

Department of ECE

Date : 11-05-2021

Board of Studies of Electronics and Communication Engineering

Minutes of the 2nd Board of Studies Meeting (Online Mode)

Date : 08-05-2021 Saturday

Time : 02.30 P.M to 5.00 P.M

Platform : Microsoft Teams

Meeting Link : https://teams.microsoft.com/l/meetup-join/19%3ameeting_YzhjNDM0MjUtNTQ3Zi00Nzc3LWlyOTYtNzE3MTNjOTQ0OWVm%40thread.v2/0?context=%7b%22Tid%22%3a%222666d919-f1fc-4027-b9c5-212d4e95e68a%22%2c%22Oid%22%3a%22e2bd1ae4-544b-4688-9cd6-e10de0b4a9ec%22%7d

In Attendance:

S.No	Name of the Expert	Designation	Capacity
1	Dr.H.Umma Habiba, Ph.D.,	Professor, ECE, Sri Venkateswara College of Engineering, Irungattukottai - 602117. Sriperumbudur Taluk.	Anna University Nominee
2	Dr.D.Sriram Kumar, Ph.D.,	Professor, ECE, National Institute of Technology, Tiruchirappalli - 620015.	Academic Council Nominee
3	Dr.A.Amalin Prince, Ph.D.,	Associate Professor, Department of EEE, BITS Pilani, K.K.Birla Goa Campus, Zuarinagar, Goa – 403726.	Academic Council Nominee
4	Mr.M.Chinnathambi, M.E.,	Technical Lead, Viasat India, Global Infocity, Module 1 & 2, 5th Floor, Block C, No. 40, MGR Salai, Perungudi, Chennai - 600097.	Industrialist Nominee
5	Dr.R.Preetha, Ph.D.,	Assistant Professor, ECE, SRM Institute of Science and Technology, Ramapuram, Chennai - 600089.	Alumni Nominee

Internal Members of BoS – ECE Department		
S.No	Name	Designation
1.	Dr.R.Suresh Babu, M.E.,M.B.A.,Ph.D.,	Professor and Head / ECE, Chairman of BoS – ECE
2.	Dr.C.Geetha Priya, M.E.,Ph.D.,	Professor / ECE
3.	Dr.A.Geetha, M.E.,Ph.D.,	Associate Professor / ECE
4.	Dr.R.S.Venkatesan, M.E.,Ph.D.,	Assistant Professor / ECE
5.	Dr.V.Jeyalakshmi, M.E.,Ph.D.,	Assistant Professor / ECE
6.	Dr.T.Pandiselvi, M.E.,Ph.D.,	Assistant Professor / ECE
7.	Dr.N.M.Mary Sindhuja, M.E.,Ph.D.,	Assistant Professor / ECE
8.	Mrs.T.Prathiba, M.E.,(Ph.D.,)	Assistant Professor / ECE
9.	Mrs.C.Nagavani, M.E.,(Ph.D.,)	Assistant Professor / ECE
10.	Mr.M.Ramesh, M.E.,(Ph.D.,)	Assistant Professor / ECE
11.	Mr.R.Ashok, M.E.,(Ph.D.,)	Assistant Professor / ECE
12.	Mrs.S.Nisharani, M.E.,(Ph.D.,)	Assistant Professor / ECE
13.	Mr.P.Aravind, M.E.,	Assistant Professor / ECE
14.	Mrs.P.Ramalakshmi, M.E.,(Ph.D.,)	Assistant Professor / ECE
15.	Mrs.M.Stella Mercy, M.E.,(Ph.D.,)	Assistant Professor / ECE
16.	Mr.S.Alwyn Rajiv, M.E.,(Ph.D.,)	Assistant Professor / ECE
17.	Mrs.M.Gokila, M.E.,	Assistant Professor / ECE
18.	Mrs.P.Muthumari, M.E.,	Assistant Professor / ECE
19.	Mrs.A.J.Bhuvaneshwari, M.E.,	Assistant Professor / ECE

The Minutes:

The meeting is called for considering the Undergraduate curriculum & syllabi (III semester to VIII semester) and Postgraduate Syllabi Amendments.

