



SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE

(An Autonomous Institution)

Puducherry - 605 107

*3rd 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 ECE
Sri Manakula Vinayagar Engineering College
Madagadipet, Puducherry – 605 107

Date & Time

28-08-2021 & 10.30 am

BOARD OF STUDIES MEETING

The Third Board of Studies meeting for B.Tech. Electronics and Communication Engineering was held on 28th August 2021 at 10:30 am in the Seminar Hall, Department of ECE, Sri Manakula Vinayagar Engineering College with the Head of the Department in the Chair.

The following members were present for the BoS meeting in the venue

Sl. No	Name of the Member	Designation
1	Dr. P. Raja Professor and Head, Department of ECE	Chairman
2	Mr. C. Gnanavel General Manager, Production and Technology, Lenovo India Ltd., Puducherry	Industry Member
3	Dr. R. Ramya , Professor/ ECE Specialization: ECE	Member
4	Dr. J. Pradeep , Associate Professor / ECE Specialization: Image Processing	Member
5	Dr. R. Kurinjimalar , Associate Professor / ECE Specialization: Mobile Satellite Communication	Member

6	Prof. R. Ilaiyaraja , Assistant Professor / ECE Specialization: VLSI Design	Member
7	Prof. Egalite Francis , Assistant Professor Specialization: Mathematics	Member
8	Prof. K. Oudayakumar , Associate Professor Specialization: Physics	Member
9	Dr. S. Deepa , Professor Specialization: Chemistry	Member
10	Dr. D. Jaichithra , Professor and Head Specialization: English	Member
11	Mr. G. Dharanidharan Associated Functional Consultant, Birlasoft Limited, Old Mahabalipuram Road, Chennai – 600096	Alumni Member

The following members were present in the online platform

Sl. No	Name of the Member	Designation
1	Dr. Gerardine Immaculate Mary Professor, Department of Embedded Systems, Vellore Institute of Technology (VIT), Vellore, Tamil Nadu, India	Expert Member (University Nominee)
2	Dr. N. Venkateswaran Professor, Department of ECE, SSN - College of Engineering, Kalavakkam, Tamil Nadu, India	Expert Member (Academic Council Nominee)
3	Dr. V. R. Vijayakumar Associate Professor & Head, Department of ECE, Anna University, Regional Campus, Coimbatore	Expert Member (Academic Council Nominee)

AGENDA OF THE MEETING

Item No. : BoS / UG / ECE 3.1

To review and confirm the second BoS meeting minutes held on 10.04.2021

Item No. : BoS / UG / ECE 3.2

To consider and approve syllabi of VII and VIII semesters of B.Tech. ECE to be offered under Regulations 2019 for the students admitted in the academic year 2019 - 20

Item No. : BoS / UG / ECE 3.3

To discuss and approve the Professional electives offered in VII and VIII semesters for the students admitted in the Academic Year 2019 - 20 as per Regulations 2019.

Item No. : BoS / UG / ECE 3.4

To consider and approve syllabi of V and VI semester of B.Tech. ECE to be offered under Regulations 2020 for the students admitted in the academic year 2020-21

Item No. : BoS / UG / ECE 3.5

To discuss and approve the Professional electives offered in V and VI semesters for the students admitted in the Academic Year 2020-21 as per Regulations 2020

Item No. : BoS / UG / ECE 3.6

To consider and approve the open electives offered to other departments in Semester VIII from the academic year 2021-22

Item No. : BoS / UG / ECE 3.7

Any other item with the permission of the chair

MINUTES OF THE MEETING

Dr. P. Raja, Chairman, BoS opened the meeting with a warm welcome and thanked all the members for accepting the 3rd BoS meeting Invitation for the B.Tech – Electronics and Communication Engineering program. The Chairman proceeded to the meeting subsequently and discussed the agenda items.

**BoS / UG /
ECE 3.1****To review and confirm the second BoS meeting minutes held on 10.04.2021**

The second BoS Meeting for B.Tech.- Electronics and Communication Engineering under Regulations 2020 and Regulations 2019 was held on 10-04-2021. The Members have reviewed the Minutes of Second BoS Meeting and approved

Minutes are Reviewed and Confirmed**BoS / UG /
ECE 3.2****To consider and approve syllabi of VII and VIII semesters of B.Tech. ECE to be offered under Regulations 2019 for the students admitted in the academic year 2019 - 20**

Members have discussed the syllabi of semesters VII and VIII of B.Tech- Electronics and Communication Engineering under Regulation 2019, and the suggestions are given in course wise.

