



ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,
Accredited by National Board of Accreditation (NBA), New Delhi &
National Assessment and Accreditation Council (NAAC), Bangalore with 'A' Grade
PERUNDURAI -638 057, TAMILNADU, INDIA.



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

7th Board of Studies Meeting

Meeting Link: Zoom Meeting ID:

<https://drive.google.com/file/d/1KwieBEzJltCTRLmVfme2Q3GVPvW950q7/view?usp=sharing>

Date & Time: 28.12.2023 & 10.00 AM

AGENDA

The 7th Board of Studies Meeting is convened on 28.12.2023 at 10.00 AM. The agenda for the meeting is as follows.

BoS /ECE 7.1	:	Welcoming new Board of Studies members and opening remarks by the Chairman, Board of Studies, Department of Electronics and Communication Engineering.
BoS /ECE 7.2	:	Confirmation of the Minutes of 06 th Board of Studies Meeting and Action taken report of 06 th Board of Studies meeting.
BoS /ECE 7.3	:	Review of curriculum for the B.E. Electronics and Communication Engineering programme offered under Regulation 2023.
BoS /ECE 7.4	:	Review of syllabus for the Third and Fourth semesters for the B.E. Electronics and Communication Engineering programme offered under Regulation 2023.
BoS /ECE 7.5	:	Review of curriculum for the M.E. Applied Electronics programme offered under Regulation 2023.
BoS /ECE 7.6	:	Approval of syllabus for the Third and Fourth semesters for the M.E. Applied Electronics programme offered under Regulation 2023.
BoS /ECE 7.7	:	Suggestions for Revisions in curriculum & syllabi needed for Regulation 2023.
BoS /ECE 7.8	:	Any other items

CHAIRMAN
BOARD OF STUDIES – ECE



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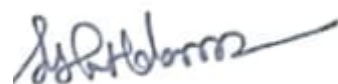


DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

7th Board of Studies Members

1.	Dr.S.BHARATHIDASAN, Professor & Head / ECE, Erode Sengunthar Engineering College.	Chairman
2.	Dr. T.Kesavamurthy, Professor, Department of Electronics and Communication Engineering, PSG College of Technology, Peelamedu, Coimbatore – 641 004.	University Nominee
3.	Dr.S.Sivanantham Associate Professor Sr- & Asst- Dean-AR Department of Micro and Nano Electronics Vellore Institute of Technology University, Vellore.	Academic Experts
4.	Mr.S.Sundaramoorthy, CEO, Sunshiv Electronic Solution , Coimbatore.	Industrial Expert related to Placement
5.	Dr.K.Thiyagarajan, Assistant Professor (Sl.Gr) Department of Electronics and Communication Engineering, PSG College of Technology, Peelamedu, Coimbatore – 641 004.	Alumnus
6.	Dr.R.Kalaivani, Professor / ECE	Internal Members
7.	Dr. R.Vadivelu, Professor / ECE	
8.	Mr.V.Thamizharasan, Assistant Professor / ECE	
9.	Mr.S.Gladson, Assistant Professor / ECE	
10.	Mr. M. Karthikkumar, Assistant Professor / ECE	
11.	Mr. M. Balamurugan,	

	Assistant Professor / ECE	
12.	Ms.S.Divya, Assistant Professor / ECE	
13.	Ms.G.Amsaveni, Assistant Professor / ECE	
14.	Ms. K. R. Priya Dharshini, Assistant Professor / ECE	
15.	Ms.J.Nalifabegam Assistant Professor / ECE	