Discussions:

1. HOD/ECE gave a warm cordial welcome to all the members of the Board of Studies and ECE department.
2. HOD/ECE gave a brief presentation about the PEOs, POs and PSOs (UG and PG) of the ECE department and requested approval for the same from the BOS Members.
3. HOD/ECE discussed on the gist of 1st AC meeting held on 17th July 2020 to the BoS experts. The highlights of the discussion were as follows:

<p>Recommendations from the Governing Body and Academic Council for Framing UG Curriculum:</p>	<ol style="list-style-type: none"> 1. Credit range: 165 - 170 2. 20 - 24 credit per Semester. 3. VIII Sem Project Work: 8 - 10 credits 4. Online Course (Maximum 6 credits) 5. Audit Course (Mandatory non credit) 6. First semester is common for all Programme 7. First year credit range : 40 - 42 8. Engineering Graphics to be in II Semester 9. Programme specific papers could be offered in II Sem. 10. AICTE & AU 2019 curriculum could be taken as base for framing curriculum. 11. III Sem Mathematics (Programme specific) Mandatory
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4. Once after getting the approval from BOS members in 1st BOS Meeting, the approval for PG curriculum and Syllabi (M.E – Communication and Networking) is submitted to the 2nd Academic Council Meeting.
5. Similarly, once after getting the approval from BOS members in 1st BOS Meeting, the approval for UG curriculum and Syllabi – I Year (B.E. – Electronics and Communication Engineering) is submitted to the 2nd Academic Council Meeting.
6. In the 2nd Academic Council Meeting, the Executive Council for monitoring exam related activities is formed.
7. Approval is requested for the First BoS Minutes from the BoS members.
8. **HOD/ECE presented the proposed R2020 UG Programme Curriculum and Syllabi for the following**
 - a. B.E. - ECE 2nd, 3rd and 4th year (3rd to 8th semester)
 - b. Syllabus for Common Courses
 - c. Syllabus for General Papers
 - d. Syllabus for Open Electives
 - e. Syllabus for Audit Courses
 - f. Curriculum Framework Semester wise with credit.
9. **HOD/ECE explained the Process for framing Curriculum and Syllabi which involves the following.**
 - a. Syllabus Framing Committee comprising of HOD and Domain Experts
 - b. Syllabus Framing Sub Committee comprising of Domain Experts and Domain Subject Incharges.
 - c. Syllabus Presentation Domain Wise at Department Level

- d. Syllabus Presentation Semester Wise at Department Level
 - e. Syllabus Presentation at Board of Studies
 - f. Suggestion / Comments by BoS Members
 - g. Syllabus updation & Final approval from BoS Members
 - h. Syllabus Presentation & Approval by Academic Council
10. The different domains of the Electronics and Communication Engineering are identified by the HoD. Based on the expertise of the faculty members and the competency matrix of individual faculty member, HoD will allocate the domain experts and the domain subject incharges.

S. No	Domain Name	Domain Experts
1.	Circuits & VLSI domain	Dr.R.S.Venkatesan Mr.P.Aravind
2.	Embedded & IoT domain	Dr.V.Jeyalakshmi Mrs.C.Nagavani
3.	Signal, Image & Video Processing domain	Dr.A.Geetha Mrs.T.Prathiba
4.	Wireless Communication & Networking domain	Dr.C.GeethaPriya Mrs.S.Nisharani
5.	RF & Microwave domain	Dr.N.M.MarySindhuja Mr.R.Ashok

11. Syllabus Framing Sub-Committee consists of domain experts and domain subject in charges. Domain experts and Domain subject in charges were allocated with different courses based on their domain, their expertise and the competency matrix. Domain expert conducted meetings with domain subject incharges and framed the syllabus based on the guidelines. The domain expert discussed the course objectives, syllabus (Addition / deletion with justification) and Course outcomes for individual courses allocated to domain subject incharges. The domain experts consolidated the syllabus framed by the domain subject incharges and send the same to the HoD / UG Program Coordinator / BoS Coordinator.
12. Syllabus Presentation Domain Wise at Department Level by the various Domain subject incharges and Syllabus Presentation Semester Wise at Department Level by the UG Program Coordinator. And the final drafted syllabus is presented to the BoS members in Board of Studies Meeting.

13. **HOD/ECE explained the Process for framing Syllabus for the Common Courses which involve the following**
 - a. Identification of Common Courses by respective HODs
 - b. Deputation of Common Course Incharges (based on Domain Expertise) by respective HODs
 - c. Selection of Common Course Coordinator
 - d. Meetings Conducted by the Common Course Coordinator to Common Course Incharges and Domain Experts
 - e. Discussions on Designing the Course Objective and Course Outcomes.
 - f. Discussions on Framing the Syllabus based on the Guidelines
 - g. Finalized Syllabus Presentation in the Respective Departments & BOS for Approval.
14. HOD/ECE listed the various Common Courses and the Common Course Incharges/ Common Course Coordinators to BoS Members.
15. In the common courses, in addition the syllabus for the management papers “Principles of Management”, “Total Quality Management” & “Professional Ethics & Human Values” were sent to external expert Dr.E.V.Rigin, M.Sc., M.Phil., M.B.A., M.Phil., Ph.D., Assistant Professor & Zonal Coordinator-YRC, Department of Youth Welfare Studies, School of Youth Empowerment, Madurai Kamaraj University, Madurai for review and the corresponding suggestions were included in the syllabus framing for those management papers.
16. **HOD/ECE discussed the BoS members about their suggestions and recommendations given during 1st BoS Meeting with respect to the curriculum of B.E-ECE. The following justifications/modifications were made in the UG curriculum as suggested in the 1st BoS meeting.**
 - a. Dr. H. Umma Habiba, Ph.D., suggested that Instead of “C Language” in “Fundamentals of Computing and Programming” theory course “Python and C programming languages” can be given - All the courses are common to all branches in Semester 1 and “C Language” is included as per the suggestion received from the Academic Council Team.
 - b. Mr. M. Chinnathambi, M.E., suggested the usage of Matlab Simulink tools for “Circuit Analysis” course. - As the classes are going Online, MultiSim and Every Circuit Simulation Tools are currently used.

