



**SRI MANAKULA VINAYAGAR**  
ENGINEERING COLLEGE  
(AN AUTONOMOUS INSTITUTION)



**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

*8<sup>th</sup> UG - Board of Studies Meeting in the Department of  
Electronics and Communication Engineering*

*for the Programme*

**B.Tech. – Electronics and Communication Engineering**

**Venue**

Seminar Hall,  
Department of Electronics and Communication Engineering  
Sri Manakula Vinayagar Engineering College  
Madagadipet, Puducherry – 605 107

**Date & Time**

**September 5, 2024, at 10.30 am.**

## BOARD OF STUDIES MEETING

The Eighth Board of Studies meeting for UG programme was held on 5<sup>th</sup> September 2024 at 10:30 am in Seminar Hall, Department of Electronics and Communication, Sri Manakula Vinayagar Engineering College, Puducherry.

### MEMBERS OF THE BOARD OF STUDIES

<b>1. Head of the Department concerned (Chairperson).</b>
<b>Dr. P. Raja, Professor and Head</b>

<b>2. Faculty members of the Department.</b>	
<b>Name and Designation</b>	<b>Specialization</b>
<b>Dr. C. A. Sathiyamoorthy</b> , Professor	Image Processing
<b>Dr.A.Jayachitra</b> , Professor	Control and Instrumentation
<b>Dr. R.Kurinjimalar</b> , Professor	Mobile Satellite Communication
<b>Dr.J.Pradeep</b> , Associate Professor	Image Processing
<b>Dr.S.B.Lenin</b> , Associate Professor	Wireless Communication, VLSI Design
<b>Dr.P.Arunagiri</b> , Associate Professor	Wireless Communication
<b>Dr.PremKumar.S</b> , Associate Professor	Wireless Communication
<b>Dr.N.Saranya</b> , Assistant Professor	Antennas and Microwave Engineering
<b>Dr.S.Dhivya</b> , Assistant Professor	Digital Image Processing
<b>Dr.R.Vijayarani</b> , Assistant Professor	Wireless Communication
<b>Dr.Vankayala Chethan, Prakash</b> , Assistant Professor	Wireless Communication
<b>Mrs.S.Jayanthi</b> , Assistant Professor	VLSI Design
<b>Mrs.V.Logisvary</b> , Assistant Professor	Applied Electronics
<b>Mr.J.Soundararajan</b> , Assistant Professor	Digital Communication and Network Engineering.
<b>Mr.M. Harikrishnan</b> , Assistant Professor	Image Processing
<b>Mr.S.Pushparaj</b> , Assistant Professor	VLSI Design
<b>Navaneethakrishan. V.M</b> , Assistant Professor	Embedded Systems
<b>Mrs.P.Srividdhya</b> , Assistant Professor	Image Processing
<b>Mr.P.Mahendra Peruman</b> , Assistant Professor	VLSI Design
<b>Mrs.R.Gayathri</b> , Assistant Professor	Signal Processing
<b>Mr.S.Ganesan</b> , Assistant Professor	Electrical Drives and Control
<b>Mr.R.Kalaiyaran</b> , Assistant Professor	Wireless Communication
<b>Mr.S.Mohanram</b> , Assistant Professor	Embedded Systems
<b>Mr.K.Jambulingam</b> , Assistant Professor	Wireless Communication
<b>Ms.R.Priya</b> , Assistant Professor	Digital Image Processing
<b>Ms.K.Archana</b> , Assistant Professor	Applied Electronics
<b>Mr.P. Suseendar</b> , Assistant Professor	Embedded Systems
<b>Mrs.T.S.Krishnapriya</b> , Assistant Professor	Embedded Systems
<b>Mr.S.Yuvaraj</b> , Assistant Professor	VLSI Design