Courses wise suggestions of the semester- VII under Regulations 2019**1. Millimeter and Optical Wave Communication (U19ECT71)**

Unit-1, the Application of Millimetre-wave focused below the 60GHz; the members are suggested to include 5G applications that are used beyond 60 GHz.

2. Internet of Things (U19ECT72)

The academic members suggested having the IoT course as an elective course; however, the industry person indicated that the course should remain in the professional core course because of vital role in automation and remote monitoring system in the industry. Based on his recommendation, the other members are accepted to keep this course as a core course and suggested mentioning the IoT applications in unit – V instead of case studies. Also, concentrate the security perspective in IoT and also include data platforms in smart cities.

3. Internet of Things Laboratory (U19ECP73)

The member suggested to include one experiment based on LoRaWAN.

4. Comprehensive VIVA Voce

The portion of microcontroller to be included In test-1 instead of “Microprocessor”

Courses wise suggestions of the semester- VIII under Regulations 2019

1. Cyber Physical System (U19ECT81)

The members feel that this course syllabus is higher, which is similar to the PG level programme. They suggested reducing the level of complexity of the course syllabus

All the suggestions are considered and updated in the respective courses. The details are given in **Annexure - I**

Approved with Minor corrections and Recommended to Academic Council

**BoS / UG /
ECE 3.3**

To discuss and approve the Professional electives offered in VII and VIII semesters for the students admitted in the Academic Year 2019 - 20 as per Regulations 2019.

As per the Regulations, each student shall choose one professional elective in semester VII and two professional electives in semester VIII in consultation with the Class Advisor, Programme Academic Coordinator and the HoD. The opted elective course will be offered only if the number of students opted for that course is not less than 30. However, if the students' enrollment in a class is less than 30, the head of the department will decide the elective course.

Members have discussed the syllabi professional elective courses offered in semesters VII and VIII of B.Tech- ECE under Regulations 2019, and the suggestions are given in course wise

Suggestions to Professional Elective – IV (Semester- VII)

1. Fuzzy logic and Neural Network (U19ECE73)

For Unit-5 the title “Case Studies” to be renamed as “Application of Fuzzy Logic and Neural Network”.

2. Biomedical Signal Processing (U19ECE74)

Medical imaging like brain –computer interface to be include in the syllabus.

Suggestions to Professional Elective – V (Semester- VIII)

1. VLSI for Wireless Communication (U19ECE80)

Simplify the content of this elective course as per UG level

2. Machine Learning Techniques (U19ECE81)

Include the applications machine learning in unit – V.

3. Advanced Digital Image and Video Processing (U19ECE88)

- Course name to be modified as “Advanced Image and Video Processing”.
- In Unit-1, 2D image transforms to be included.
- Unit-IV and V to be focused on Video processing and 2D motion estimation respectively.

4. ASIC and FPGA Based Design (U19ECE89)

The members suggested to introduce “ASIC and FPGA based Design” course as elective instead of “Hardware Software Co-design”

All the suggestions are considered and updated in the respective courses. The details are given in **Annexure - II**

Approved with Minor corrections and Recommended to Academic Council

**BoS / UG /
ECE 3.4**

To consider and approve syllabi of V and VI semester of B.Tech. ECE to be offered under Regulations 2020 for the students admitted in the academic year 2020-21

Members have discussed the syllabi of V and VI semesters of B.Tech- ECE to be offered under Regulations 2020 for the students admitted in the academic year 2020-21 and the suggestions are given in course wise

Courses wise suggestions of the semester- V under Regulations 2020

1. Statistical Methods for Engineers (U20BST544)

- Course name “Statistical Methods” to be renamed as “Statistical Methods for Engineers”.

