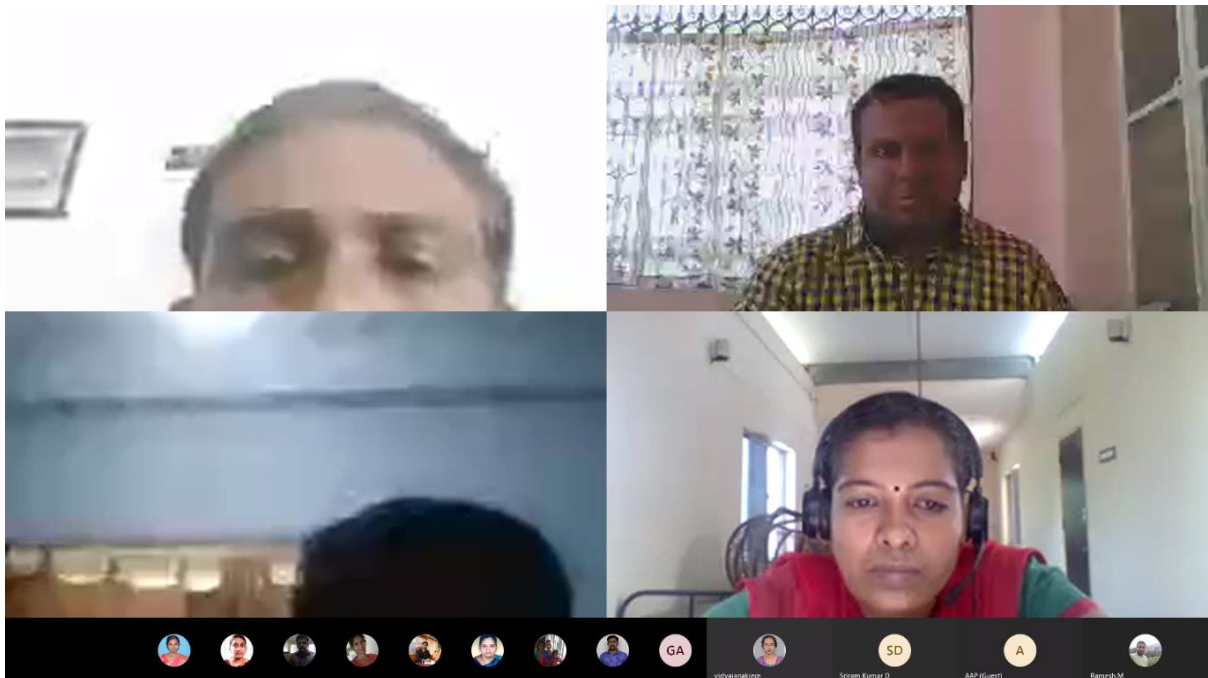


ANNEXURE III

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



Department of ECE

Date : 01-08-2020

Board of Studies of Electronics and Communication Engineering

Minutes of the 1st Board of Studies Meeting (Online Mode)

Date : 31-07-2020 Friday

Time : 10.00 A.M to 1.00 P.M

Platform : Microsoft Teams

Meeting Link : https://teams.microsoft.com/l/meetup-join/19%3ameeting_M2Q3MDE2ODktYWJkMS00Y2EzLTk5YzktYzFjY2U3NzljZDYw%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.,	Associate Professor, ECE, Rajalakshmi Institute of Technology, Chennai - 600124.	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.	Mrs.T.Prathiba, M.E.,(Ph.D.,)	Assistant Professor / ECE
7.	Mrs.T.Pandiselvi, M.E.,(Ph.D.,)	Assistant Professor / ECE
8.	Mrs.C.Nagavani, M.E.,(Ph.D.,)	Assistant Professor / ECE
9.	Mr.M.Ramesh, M.E.,(Ph.D.,)	Assistant Professor / ECE
10.	Mr.R.Ashok, M.E.,(Ph.D.,)	Assistant Professor / ECE
11.	Mrs.N.M.Mary Sindhuja, 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.Vidya P.Janaki, M.E.,	Assistant Professor / ECE
19.	Mrs.P.Muthumari, M.E.,	Assistant Professor / ECE
20.	Mrs.A.J.Bhuvaneshwari, M.E.,	Assistant Professor / ECE
21.	Mr.S.Wesley Moses Samdoss, M.E.,	Assistant Professor / ECE

The Minutes:

The meeting is called for considering the Undergraduate and Postgraduate curriculum & syllabi.

Discussions:

1. Dr.R.Suresh Babu gave a warm cordial welcome to all the members of the Board of Studies and ECE department.

2. Dr.R.Suresh Babu gave a brief presentation about the Institution and the ECE department. Also, Dr.R.Suresh Babu gave presentation briefing about the department's accomplishments.
3. Dr.R.Suresh Babu discussed on the minutes of 1st AC meeting held on 17th July 2020 to the 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
<p>Recommendations from the Governing Body and Academic Council for Framing PG Curriculum:</p>	<ol style="list-style-type: none"> 1. Credit range : 70 - 75 2. 20 - 22 credit per semester. 3. Online Course (Max 3 credits) 4. Open Elective: Industry Certification Courses 5. AU R2017 & AU R2019 curriculum could be taken as base for framing curriculum 6. Project Work Phase I : 6 - 8 credit 7. Project Work Phase II : 12 - 14 credit 8. II Sem Mathematics (Programme specific) Optional 9. Over and above credit will appear in transcript 10. 1 Tutorial period = 1 credit

4. **Dr.R.Suresh Babu presented the proposed R2020 PG Programme Curriculum and Syllabi for 1st and 2nd year M.E. – Communication and Networking**
5. Dr.H.Umma Habiba, Ph.D., suggested that the Mini Projects can be included so that students will start using all open source simulation tools and this will enhance their resume and even students can continue the main project with the help of their mini project.
6. Dr.H.Umma Habiba, Ph.D., suggested that Only References can be included and there is no need of mentioning separate Text Books for PG.