- c. Dr. H. Umma Habiba, Ph.D., suggested renaming “Fundamentals of Data Structures in C” subject (Theory and Practical) as “Data Structures and Algorithms” – Accepted and changed as per the suggestion.
- d. Dr. H. Umma Habiba, Ph.D., suggested that in RF domain area, in semester 3 “Electromagnetic Theory” can be changed to “Electromagnetic Fields and Waves” - Accepted and changed as per the suggestion.
- e. Dr.D.Sriram Kumar, Ph.D., suggested introducing Theory cum Lab Courses. – As per the suggestions Theory cum Lab Courses were introduced.
- f. Dr.A.Amalin Prince, Ph.D., suggested the usage of available open source tools for the Theory and Lab courses. – Open Source tools used are MultiSim, Every Circuit, PSPICE, Emulator 8086 / EMU 8051, VLab etc.,
- g. Dr. H. Umma Habiba, Ph.D., suggested to include “Waveguides” concepts in the course “Transmission Lines and RF Engineering” - Included in the syllabus framed
- h. Dr. A. Amalin Prince, Ph.D., insisted to stress the Importance of “Object Oriented Programming” course in their placement interviews – Accepted and included in professional electives list.
- i. Dr.H.Umma Habiba, Ph.D., suggested introducing the course “RF Signal Integrity in system design” - Included in professional electives.
- j. Mr.M.Chinnathambi, M.E., suggested including “Software Engineering and Software Development Life Cycle” course in professional Electives – This course is offered by CSE department as Open Elective to other departments.
- k. Dr.R.Preetha, Ph.D., suggested introducing “Web Designing, Java Programming, IOT and Mobile App Development” courses in the Elective courses – This course is offered by CSE department as Open Elective to other departments.
- l. Dr. D. Sriram Kumar, Ph.D., appreciated that the presence of Online Course alone in 8th semester will pave way for industry internship projects.
- m. Dr. D. Sriram Kumar, Ph.D., suggested including “Electronics Packaging” and “Bio MEMS” courses in open electives – Included in Open Electives List
- n. Dr. A. Amalin Prince, Ph.D., suggested including “Machine Learning” Course in open electives list – Offered by CSE department as Open Elective.
- o. Dr.R.Preetha, Ph.D., suggested introducing “PCB Design Course” in open electives list – Included as a Value Added Course.

- p. Dr.D.Sriram Kumar, Ph.D., suggested introducing “Green Environmental Engineering”, “Energy Audit” in Audit courses. - Offered as Open Elective by EEE department
- q. Mr.M.Chinnathambi,M.E., Dr.A.Amalin Prince, Ph.D., and Dr.R.Preetha, Ph.D., suggested introducing “Economics, Financial Management and Accounting” in Audit courses. - Included TQM, Project Management and Finance courses.
17. **HOD/ECE presented and discussed the whole syllabus for B.E-ECE from 3rd semester to 8th semester including Professional Elective Courses, Common Courses, Open Elective courses and Audit Courses. The following suggestions and recommendations were given during the discussion.**
18. Dr.H.Umma Habiba, Ph.D., suggested that it is better to have five course objectives uniformly for all the courses.
19. Dr.H.Umma Habiba, Ph.D., suggested that in Data Structures and Algorithms course, In the title of each unit it is not necessary to explicitly mention/display the specific data structure (Eg: List, Stacks, Queues and Trees and Graphs).
20. Dr.H.Umma Habiba, Ph.D., suggested that the sub topics within a unit should be separated by comma where as the new topics within a unit should be separated by hyphen. Also instead of giving topics within parenthesis, it is better to include as sub topics separated by commas.
21. Dr. A. Amalin Prince, Ph.D. and Dr.H.Umma Habiba, Ph.D., suggested that in the Digital Electronics Course, the contents “Basic memory structure – ROM - PROM – EPROM – EEPROM –EAPROM - RAM, Static and dynamic RAM” with respect to memory devices need to be included as it is important to understand the FPGA concepts.
22. Dr.H.Umma Habiba, Ph.D., suggested that in the Electromagnetic Fields and Waves Course, instead of having only Basics such as Vectors, Co-ordinates, Volume Integrals, Green’s and Stoke’s Theorem in Unit I – Introduction, more additional topics can be included from the other units which are heavy. .
23. Dr.H.Umma Habiba, Ph.D., suggested that in the Electronic Devices Course, in the unit title the other names for the devices mentioned within the parenthesis is not necessary. Also, the title should not be too lengthy, mentioning the topic headings inside the syllabus are not necessary. All the topics can be continuously mentioned.
24. Dr.D.Sriram Kumar, Ph.D., and Dr.H.Umma Habiba, Ph.D., suggested that instead of having only REFERENCES, it can be split into TEXT BOOKS and REFERENCE BOOKS. Keeping only REFERENCES section for UG syllabus is misleading as this will

