.Nagarajan, Associate Professor/ECE/BIHER (Internal Member)
- 26 Ms.S.Subbulakshmi, Assistant Professor/ECE/BIHER (Internal Member)
- 27 Ms.G.Kanagavalli, Assistant Professor/ECE/BIHER (Internal Member)
- 28 Ms.G.Vasumathi, Assistant Professor/ECE/BIHER (Internal Member)
- 29 Mr.P.John Thangavel, Assistant Professor/ECE/BIHER (Internal Member)
- 30 Ms.R.Geetha, Assistant Professor/ECE/BIHER (Internal Member)
- 31 Ms.P.Vanithamani, Assistant Professor/ECE/BIHER (Internal Member)
- 32 Dr.V.Ganesan, Associate Professor/ECE/BIHER (Internal Member)
- 33 Dr.B.Karthik, , Associate Professor/ECE/BIHER (Internal Member)
- 34 Ms.B.Hemalatha, Assistant Professor/ECE/BIHER (Internal Member)
- 35 Mr.Balaji, Assistant Professor/ECE/BIHER (Internal Member)

After brief introduction by the Dr.M K Ilampooran, Dean (Electrical Sciences) andDr.H.UmmaHabiba ,HoD (Department of Electronics & Communication Engineering) about the participants from industries, alumni, faculty from the Departments of Electronics and Communication Engineering , the agenda items were taken up for discussion. The discussion starts with R2020UG Programme curriculum and syllabi of Electronics and Communication Engineering and then continues with the suggestions and recommendations received from all stake holders.

S No.	Course Code	Course Title
1	U20ECCT09	Wireless Communication and Networks
2.	U20ECCT10	Digital Image Processing
3.	U20ECCJ09	Computer Communication Networks
4.	U20ECCJ05	Analog and digital communication

Specialization	Course Code	Course title
VLSI AND EMBEDDED SYSTEMS	U20ECST02	VLSI System Testing –PE6
	U20ECST04	CMOS Analog IC Design –PE4 or PE5
	U20ECST05	Low power SOC Design –PE4 or PE5
	U20ECST10	Robotics and Automation –PE4 or PE5
COMMUNICATION/ NETWORK	U20ECST12	Information Theory–PE4 or PE5
	U20ECST17	RF System Design –PE4 or PE5
	U20ECST18	Adhoc and Wireless Sensor Networks –PE4 or PE5
	U20ECST21	Cognitive Radio Networks –PE6
	U20ECST22	Cryptography and Network Security –PE6

S. No.	Course Title	Course Code
1.	U20ECOT06	Basics of MEMS and NEMS
2.	U20ECOT07	Medical Electronics
3.	U20ECOT08	Communication Networks
4.	U20ECOT09	Electronics Packaging
5.	U20ECOT10	Space Time Wireless Communication
6.	U20ECOT11	Antenna Engineering

Discussions:

- HOD/ECE gave a brief presentation for the Approval of the Minutes of the third BoS .
- HOD/ECE presented, R2020 UG Curriculum, B.E. - Electronics and Communication Engineering.

The following were the suggestions made by the committee and the action taken by the respective course coordinator.

S.No:	Suggestions and Action taken	Committee Experts
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1	<p>In the course, Computer Communication Networks RS232 may be removed, Wireless data transfer protocols and latest technology can be added.</p> <p>Action taken: The suggestion considered and included in the syllabus.</p>	<p>Recommended by: MrB Jayaprakash and Dr K Kavitha, Professor , KCT Coimbatore</p>
2	<p>In the course, Cryptography and Network Security suggested Encryption Algorithms keeps obsoleted soon. Topics like Strong cipher, weak cipher, Block string cipher may be included. TLS Protocol in unit 4. AI security, Cloud Security, IOT and Wireless, Industry terminology Hardening and Access Control can be included in unit 5.</p> <p>Action taken: The suggestion considered and included in the syllabus.</p>	<p>MrB Jayaprakash and Dr K Kavitha, Professor , KCT Coimbatore</p>
3	<p>In the course -Wireless Communication and network, contents are too vast and faculty will have time constraint in completing the syllabus.</p> <p>Action taken: The suggestion considered and portions reduced in the syllabus.</p>	<p>MrB Jayaprakash and Dr K Kavitha, Professor , KCT Coimbatore</p>
4	<p>In the course Analog and Digital Communication is very vast and may be diluted</p> <p>Action taken: The suggestion considered and portions reduced in the syllabus.</p>	<p>MrB Jayaprakash and Dr K Kavitha, Professor , KCT Coimbatore</p>
5	<p>In the course Digital Image Processing some application type case studies can be included in 5th unit</p> <p>Action taken: The suggestion considered and included in the syllabus.</p>	<p>Dr K Kavitha, Professor , KCT Coimbatore</p>
6	<p>In the course VLSI System Testing no comments by the expertize committee</p> <p>Action taken:No suggestion</p>	<p>Dr K Kavitha, Professor , KCT Coimbatore</p>
7	<p>In the course Information theory the complete syllabus has to reframed</p> <p>Action taken: The suggestion considered and included in the syllabus.</p>	<p>Dr K Kavitha, Professor , KCT Coimbatore</p>
8	<p>In the course CMOS Analog IC design no comments by the expertize committee</p> <p>Action taken:No suggestion</p>	<p>Dr K Kavitha, Professor , KCT Coimbatore</p>

