

ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution, Affiliated to Anna University, Chennai)

PERUNDURAI, ERODE - 638 057.



Department of Electronics and Instrumentation Engineering
7th BOARD OF STUDIES MEETING

21st December 2023 @ 02.30 p.m.

ZOOM ONLINE MEET

Meeting Link: Zoom Meeting ID: 878 6340 7202 , Passcode: 533958
<https://us06web.zoom.us/j/87863407202?pwd=hwuzj3Okj4H7BlewaPNMYFq9UJJnlt.1>



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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 INSTRUMENTATION ENGINEERING

7th BOARD OF STUDIES MEETING

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Date & Time: 21.12.2023 & 02.30 p.m.

AGENDA

The 7th Board of Studies Meeting is convened on 21.12.2023 at 02.30 p.m. The agenda for the meeting is as follows.

BoS /EIE 7.1	:	Welcoming Board of Studies members and opening remarks by the Chairman, Board of Studies, Department of Electronics and Instrumentation Engineering.
BoS /EIE 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 /EIE 7.3	:	Review of Syllabus for the Third and Fourth Semesters for the B.E. Electronics and Instrumentation Engineering programme offered under Regulations 2023.
BoS /EIE 7.4	:	Review of Vertical courses identified for the B.E. Electronics and Instrumentation Engineering programme offered under Regulations 2023.
BoS /EIE 7.5	:	Suggestions for Revisions in curriculum & syllabi needed for Regulations 2023.
BoS /EIE 7.6	:	Any other Matter


Chairman - BoS
Dept. of EIE - ESEC



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DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING

7th Board of Studies BOS MEMBERS

1.	Dr.T.Maris Murugan, Associate Professor & Head, Department of Electronics and Instrumentation, Erode Sengunthar Engineering College, Perundurai.	Chairman
2.	Dr.S.Geetha Associate Professor, Department of Electrical and Electronics Engineering, Coimbatore Institute of Technology, Coimbatore.	University Nominee
3.	Dr. P. Subha Hency Jose Associate Professor, Biomedical Engineering, Karunya University, Coimbatore.	Academic Experts
4.	Er. S.Subbain Product Manager, Shri Jai Sharath Automation & Engineering Solution, TS/77, 2ndFloor, Thiru.Vi.Ka. Industrial Estate, Ekkattuthangal, Chennai.	Industrial Expert related to Placement
5.	Er. Sivasai Thota, Software Development Engineer in Test (SDET), Lyric.Tech, Chennai.	Meritorious Alumnus nominated by the Principal
6.	Dr.P.Elamurugan, Associate Professor/EIE	Internal Members
7.	Mr.P.Suresh Kumar, Assistant Professor (Sr.Gr.)/ EIE	
8.	Mr.E.Sathish, Assistant Professor / EIE	
9.	Mr.P.Senthil Kumar, Assistant Professor / EIE	
10.	Ms.C.Jayabharathi, Assistant Professor / EIE	
11.	Ms.G. Revathy, Assistant Professor / EIE	


**Chairman - BoS
Dept. of EIE - ESEC**

BoS / EIE 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 Instrumentation Engineering curriculum of all Semesters and syllabus of I, II, III & IV Semesters under the Regulations 2023. The members presented in the Board of Studies Meeting are given in Annexure - I.
BoS / EIE 7.2	:	Confirmation of the Minutes of 06th Board of Studies Meeting and Action Taken Report of 06th Board of Studies meeting.
	:	<p>Discussion</p> <p>The Chairman, presented the Minutes of 6th Board of Studies Meeting which was held on 16.12.2022 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 /EIE 7.3	:	Review of syllabus Third and Fourth semesters for the B.E. Electronics and Instrumentation Engineering programme offered under Regulations 2023.
	:	<p>Discussion</p> <p>The Chairman, presented syllabus belongs to Third and Fourth semester for the B.E. Electronics and Instrumentation Engineering programme offered under Regulations 2023. The BoS members approved the same.</p> <p>Dr. P. Subha Hency Jose, AsP/BME, Karunya University, Coimbatore, Suggested to include Advanced Processor topic in the course of “Microprocessors and Microcontrollers” Chairman agreed to include the same.</p> <p>Dr. P. Subha Hency Jose, AsP/BME, Karunya University, Coimbatore and Er. S.Subbain, Product Manager, Shri Jai Sharath Automation & Engineering Solution, appreciated the syllabus formation of B.E. EIE under Regulations 2023.</p> <p>Resolution</p> <p>It is resolved to recommend the B.E. - EIE syllabus under Regulations 2023 and same is submitted to the Academic Council for Approval.</p>
BoS /EIE 7.4	:	Review of vertical courses identified for the B.E. Electronics and Instrumentation Engineering programme offered under Regulations 2023


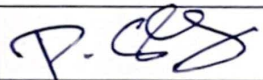
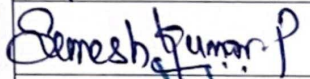





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	<p>The Chairman presented the vertical courses identified for the B.E. Electronics and Instrumentation Engineering programme offered under Regulations 2023. The BoS members approved the same.</p> <p>Dr.S.Geetha, AsP/EEE/CIT/Coimbatore, suggested to include “Building Automation” course in the vertical courses for B.E. EIE programme offered under Regulation 2023. The Chairman agreed to include the same.</p> <p>Er. Sivasai Thota, Software Development Engineer in Test (SDET), Lyric.Tech, Chennai, suggested to include “Deep and Reinforcement Learning” in vertical courses under Regulations 2023. The Chairman agreed to include the same.</p> <p>Resolution</p> <p>It is resolved to recommend the Vertical Courses under Regulations 2023 and same is submitted to the Academic Council for Approval.</p>
BoS /EIE 7.5	<p>Suggestions for Revisions in Curriculum and Syllabi needed for Regulations 2023</p>
	<p>Dr. P. Subha Hency Jose, AsP/BME, Karunya University, Coimbatore, she enquired about delivery method and Latest tools used for the all the course.</p> <p>Dr.S.Geetha, AsP/EEE/CIT/Coimbatore, suggested to more number of students involve and receive the online NPTEL Course Certificate for their Placement and Higher studies.</p>
BoS /EIE 7.6.	<p>Any other Matter</p>
	<p>Common points suggested by the members as concluding remark</p> <p>Suggested to update the 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 - BoS
Dept. of EIE - ESEC