<b>Mrs.S.Anbarasi</b> , Assistant Professor	Wireless Communication
<b>Mr.Sundar Mohan</b> , Assistant Professor	Image Processing
<b>Mrs.Kavitha.K</b> , Assistant Professor	Communication Systems
<b>Mrs.Tamilselvi D</b> , Assistant Professor	Communication Technology
<b>Mr. J, Dhanapathi</b> , Assistant Professor	Process Control and Instrumentation
<b>Mrs. M.S. Vandhana</b> , Assistant Professor	VLSI Design
<b>Ms. R. Arthy</b> , Assistant Professor	VLSI and Embedded Systems
<b>Ms. A. Preetha</b> , Assistant Professor	Electronics and Communication Engineering
<b>Invited Members</b>	
<b>Dr.T.Gayathri, Professor</b>	Graph Theory
<b>Dr.T.Jayavarthanam, Professor</b>	Vibrational Spectrography
<b>Dr.S.Savithri, Professor</b>	Environmental Chemistry
<b>Dr.P.Rajeswari, Associate Professor</b>	Indian Writing in English

### 3. Two subject experts from outside the parent University are nominated by the Academic Council

<b>Dr.J.Charles Pravin</b> , Professor, Department of ECE Kalasalingam Academy of Research and Education, Krishnankoil	<b>Dr.V.J.K.Kishore Sonti</b> , Professor, School of Electrical and Electronics, Sathyabama Institute of Science and Technology, Chennai.
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### 4. One expert is nominated by the Vice-Chancellor from a panel of six recommended by the Autonomous College Principal as a University Nominee

**Dr. M. Jagannath**  
Professor, School of Electronics Engineering  
Vellore Institute of Technology, Chennai.

### 5. One representative from the Industry/Corporate sector/allied areas nominated by the principal.

**Er.R. Murali Srinivasan**,  
Principal Engineer, Western Digital Corporation  
Prestige Park, Prestige Excelsior,  
Building No. 143/1, Amani Belandur Kane Village  
Varthur Hobli, Bangalore

### 6. One member of the College alumni to be nominated by the principal.

**S. Krishnakumar**,  
Test Engineer (Cloud Architect),  
Wipro Technologies, Survey No - 602/03, SEZ Ave,  
ELCOT SEZ, Shollinganallur, Chennai

### 7. Experts from outside the Autonomous College, whenever special courses of studies are to be formulated, to be nominated by the principal.

**Prof. R. Nakkeeran**  
Professor, Department of Electronics Engineering  
School of Engineering & Technology, Pondicherry University

## **AGENDA OF THE MEETING**

### **BoS /2024 /UG/ECE 8.1**

To Review and confirm the minutes of the Seventh meeting of Board of Studies held on 29.02.2024

### **BoS /2024 /UG/ECE 8.2**

To discuss and approve Syllabi of semester-V for the B.Tech. – Electronics and Communication Engineering students admitted from the academic year 2023-24.

- Professional Core Courses
- Professional Elective Courses
- Open Elective Courses

### **BoS /2024 /UG/ECE 8.3**

To discuss and approve Syllabi of semester-VI for the B.Tech. – Electronics and Communication Engineering students admitted from the academic year 2023-24.

- Professional Core Courses
- Professional Elective Courses
- Open Elective Courses

### **BoS /2024 /UG/ECE 8.4**

To discuss and approve Syllabi of Honors Degree offered in the department of Electronics and Communication Engineering students admitted from the academic year 2023-24.

### **BoS /2024 /UG/ECE 8.5**

To discuss the Industry Institute Interaction for the Department of Electronics and Communication Engineering.

- Guest lectures
- Internship details
- Placement details
- MOUs
- Industrial Visits

### **BoS /2024 /UG/ECE 8.6**

Any other additional points with the permission of the chair.

## MINUTES OF THE MEETING

Dr. P. Raja, Chairman, BoS opened the meeting with warm welcome and thanked all the Members for accepting the Eighth BoS meeting Invitation for the B.Tech programme. The Chairman proceeded the meeting subsequently and discussed the agenda items.