9	In the course Low power SoC design no comments by the expertize committee Action taken: No suggestion	Dr K Kavitha, Professor , KCT Coimbatore
10	In the course RF System design no comments by the expertize committee Action taken: No suggestion	Dr K Kavitha, Professor , KCT Coimbatore
11	In the Robotics and Automation some theoretical and practical aspects may be included as case study. Action taken: The suggestion considered and included in the syllabus.	Dr K Kavitha, Professor , KCT Coimbatore
12	In the course Adhoc and Wireless Sensor Networks introduction to IoT may be included in 5 th unit and case studies using IoT Action taken: The suggestion considered and included in the syllabus.	Dr K Kavitha, Professor , KCT Coimbatore
13	In the course Cognitive Radio Networks no comments by the expertize committee Action taken: No suggestion	Dr K Kavitha, Professor , KCT Coimbatore
14	In the Basics of MEMS and NEMSno comments by the expertize committee Action taken: No suggestion	Dr K Kavitha, Professor , KCT Coimbatore
15	In the course Medical Electronics no comments by the expertize committee Action taken: No suggestion	Dr K Kavitha, Professor , KCT Coimbatore
16	In the course Communication Networks, is having very vast portions may be reduced. Action taken: The suggestion considered and diluted the portions in the syllabus.	Dr K Kavitha, Professor , KCT Coimbatore
17	In the course Electronics Packaging no comments by the expertize committee Action taken: No suggestion	Dr K Kavitha, Professor , KCT Coimbatore
18	In the course Antenna Engineering introduction EMF and inclusion of case study in 5 th unit Action taken: The suggestion considered and included in the syllabus.	Dr K Kavitha, Professor , KCT Coimbatore

19	<p>In the course Space Time Wireless Communication has to be diluted and made very light</p> <p>Action taken: The suggestion considered and diluted the syllabus.</p>	Dr K Kavitha, Professor , KCT Coimbatore
20	<p>Programming of system verilogis covered in any of the subject. Nice to see most of the topics in semiconductor field is there. Also on top of that if not covered, system verilog programming, fpga's, writing testbench, protocol knowledge like axiambaahb can be introduced.</p> <p>Action taken: The suggestion considered and already included in digital system design in 3rd semester and 5thsem in VLSI Design</p>	Dipongakar Chakraborty, Alumini member

➤ Screen shots taken during the Presentation

The screenshot shows a Zoom meeting interface. The main content is a presentation slide with two tables. The top table lists course categories with their respective credit requirements and weightages. The bottom table lists professional core courses (PC) with their course codes, titles, and prerequisites.

Course categories	Category Code	Minimum Credit required	Weightage % of Course Categories
Humanities and Social Sciences including Management courses	H	12	7.5
Basic Science courses	B	34	20
Engineering Science courses	E	19	11.875
Professional Core courses (Compulsory courses)	C	52	32.5
Professional Elective courses (Optional courses relevant to chosen branch/specialization)	S	18	11.25
Open Elective courses (Optional courses from other technical and/or emerging subjects)	O	12	7.5
Project Work, Seminar, and Internship in industry or higher institutions	P	15	9.375
Mandatory Courses (non-credit courses)	M	-	-
Total		180	100

S.No.	Course Code	Course Title	L	T	P	C	Pre-requisite	Co-requisite
1.	U28ECCT01	Signals and Systems	3	1	0	4	U28MART01, U28MART02 or Diploma	Nil
2.	U28ECC01	Digital System design	3	0	2	4	U28ECC01 or Diploma	Nil
3.	U28ECC02	Analog Electronic Circuits	3	0	2	4	U28ECC01 or Diploma	Nil
4.	U28ECC02	Electromagnetics and Transmission Lines	3	1	0	4	U28ECC01 or Diploma	Nil
5.	U28ECC03	Digital Signal Processing	2	1	2	4	U28ECC01	Nil
6.	U28ECC04	Linear Integrated Circuits	2	0	2	3	U28ECC02	Nil
7.	U28ECC06	Microcontrollers and Embedded Systems	2	0	2	3	U28ECC01	Nil
8.	U28ECC07	Microprocessors and Embedded Systems	2	0	2	3	U28ECC01	Nil

Zoom Meeting

Participants (13)

Find a participant

B.KALAISELVI BIHER (Me)

DH Dr.H.Umma Habiba (Host)

D Dr.M.NAGARAJAN

G GJeyalakshmi

A ADMIN

D dipongkar

DK Dr. K.Kavitha

D5 Dr.S.Varalakshmi Subramanian

I ilampoornan

M Mr.R.PRABU

MP Ms. P.Vanithamani

DT Dr T sivakami

NK N.R.Sathis Kumar

Invite Unmute Me Reclaim Host

85°F Haze

Zoom Meeting

Recording...