ANNEXURE – I

The following members presented in the Board of Studies Meeting

Sl. No.	Name & Designation	Category	Signature
1	Dr.T.Maris Murugan, Associate Professor & Head, Department of Electronics and Instrumentation, Erode Sengunthar Engineering College, Perundurai.	Chairman	
2	Dr.S.Geetha Associate Professor, Department of Electrical and Electronics Engineering, Coimbatore Institute of Technology, Coimbatore.	University Nominee	ON-LINE MODE
3	Dr. P. Subha Hency Jose Associate Professor, Biomedical Engineering, Karunya University, Coimbatore.	Academic Experts	
5	Er. S.Subbain Product Manager, Shri Jai Sharath Automation & Engineering Solution, TS/77, 2ndFloor, Thiru.Vi.Ka. Industrial Estate, Ekkattuthangal, Chennai.	Representative from Industry/ Corporate sector	
6	Er. Sivasai Thota, Software Development Engineer in Test(SDET), Lyric.tech, Chennai.	Meritorious Alumnus nominated by the Principal	
7	Dr.P.Elamurugan, Associate Professor/EIE	Internal Members	
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12	Ms.C.Jayabharathi, Assistant Professor / EIE		
13	Ms.G.Revathy, Assistant Professor / EIE		


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ANNEXURE – II

DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING

Screen shots of 7th Board of Studies Meeting

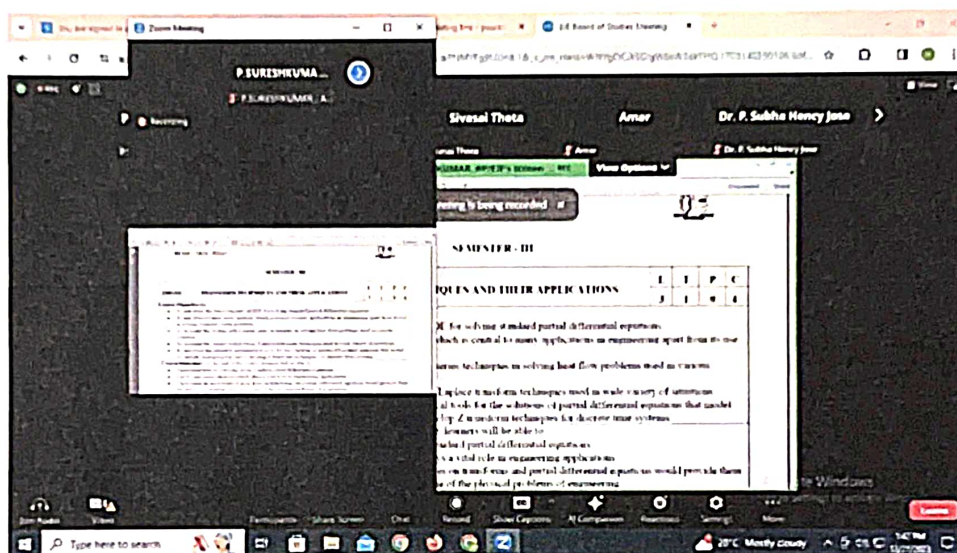
Name of the Department : Electronics and Instrumentation Engineering

Name of the Board : Electronics and Instrumentation Engineering

Date, Time & Mode : 21.12.2023 - 02.30 p.m. & Online Mode

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Ability to design signal conditioning circuits for resistive, inductive and capacitive transducers	
Unit I	CHARACTERISTICS OF TRANSDUCERS
Units and standards – Classification of errors. Limiting error and probable error – Error analysis – Statistical methods – Odds and uncertainty – Classification of transducers – Selection of transducer	
Unit II	SCIENCE OF MEASUREMENTS AND CLASSIFICATION OF TRANSDUCER
Static characteristics – Accuracy, precision, resolution, sensitivity, linearity, span and range – Dynamic characteristics – Mathematical model of transducer – Zero, first and second order transducers – Response to impulse, step, ramp inputs	
Unit III	VARIABLE RESISTANCE TRANSDUCERS
Principle of operation, construction details, characteristics and applications of potentiometer, strain resistance thermometer, thermistor, hot-wire anemometer, piezo-resistive sensor and humidity sensor	
Unit IV	VARIABLE INDUCTANCE AND VARIABLE CAPACITANCE TRANSDUCERS
Inductive transducers: Principle of operation, construction details, characteristics and applications: LVDT, Induction potentiometer – Variable reluctance transducers – Principle of operation, construction details, characteristics and applications: Capacitive transducers: Principle of operation, construction details and characteristics: Differential capacitance transducer, Capacitor microphone, Capacitive pressure sensor	
Unit V	OTHER TRANSDUCERS
Piezoelectric transducer – Hall Effect transducer – Magneto elastic sensor – Digital transducers – Optic sensors – Servo pickup transducers – Introduction to MEMS – Introduction to Smart transducers and its interface standard (IEEE 1451)	
L: Lecture	T: Tutorial
P: Practical	C: Credits
Total 45 Periods	

Chairman - BoS
Dept. of EIE - ESEC