### BoS / UG / ECE 8.1

#### To review and confirm the minutes of the Seventh BoS meeting held on 29<sup>th</sup> February 2024

The seventh BOS meeting for B.Tech - Electronics and Communication Engineering program under Regulations 2023 was held on February 29, 2024. The chairman presented the action taken report based on the suggestions provided by the BoS members

S.No	Sem	Title of Course	Unit	Suggestions	Action Taken
1	III	Electron Devices	I	The application of electron devices initially included in Unit I of the course "Electronic Circuits" will be replaced by the biasing of BJTs and FETs, including their stability.	Modified the syllabus
2	III	Sensors and Its Applications	-	The course "Measurement and Instrumentation," offered in Semester III as a core course, may be chosen as one of the Professional Elective - I option. Instead of this course, the new course "Sensors and Their Applications" may be offered in Semester III, as the knowledge gained from this course would be more beneficial for the automation of various systems.	As per suggestions, the course "Sensors and its Applications" introduced in Semester - III
3	III	Engineering Electromagnetics	-	It is suggested that the "Engineering Electromagnetics" theory-cum-practical course be considered a professional core course due to its status as a prerequisite for communication-related courses.	Based on the suggestion, The course is as professional core course
4	III	Signals and Systems		The course "Signals and Systems" is recommended to be structured as a theory-cum-practical course because it allows students to gain confidence in understanding signals and systems by integrating theoretical knowledge with practical applications within a single course.	Based on the suggestion, The course "Signals and Systems" offered as Theory cum Practical course
5	IV	Analog Communication	-	The course "Analog and Digital Communication Systems" was combined into a single course; however, it is recommended that they be separated, with "Analog Communication" offered in Semester IV and "Digital Communication" offered in Semester V. It is also suggested that the course "Analog Communication" be structured as a theory-cum-practical course in Semester IV. This recommendation aims to enhance students' understanding of communication systems.	As per suggestion, the course "Analog Communication" is introduced in semester-IV as Theory cum Practical course.

**Members are reviewed the Action taken report and Confirmed the Minutes of 7<sup>th</sup> BoS Meeting**

**BoS / UG / ECE 8.2**

To discuss and approve Syllabi of semester-V for the B.Tech. – Electronics and Communication Engineering students admitted from the academic year 2023-24.

- Professional Core Courses
- Professional Elective Courses
- Open Elective Courses

The members reviewed the syllabus of each course offered in Semester – V under Regulations 2023 and gave the following suggestions.

**Semester - V: Professional Core Courses**

Course Code	Course Name	Remarks
U23ECT509	Digital Communication	Members insisted the Unit I with a modification of matched filter and its probability of error can be included, since knowledge of matched filters is essential for optimal signal detection in noisy environments and improves signal recovery in communications.
U23ECP506	Digital Communication Laboratory	Members suggested to Include some simulation tool to generate ASK, FSK and PSK etc.,
U23ECW501	Micro project	Reduce the team size from four students to two students to assess the student project effectively. Since it is a micro-level project, keeping the group size at four may result in minimal contributions from each student, limiting their practical exposure.

**Professional Elective –II (Offered in Semester – V)**

Course Code	Course Name	Remarks
U23ECE507	Introduction to MEMS	<ul style="list-style-type: none"> <li>• The members suggested that the syllabus is too extensive and suggested to modify the syllabus with the fundamental knowledge               <ul style="list-style-type: none"> <li>○ Unit – II : remove the topic High Speed Ratio (HSR) Technology</li> <li>○ Unit – V : Remove Parylene, Fluorocarbon, Actuators for large plane translation motion, Role of MEMs in IOT, Industrial Applications to be removed</li> </ul> </li> </ul>
U23ECE508	Real time Operating system	<ul style="list-style-type: none"> <li>• Members insist on reducing Unit-I since it is too large, and the suggestion was provided to include Task and scheduling as a separate unit.</li> <li>• The fault tolerance techniques given in Unit-5 is to be replaced with real time databases and Communication.</li> </ul>
U23ECE509	Hardware Description Languages	<ul style="list-style-type: none"> <li>• Members suggested that to focus any one type of Hardware Description Language either Verilog or VHDL.</li> <li>• Hence Unit -IV and Unit V contents had been revised based on HDL description</li> </ul>
U23ECE510	Network Information Security	<ul style="list-style-type: none"> <li>• Members stated that Unit-I should include general fundamental topics.</li> <li>• Unit II had been modified as User authentication and Access control</li> </ul>

**Modified syllabus based on the members suggestions are given in Annexure - I**

**The syllabus for each course offered in Semester V was discussed in detail, and the members approved it with minor revisions.**

**BoS / UG / ECE 8.3**

**To discuss and approve Syllabi of semester- VI for the B.Tech. – Electronics and Communication Engineering students admitted from the academic year 2023-24.**

- **Professional Core Courses**
- **Professional Elective Courses**
- **Open Elective Courses**

The following courses have been modified as per the BOS members suggestion in semester VI as per guidelines of AICTE model curriculum.