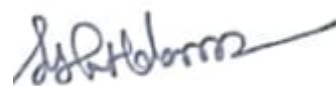
CHAIRMAN
BOARD OF STUDIES – ECE

BoS / ECE 7.1	:	WELCOME ADDRESS AND OPENING REMARKS BY CHAIRMAN, BOARD OF STUDIES
		The Chairman of the Board of Studies welcomed all the members to the meeting for discussing proposed B.E. – Electronics and Communication Engineering and M.E. Applied Electronics curriculum of all semesters and syllabus of III & IV semesters under the Regulations 2023. The members presented in the Board of Studies Meeting are given in Annexure I.
BoS / ECE 7.2	:	CONFIRMATION OF THE 6 th BOARD OF STUDIES MEETING MINUTES AND ACTION TAKEN REPORT
	:	<p>Discussion</p> <p>The Chairman, presented the Minutes of 6th Board of Studies Meeting which was held on 25.06.2023 and action taken report of the same.</p> <p>Resolution</p> <p>It is resolved to recommend the Minutes of 6th Board of Studies Meeting and action taken report of the same is submitted to the Academic Council for approval.</p>
BoS / ECE 7.3	:	REVIEW OF CURRICULUM FOR THE B.E. ELECTRONICS AND COMMUNICATION ENGINEERING PROGRAMME UNDER REGULATIONS 2023.
		<p>Discussion</p> <p>Dr.S.Sivanantham, ASP(Sr), Dept. of Micro and Nano Electronics, VIT University, Vellore, asked the reason for integrating some theory papers with laboratory named Digital electronics and Analog Electronics from 3rd semester. The Chairman replied that students will gain more knowledge on integrating course. He suggested to add VLSI Design Verification course to the vertical courses in the curriculum. The Chairman replied that vertical courses are limited to 6 categories as per Regulations 2023. The BoS members approved the same.</p> <p>Resolution</p> <p>It is resolved to recommend the curriculum for the B.E. Electronics and Communication Engineering programme under Regulations 2023 and the same is submitted to the Academic Council for approval.</p>
BoS / ECE 7.4	:	REVIEW OF SYLLABUS BELONGS TO THIRD AND FOURTH SEMESTER FOR THE B.E. ELECTRONICS AND COMMUNICATION ENGINEERING PROGRAMME OFFERED UNDER REGULATIONS 2023.

	<p>Discussion</p> <p>The Chairman, presented syllabus belongs to first and second semester for the B.E. Electronics and Communication Engineering programme offered under Regulations 2023. The BoS members approved the same.</p> <p>Dr. T.Kesavamurthy, Professor/ECE/PSG/Coimbatore, suggested to map the course objective and outcomes with syllabus of Analog Electronics course and Also suggested to add the Text Books and Reference Books with latest edition and suggested to include web resources in the syllabus of Design Studio. The Chairman agreed to update the same.</p> <p>Mr.S.Sundaramoorthy, CEO/Sunshiv Electronics/Coimbatore, suggested to include industrial application of amplifier in the syllabus of Analog Electronics course and Also suggested to add AD 620, LM 743 in the syllabus of Linear Integrated Circuits Laboratory. The Chairman agreed to update the same.</p> <p>Dr.K.Thiyagarajan, AP(Sr)/ECE/PSG/Coimbatore, suggested to include operation and construction of Multivibrators in the syllabus of Analog Electronics course. The Chairman agreed to update the same.</p> <p>Dr.S.Sivanantham, ASP(Sr), Dept. of Micro and Nano Electronics, VIT University, Vellore, suggested to include Verilog HDL in second unit in the syllabus of Digital Electronics course. Suggested for updating the Text Books latest edition and Also suggested to introduce application based experiments in the syllabus of Analog Electronics Laboratory. The Chairman agreed to update the same.</p> <p>Resolution</p> <p>It is resolved to recommend the B.E. – ECE syllabus under Regulations 2023 and same is submitted to the Academic Council for Approval.</p>
BoS / ECE 7.5	: REVIEW OF CURRICULUM FOR THE M.E. APPLIED ELECTRONICS PROGRAMME OFFERED UNDER REGULATIONS 2023.

		<p>Discussion</p> <p>The Chairman, presented the curriculum of all semesters for the M.E. Applied Electronics programme to be offered under Regulation 2023. The BoS members approved the same.</p> <p>Mr.S.Sundaramoorthy, CEO/Sunshiv Electronics/Coimbatore, suggested to include PIC Microcontrollers in Embedded Lab instead of Arduino as the Industry is inevitably using the PIC Microcontroller for their Applications. The Chairman agreed to include the same.</p> <p>Dr.S.Sivanantham, ASP(Sr), Dept. of Micro and Nano Electronics, VIT University, Vellore, suggested to complete the third semester elective theory courses within first year and may allow students to go internship in core companies to do project in second year. The Chairman agreed to check the possibilities for the same.</p> <p>Resolution</p> <p>It is resolved to recommend the M.E. Applied Electronics programme under Regulations 2023 and same is submitted to the Academic Council for Approval.</p>
BoS / ECE 7.6	:	<p>REVIEW OF SYLLABUS BELONGS TO THIRD AND FOURTH SEMESTER FOR THE M.E. APPLIED ELECTRONICS PROGRAMME OFFERED UNDER REGULATIONS 2023.</p>
		<p>Discussion</p> <p>The Chairman, presented the syllabus belongs to first and second semester for the M.E. Applied Electronics programme to be offered under Regulation 2023. The BoS members approved the same.</p> <p>Mr.S.Sundaramoorthy, CEO/Sunshiv Electronics/Coimbatore, suggested to include APLUS Audio in the syllabus of Image and Video Processing.</p> <p>Resolution</p> <p>It is resolved to recommend the M.E. – Applied Electronics syllabus under Regulation 2023 and same is submitted to the Academic Council for Approval.</p>
BoS / ECE 7.7		<p>SUGGESTIONS FOR REVISIONS IN CURRICULUM & SYLLABI NEEDED FOR REGULATION 2023.</p>