be followed in PG syllabus only. Either the TEXT BOOKS and REFERENCE BOOKS along with WEBSITES can be used or a single cluster under the name LEARNING RESOURCES can be used.

25. Dr.D.Sriram Kumar, Ph.D., suggested introducing Software Tools in the laboratory courses either in a cycle of experiments or a couple of experiments, whichever possible.
26. Dr.D.Sriram Kumar, Ph.D., suggested that the ECE department faculty members can be encouraged to handle the course “Probability and Random Processes” in future.
27. Dr.D.Sriram Kumar, Ph.D., suggested that the number of Reference books can be fixed to a value so that it will be uniform throughout the courses in the syllabus. It is better to have Text Books (one or two books) and Reference Books section throughout all the courses.
28. Dr.D.Sriram Kumar, Ph.D., suggested that the course Microprocessor and Microcontrollers Theory and the corresponding Laboratory course can be moved from sixth semester to the earlier semester in future since appearing for this course in sixth semester is late.
29. Dr.D.Sriram Kumar, Ph.D., suggested having a unique cell for Intellectual Property Rights in addition to the Research and Development Cell.
30. Dr.H.Umma Habiba, Ph.D., suggested that in Theory courses like “Electromagnetic Fields and Waves”, “Transmission Lines and RF Systems” and “RF System Design” instead of teaching only theory it is necessary to include tutorial problems based on design. The question paper should also be set in such a way that the Question Paper contains tutorial problems based on design.
31. **HOD/ECE presented and discussed the formation of Three Member Committee for evaluating the ONLINE Courses (NPTEL/SWAYAM) especially for the NPTEL failed students and requested the approval from the Board of Studies members.**
32. Dr.D.Sriram Kumar, Ph.D., confirmed that the Subject Expert for Online Courses is from the respective department.
33. **HOD/ECE presented and discussed the formation of Three Member Committee for VALUE ADDED Courses along with its evaluation and requested the approval from the Board of Studies members.**
34. **HOD/ECE presented and discussed the formation of Three Member Committee for INDUSTRY INTERNSHIP along with its evaluation and requested the approval from the Board of Studies members.**

35. Dr.D.Sriram Kumar, Ph.D., suggested that the number of credits should be a fixed one for the Industry Internship.
36. **HOD/ECE presented and requested approval for the Panel of External Experts for Staff Selection and Staff Performance Appraisal.**
37. **HOD/ECE presented and requested approval for the Panel of External Experts for the following.**
 - a. Question Paper Setting
 - b. Question Paper Scrutiny
 - c. Valuation / Practical Examinations
38. **HOD/ECE presented the report on performance of End Semester Examination Results conducted by the Anna University May / June 2020 as well the Kamaraj College of Engineering and Technology Autonomous Exams during Dec 2020 / Jan 2021.**
39. **HOD/ECE presented the amendments related to the PG Syllabus and requested the approval for the same. In PG, open elective is offered by the department in Third semester to other departments. But since for few departments (especially Bio Technology) the third semester is for only Lab / Project Work Phase –I, it is decided to offer the open elective of our department in both Second and Third semesters. The approval for the same is requested.**
40. **Date of next meeting:** The tentative date for the Next BoS Meeting (ECE Board) is suggested as 06-11-2021 (Saturday) by the BoS Members.
41. The meeting ended with the Vote of Thanks by Dr.C.Geetha Priya, Professor, Department of ECE, Kamaraj College of Engineering and Technology, Madurai.

(Dr. R.SURESH BABU)
BoS Chairman – ECE
HOD / ECE