**Semester - VI: Professional Core Courses**

Course Code	Course Name	Remarks
U23ECT610	Embedded Technology	Members suggested to focus on specific controller ARM cortex to provide the focused learning and get expertise in the specific controller. Unit- III and IV to be modified according to the controller of ARM cortex
U23ECW602	Mini Project	Reduce the team size from four students to two / Three students to assess the student project effectively. Since it is a mini-level project, keeping the group size at four may result in minimal contributions from each student, limiting their practical exposure.

**Professional Elective –III (Offered in Semester – VI)**

Course Code	Course Name	Remarks
U23ECE613	Fog Computing	Members insisted to narrow down the relevant contents in Unit IV and V.

**Modified syllabus based on the members suggestions are given in Annexure - II**

**The syllabus of each course offered in Semester VI was discussed in detail, and the members approved it with minor revisions**

**BoS / UG / ECE 8.4**

**To discuss and approve Syllabi of Honors Degree offered in the department of Electronics and Communication Engineering students admitted from the academic year 2023-24.**

The discussion regarding the Honors Degree was conducted with the expert members for students admitted in the academic year 2023-24. Eligible students should opt for this Honors Degree by earning 18-20 credits in accordance with Regulations 2023. The courses approved for this purpose will allow students to earn additional credits.

Course Code	Course Name
U23ECH401	Smart Sensor Technologies for IoT
U23ECH502	Embedded Hardware System Design
U23ECH603	IoT Networking and Communications
U23ECH704	Industrial Internet of Things
U23ECH805	Privacy and Security in IoT

**The suitable courses are approved in the 7<sup>th</sup> BoS Meeting and same was discussed and approved**

**BoS / UG / ECE 8.5**

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**To discuss the Industry Institute Interaction for the Department of Electronics and Communication Engineering.**

- **Certification Courses**
  - **Guest lectures**
  - **Internship details**
  - **Placement details**
  - **MOUs**
  - **Industrial Visits**
- 

The Chairman discussed the industry-Institute Interaction for the Department of Electronics and Communication Engineering. As a result, many guest lectures have been initiated, certification courses are being updated based on industry requirements, and MOUs have been signed to provide internship opportunities for students. Industrial visits will also offer students valuable industrial exposure.

### **Certification Courses**

<b>Year / Sem</b>	<b>Date</b>	<b>Course Title / Course Code</b>	<b>No. of students</b>
I / II	07.08.24 to 13.08.24	Python Programming / U23ECC274	224
II / IV	29.07.24 to 05.08.24	IoT using Python / U20ECC459	121
II / IV	29.07.24 to 05.08.24	Machine Learning / U20ECC461	121

### **Guest lectures**

<b>Recourse person</b>	<b>Title</b>	<b>Beneficiary</b>
Ms.Divya Jyothi	Basics of Communication Protocols	60 Students
Mr. R.Raman	Recent Technology in Electric Vehicle and Charging Station	58 Students
Mr.R.Ponmudi	Introduction to Wi-Fi and Embedded system	60 Students
Dr.D.Sugumar	Transforming Wireless Communication through Cutting-Edge Antenna Design	71 Students
Mr.R.Ashokkumar	Guest Lecture on Scope of Industry 4.0 Technology	56 Students
Mr.J.JinuKrishnan	Smarter Electronics, Smarter Communication: An IoT Workshop	48 Students
Dr.S.Shanmugam	A recent advancement and Development in Web Technologies	57 Students
Dr.V.Ezhilavan	Advances in Python For web development	70 Students
Shri.M.Indrabalan	Issues and Challenges in Army Navigation Systems	80 Students
Mr.V.Kadhirvelu	Evolution of Communication	60 Students
Dr.V.J.K. Kishore Sonti	Ideation And Innovation in Electronics	60 Students
Mr.Adinath Kale	Image Watermarking and authentication Techniques	75 Students
Dr.M.Dhayalakumar	Open-source Tools Revolutionizing VLSI Design – Advantages, opportunities and Challenges	60 Students
Mr.K.Sathish kumar	Flask Micro web Frameworks with python	60 Students
Dr.Abhijit Bora,	Fundamental of Android application Development	60 Students
Mr.R.Shankar	Recent Technology in communication systems with SCADA and its applications	110 Students
Dr.M.Anousouya Devi,	Mastering C Programming Exploring structures, Pointers, Unions	58 Students