All the suggestions are considered and updated in the respective courses. The details are given in **Annexure - III**

Approved with Minor corrections and Recommended to Academic Council

**BoS / UG /
ECE 3.5**

To discuss and approve the Professional electives offered in V and VI semesters for the students admitted in the Academic Year 2020-21 as per Regulations 2020

Members have discussed the syllabi of professional elective courses offered in semesters V and VI of B.Tech- ECE under Regulations 2020. The members appreciated the professional electives are segregated in category wise elective option. It is very useful to the students to choose their elective courses based on their specialization like Electronics, VLSI Design, Signal Processing and Communication System.

Suggestions to Professional Elective

1. **Vehicular Communication (U19ECE52)**

Vehicular communication syllabus to be modified with next generation of network

2. **Industry 4.0 Technology (U19ECE53)**

Give more awareness of this course by introducing some other technology used in Industry

3. **Information Theory and Coding (U19ECE54)**

- Unit I is to be included with Binary Symmetric Channel(BSC)
- Unit I and Unit III are modified

All the suggestions are considered and updated in the respective courses. The details are given in **Annexure - IV**

Approved with Minor corrections and Recommended to Academic Council

**BoS / UG /
ECE 3.6**

To consider and approve the open electives offered to other departments in Semester VIII from the academic year 2021-22

The following open electives are offered to other departments

Course Code	Course Title	Permitted Departments
U19ECO75	IoT and its Applications	EEE, ICE, CSE, MECH, IT, CIVIL
U19ECO76	Sensors for Industrial Applications	EEE, ICE, CSE, MECH, IT, CIVIL, BME, Mechatronics

1. **Cellular and Mobile Communications (U19ECO76)**

This open elective course, "Cellular and Mobile Communication", is suggested as an open elective for the department of EEE, ICE, CSE, MECH, IT, CIVIL, BME, Mechatronics. The syllabus was presented to BoS members for approval. The members reviewed and discussed about the prerequisite to learn this course. The students from the Department of Mechanical, Civil and mechatronics cannot opt for this course because of basic knowledge of communication systems which is a prerequisite to opt this course. Therefore, the members are suggested to go for common course used for Industrial automation and recommended that the course of "Sensors for Industrial application is more suitable to these departments. Syllabi for this course is submitted and approved the same.

All the suggestions are considered and updated in the respective courses. The details are given in **Annexure - V**

Approved with Minor corrections and Recommended to Academic Council

- The BoS member recommend “internship / In-plant training” may be provided before Project Phase-1 during the summer /winter vacation, which is more suitable for the students to choose/execute the project work accordingly.
- Members are appreciated for different types of Professional Elective for the students which will improve the interdisciplinary knowledge
- Syllabus formation is highly suitable and meets the industry requirements.
- Very well defined syllabus and more topics are based on advanced future technology.
- Slow learners to be considered while selecting the open elective courses.

Dr. P. Raja, Chairman – BoS and Head of Department, Electronics and Communication Engineering, concluded the meeting at 12.30 pm with the vote of thanks.

 Dr. P. RAJA Board Chairman - ECE	
 Dr. GERARDINE IMMACULATE MARY Professor, Department of Embedded Systems, Vellore Institute of Technology (VIT), Vellore (Expert Member - University Nominee)	
 Dr. N. VENKATESWARAN Professor, Department of ECE, SSN College of Engineering, Kalavakkam (Expert Member – AC Nominee)	 Dr. V. R. VIJAYAKUMAR Associate Professor & Head, Department of ECE, Anna University, Regional Campus, Coimbatore (Expert Member – AC Nominee)
 Mr. C. GNANAVEL Manager, Production and Technology, Lenovo India Ltd., Puducherry (Industry Member)	 Mr. DHARANIDHARAN. G Associated Functional Consultant, Birlasoft Limited, Chennai (Alumni Member)
 Dr. R. RAMYA Professor/ ECE (Member)	 Dr. R. KURINJIMALAR Associate Professor / ECE (Member)

 Dr. J. PRADEEP Associate Professor / ECE (Member)	 Prof. R. ILAIYARAJA, Assistant Professor / ECE (Member)
 Prof. EGALITE FRANCIS Assistant Professor / Mathematics (Member)	 Prof. K. OUDAYAKUMAR Associate Professor / Physics (Member)
 Dr. S. DEEPA Professor / Chemistry (Member)	 Dr. D. JAICHITHRA Professor / English (Member)