	<p>The Chairman presented the courses for the B.E. Electronics and Communication Engineering programme offered under Regulations 2023. The BoS members approved the same.</p> <p>Resolution</p> <p>It is resolved to recommend the Courses under Regulation 2023 and same is submitted to the Academic Council for Approval.</p>
BoS / ECE 7.8	ANY OTHER MATTER & VOTE OF THANKS
	<p>Common points suggested by the members as concluding remark</p> <p>Suggested to update the text and reference book with latest edition and include on-line resources.</p> <p>The Chairman of Board of Studies agreed and assured to incorporate the changes suggested by the members wherever possible.</p> <p>The Chairman of Board of Studies thanked all the members for their valuable suggestions and coordination.</p>



**CHAIRMAN
BOARD OF STUDIES – ECE**



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Participants (9)

- Thamizharasan V (Me)
- HOD ECE (Host)
- S. Divya
- Dr. Sivanantham S
- Dr. Thyagarajan K
- Gladson Benils
- M Karthik Kumar, AP/ECE
- Sunshiv Sundaramoorthy
- Dr. G. S. Satheesh Kumar

Agenda

BoS /ECE 7.1	: Welcoming Board of Studies members and opening remarks by the Chairman, Board of Studies, Department of Electronics and Communication Engineering.
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Zoom Meeting: Board of Studies Meeting

Participants: Thamizharasan V, Dr T Kesavamurthy, Dr. G. S. Satheesh Kumar, Sunshiv Sundaramoort...

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1 TO VII SEMESTERS CURRICULUM

Induction program (Mandatory)

Induction Program for the students to be offered right at the start of the first year

3 weeks duration

- Physical activity
- Creative Arts
- Universal Human Values
- Literary
- Proficiency Modules
- Lecture by Eminent people
- Visits to local Areas
- Familiarization to Dept./Branch & Innovations

THEORY

Course Code	Course Name	L	T	P	C	Maximum Marks	CA	ES	Total	Category
23BS101	Maths and Calculus	3	1	0	4	40	60	100	100	BS
23BS102	Engineering Physics	2	0	2	3	50	50	100	100	BS
23BS103	Engineering Chemistry	3	0	0	3	40	60	100	100	BS
23ES101	Problem Solving Python Programming	3	0	2	4	50	50	100	100	ES
23HS101	Technical English	3	0	0	3	40	60	100	100	HS
23HS102	Heritage of Tamil	1	0	0	1	40	60	100	100	HS
23TPS01	Soft Skills - I	1	0	0	1	40	60	100	100	EEC
PRACTICALS										
23SI105	Chemistry Laboratory	0	0	2	1	60	40	100	100	BS
23SI104	Engineering Graphics	0	0	4	2	60	40	100	100	ES

Zoom Meeting: Board of Studies Meeting

Participants: Thamizharasan V, Balamurugan, M Karthik Kumar, AP/E..., Dr. G. S. Satheesh Kumar

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23EC302 Digital Electronics

L	T	P	C
3	0	2	4

Course Objectives:

- To present the Digital fundamentals, Boolean algebra and its applications in digital systems
- To familiarize with the design of various combinational digital circuits using logic gates
- To introduce the analysis and design procedures for synchronous sequential circuits
- To analyze the design procedure for Asynchronous sequential circuits
- To explain the various semiconductor memories and digital circuits design using HDLS.

Course Outcomes: Upon completion of the course, the student will be able to:

- CO1: Apply Boolean algebra, Karnaugh map and Tabulation method for simplification of Boolean expressions
- CO2: Design various combinational digital circuits using logic gates
- CO3: Do the analysis and design procedures for synchronous sequential circuits
- CO4: Design and analysis of Asynchronous sequential circuits
- CO5: Implement the digital circuits using PLDs and HDLS

Unit-I | DIGITAL FUNDAMENTALS

Review of Number systems- Codes — Binary, BCD, Excess 3, Gray, Alphabetic codes- Boolean theorems, Logic gates, Universal gates, Sum of products and product of sums, Minterms and Maxterms, Karnaugh map Minimization and Quine-McCluskey method of minimization.

Unit-II | COMBINATIONAL CIRCUIT DESIGN

[Handwritten Signature]

**CHAIRMAN
BOARD OF STUDIES – ECE**