	and file operators	
Dr.D.Sugumar	Evolution and innovation in wireless communication Antennas: From transmission lines to intelligent solutions	75 Students
Dr.D.Sugumar	Evolution and innovation in wireless communication Antennas: From transmission lines to intelligent solutions	75 Students

### Internship Details

S.No	Name of the Company	Number of Students
1	Hexaware	12
2	Renault Nissan Technology	2
3	Societe Generale	2
4	Visteon	5
5	Ford	3
6	Secote Intelligent Manufacturing Private Limited	17
7	Cognifyz Technologies	1
8	AICTE Internship - AWS Academy	3
9	AICTE-Android Developer Virtual Internship by Google for Developers	8
10	Twilight IT solutions	1
11	KODACY in Association with SPACE	21
12	AICTE-Cybersecurity Virtual Internship-Paloalto Networks	2
13	Pantech E-learning Pvt.Ltd.	1
14	Allied Automations	3
15	AICTE-Embedded Developer Virtual Internship by Microchip	1
16	Microtron India Technologies Pvt Ltd	2
17	Intelligent Automation Internship by SS & C	1
18	Alteryx SPARKED- Data Analytics Process Automation Virtual Internship	1
19	The Drone World	1
20	AICTE-Networking Cloud Virtual Internship by Juniper Networks	2

### Placement Details

S.No	Company Name	Package	Count
1	Accenture	4.6 LPA	7
2	Data Pattern	4.2 LPA	1
3	Ford Pega	6 LPA	3
4	Hexaware	4 LPA	16
5	Integra	2.15 LPA	21
6	KAAR Technologies	6.5 LPA	1
7	Mannschaft Engineering	4 LPA	1
8	Renault Nissan Technology	4.25 LPA	5
9	Societe Generale	5.43 LPA	2
10	Sureti Insurance Marketing Pvt. Ltd	3 LPA	1
11	TCS Digital	7 LPA	17

S.No	Company Name	Package	Count
12	TCS Ninja	3.36 LPA	52
13	TCS Pega	3.86 LPA	5
14	Accenture	4.6 LPA	7
15	Data Pattern	4.2 LPA	1
16	Visteon	7 LPA	5
17	WABCO India Ltd	2.1 LPA	1
18	Vodafone Pega	7.25 LPA	1
19	Zoho	7 LPA	1
20	Girmiti Software Private Limited	3 LPA	2
21	AMI	4 LPA	1
22	SANMINA	3.4 LPA	1
23	CTS	4 LPA	8
24	Schneider Electric	3 LPA	5
25	Siechem Wires & Cables	3.87 LPA	5
26	Visteon	7 LPA	5

### MOUs

Name of the Industry	Duration
Techvolt software Pvt Ltd, Coimbatore	Lifetime
Deepshere AI, Singapore	5 Years
Retech solution Pvt. Ltd, Chennai	Lifetime
VEI Technologies Pvt. Ltd, Chennai	Lifetime

### Industrial Visits

Name of the Company	Beneficiary
Lucas TVS Pvt Limited	96 Students
Bharat Sanchar Nigam Limited	54 Students
Enthu Technology India Pvt Ltd	46 Students
TechOn Info	57 Students
Techvolt Software Pvt Ltd	105 Students
CodeBind Technologies	46 Students
Pandiyan's Industries	94 Students
Versa Drives	48 Students
Keltron Electronics Development Corporation Ltd	197 Students
Vikram Sarabhai Space Centre	197 Students

**Members appreciated the outcomes of the activities conducted during the academic year 2023-2024.**

Any other additional points with the permission of the chair.