Remaining Meeting Time: 06:04 | Upgrade to Pro

FILE HOME INSERT DESIGN PAGE LAYOUT REFERENCES MAILINGS REVIEW VIEW

Course Outcome Department: School: Department of electronics and Communications Engineering

Course Objective and Summary

- To understand the characteristics of CMOS and transistor.
- To design and develop different types of amplifier circuits.
- To build PLL, mixers, oscillators and synthesizer circuits.

Course Outcome (Co):

CO No.	Course Outcome	Bloomy Level
CO1	Recognize RF devices to analyze link systems.	2
CO2	Demonstrate the concepts of RF systems and circuit design.	2
CO3	Build feedback systems and power amplifiers for improving stability of RF systems.	3
CO4	Construct circuits containing active non-linear components used in active RF devices.	3
CO5	Demonstrate oscillators and synthesizers utilized in RF system design.	2

Mapping / Alignment of Co with PO & PSO

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
CO1	2	2	2	2											
CO2	3	3	3	3											
CO3	3	3	3	3											
CO4	3	3	3	3											
CO5	3	3	3	3											

(Tick mark or level of correlation: 3-High, 2-Medium, 1-Low)

Zoom Meeting

Participants (4)

B.KALAISELVI BIHER (Host, me)

DH Dr.H.Umma Habiba

I ilampoornan

DK Dr. K.Kavitha

Invite Mute All ...

Meeting Chat

Who can see your messages? Recording On

To: Everyone

I request you all

86°F Haze

Zoom Meeting

Recording...

DEPARTMENT OF CAD

LIST OF EXPERIMENTS:

- Solid modeling using Ideas / Pro Eng such as (at least 3 components)
- Analysis of engineering problems using software.
- Exercise in surface machining – Milling, turning, grinding, etc. (at least 3 jobs)
- Computer assisted part programming (CAPP) for various internal and external parts.

➤ Finally, the meeting ended with a thanks note given HOD / ECE to all the Experts and BoS members.

ATTENDANCE

1	Dr M K Ilampoornan ,Dean (Electrical Sciences)/BIHER	Chairman	
2	Dr.H.UmmaHabiba , Prof. & HOD/ECE, BIHER	Member Secretary	
3	Dr. Manimegalai, Professor, Department of Electronics and Communication Engineering, SRM Institute of Science and Technology, Chennai	External Expert Member, Academics	
4	Mr. Sreenivasa Teja Duvvuru, IO Layout Engineer, Texas Instruments Pvt. Ltd., Bangalore	Alumni (ECE)	
5	Mr. J. Muthukumar, RF and Microwave Application Engineer, Applied Realtech systems Pvt. Ltd., Bangalore	External Expert Member, Industry	
6	Dr.B Kalaiselvi, Assistant Professor/ECE/BIHER	Internal Member	
7	Dr S Prakash, Professor/ECE/BIHER	Internal Member	
8	Dr Vincy Floyd, Professor/ECE/BIHER	Internal Member	
9	Dr M Nagarajan, Associate Professor/ECE/BIHER	Internal Member	
10	Dr AhamedKandhu Sahib, Professor/ECE/BIHER	Internal Member	
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14	Ms. S.Saravanaselvi, Assistant Professor/ECE/BIHER	Internal Member	
15	Mr N R Satishkumar, Assistant Professor/ECE/BIHER	Internal Member	

16	Mr M Prabhu, Assistant Professor/ECE/BIHER	Internal Member	
17	Ms R RekhaSharmily, Assistant Professor/ECE/BIHER	Internal Member	
18	Mr Sivakumar, Assistant Professor/ECE/BIHER	Internal Member	
19	Ms G Jeyalakshmi,Assistant Professor/ECE/BIHER	Internal Member	
20	Mr.R.S.Sidharth Raj, Assistant Professor/ECE/BIHER	Internal Member	
21	Ms Vanithamani, Assistant Professor/ECE/BIHER	Internal Member	
22	Dr.Karthik.B, Associate Professor/ECE/BIHER	Internal Member	
23	Dr.Ganesan.V, Associate Professor/ECE/BIHER	Internal Member	
24	Ms.G.Kanagavalli, Professor/ECE/BIHER	Internal Member	
25	Dr.J. Veerappan, Assistant Professor/ECE/BIHER	Internal Member	
26	Ms.Hemalatha.B, Assistant Professor/ECE/BIHER	Internal Member	
27	Mr.Balaji.S, Assistant Professor/ECE/BIHER	Internal Member	
28	Mr.Prabu.R, Assistant Professor/ECE/BIHER	Internal Member	
29	Ms.Umamaheswari. M, Assistant Professor/ECE/BIHER	Internal Member	
31	Ms. B. Pearly, Assistant Professor/ECE/BIHER	Internal Member	
32	Dr. G. Sudhagar, Associate Professor/ECE/BIHER	Internal Member	
33	Ms.I.Jayasugumari, Assistant Professor/ECE/BIHER	Internal Member	

34	Ms.R.Geetha, Assistant Professor/ECE/BIHER	Internal Member	
35	Ms.M.Manoranjani, Assistant Professor/ECE/BIHER	Internal Member	