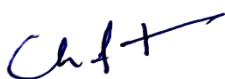
Dr. P. Raja, Chairman – BoS and Head of Department, Electronics and Communication Engineering, concluded the meeting at 2.00 pm with vote of thanks.



**Dr. P. Raja**  
Chairperson – BoS



**Dr. M. Jagannath**  
Member - University Nominee



**Dr. J. Charles Pravin**  
Member – Academic Council Nominee



**Dr. V. J. K. Kishore Sonti,**  
Member – Academic Council Nominee



**Prof. R. Nakkeeran**  
Member – Subject Experts



**Er. R. Murali Srinivasan,**  
Member – Industry Nominee



**S. Krishnakumar**  
Member – Alumni Nominee



**Dr. C. A. Sathiyamoorthy**  
Member - Professor/ ECE



**Dr. A. Jayachitra,**  
Member - Professor/ ECE



**Dr. R. KURINJIMALAR**  
Member - Professor/ ECE



**Dr. J. PRADEEP**  
Member – Associate Professor/ ECE



**Dr. S. B. Lenin,**  
Member – Associate Professor/ ECE



**Dr. P. Arunagiri,**  
Member – Associate Professor/ ECE



**Dr. Prem Kumar S.,**  
Member – Associate Professor/ ECE



**Dr. N. Saranya,**  
Member – Assistant Professor/ ECE



**Dr.S.Dhivya,**

Member – Assistant Professor/ ECE



**Dr.Vankayala Chethan Prakash,**

Member – Assistant Professor/ ECE



**Mrs.V.Logisvary,**

Member – Assistant Professor/ ECE



**Navaneethakrishnan.V.M**

Member – Assistant Professor/ ECE



**Mr.P.Mahendra Peruman,**

Member – Assistant Professor/ ECE



**Mr.S.Ganesan,**

Member – Assistant Professor/ ECE



**Mr.S.Mohanram,**

Member – Assistant Professor/ ECE



**Ms.R.Priya,**

Member – Assistant Professor/ ECE



**Mrs. M.S. Vandhana,**

Assistant Professor



**Mrs.T.S.Krishnapriya,**

Member – Assistant Professor/ ECE



**Dr.R.Vijayarani,**

Member – Assistant Professor/ ECE



**Mrs.S.Jayanthi,**

Member – Assistant Professor/ ECE



**Mrs.P.Srividhya,**

Member – Assistant Professor/ ECE



**Mr.M. Harikrishnan,**

Member – Assistant Professor/ ECE



**Mrs.R.Gayathri,**

Member – Assistant Professor/ ECE



**Mr.R.Kalaiyaran,**

Member – Assistant Professor/ ECE



**Mr.K.Jambulingam,**

Member – Assistant Professor/ ECE



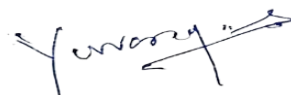
**Ms.K.Archana,**

Member – Assistant Professor/ ECE



**Mr.P. Suseendar,**

Member – Assistant Professor/ ECE



**Mr.S.Yuvaraj,**

Member – Assistant Professor/ ECE



**Mrs.S.Anbarasi,**  
Member – Assistant Professor/ ECE



**Mr.Sundar Mohan,**  
Member – Assistant Professor/ ECE



**Mrs.Kavitha.K,**  
Member – Assistant Professor/ ECE



**Mrs.Tamilselvi D,**  
Member – Assistant Professor/ ECE



**Ms. R. Arthy,**  
Assistant Professor



**Ms. A. Preetha,**  
Assistant Professor



**Mr. J. Dhanapathi**  
Member – Assistant Professor/ ECE



**Dr.T.Gayathri,**  
Invited Member – Professor/ Mathematics



**Dr.T.Jayavarthan,**  
Invited Member – Professor/ Physics



**Dr.S.Savithri,**  
Invited Member – Professor/ Chemistry



**Dr.P.Rajeswari,**  
Invited Member – Associate Professor/ English