7. Dr.H.Umma Habiba, Ph.D., suggested that if any basic topics in UG curriculum / other courses are getting repeated in PG courses (subjects) then it can be mentioned as review topic.
8. Dr.H.Umma Habiba, Ph.D., suggested upgrading the course objectives and outcomes for all subjects. There should be one to one correspondence in the Course Objectives and Outcomes.
9. Dr.H.Umma Habiba, Ph.D., suggested that for Computer Vision and Applications (OE) subject, more sub topics need to be included in unit IV and unit V and those topics can be application oriented.
10. Dr.D.Sriram Kumar, Ph.D., suggested that the total number of credits given for PG curriculum can be around 70. One Professional Elective course can be removed / merged so that the total credits will be around 72. As this is the first phase of Autonomous, credits can be maintained as 75 and in the next phase it may be revised.
11. Dr.D.Sriram Kumar, Ph.D., suggested that only Learning Resources can be included instead of mentioning separately as Text books, Reference books. In this group of Learning Resources, web references and links can also be included wherever necessary.
12. Dr.D.Sriram Kumar, Ph.D., suggested that MEMS and NEMS with reduced contents can be included in Open Elective which will help for other PG branch students.
13. Dr.A.Amalin Prince, Ph.D., suggested that in PG curriculum Mini Project can be included in the lab courses and this will help them to improve their Curriculum Vitae as a strong one.
14. Dr.A.Amalin Prince, Ph.D., suggested that in Assignments, students may be encouraged to use open source tools to increase employability enhancement.
15. Mr.M.Chinnathambi, M.E., suggested that for Applied Mathematics for Communication Engineers subject - 1D and 2D wave equations can be included.
16. Mr.M.Chinnathambi, M.E., appreciated that, for Networking Laboratory, Open Source tools such as NS2 and NS3 is used for simulation in addition to Matlab.
17. Mr.M.Chinnathambi, M.E., suggested that for the subject Python for Machine Learning (OE) – “Application of Python in automation” can be included as case studies
18. Dr.R.Preetha, Ph.D., suggested that in Advanced Digital Communication Techniques Unit V –Applications of OFDM can be included
19. Dr.R.Preetha, Ph.D., appreciated that the Open Elective Theory “Medical Image Processing” covers the most relevant topics such as MRI, PET and SPECT and hence it is well framed.

20. **Dr.R.Suresh Babu presented the proposed R2020 First Year Curriculum and Syllabi for UG Programme B.E. – Electronics and Communication Engineering.**
21. Model 1 and Model 2 are presented in which, for semester 1, the curriculum and syllabi will be common to all branch students as per the AC recommendations.
22. Among the two models presented, the BoS members suggested that the Model 2 seems better and in model 2, the students will be studying one Professional Core Theory in the second semester.
23. The BoS members approved the syllabus framed for the following courses in second semester
 - a. Circuit Analysis – Theory
 - b. Circuit Analysis Laboratory - Practical
 - c. Engineering Practices Laboratory (Electronics Part) – Practical
24. **Dr.R.Suresh Babu presented the proposed R2020 UG Programme Curriculum for 2nd, 3rd and 4th year for UG Programme B.E. – Electronics and Communication Engineering.**
25. Dr.H.Umma Habiba, Ph.D., suggested that in semester 1, instead of giving C language in Fundamentals of Programming theory course, it will be better if Python language is given or the particular theory course can be given with C and Python programming languages. Dr.R.Suresh Babu assured to pass this information to First Year BoS since AC suggested common curriculum for semester 1.
26. Dr.H.Umma Habiba, Ph.D., suggested that in semester 3, the theory course “Fundamentals of Data Structures in C” can be renamed as “Data Structures and Algorithms”. Similarly, in semester 3, the Lab course “Fundamentals of Data Structures in C Lab” can be renamed as “Data Structures and Algorithms Lab”.
27. Dr.H.Umma Habiba, Ph.D., suggested that in the RF domain area, the professional elective courses such as “Signal Integrity for High Speed Design”, “RF System Design” “Advanced Radiation Systems”, “Electromagnetic Interference and Compatibility in System Design” and “Advanced Microwave Communication” can be included.
28. Dr.H.Umma Habiba, Ph.D., suggested that in RF domain area, the concept of Waves and Waveguides is missing. Hence it is suggested that in semester 3, the course “Electromagnetic Theory” can be changed to “Electromagnetic Fields and Waves” in which the Unit 5 can comprise of “Waves” concepts. And in semester 5, only “Waveguides” concepts can be included in the course “Transmission Lines and RF Engineering”

29. Dr.D.Sriram Kumar, Ph.D., suggested that the total number of credits given for UG curriculum can be around 165 and this credits reduction from 169/168 to 165 can be implemented in the next phase.
30. Dr.D.Sriram Kumar, Ph.D., suggested that in semester 7, the theory course “Antennas and Microwave Engineering” will be too lengthy and can be converted to two different theory courses. But in Anna University current R2017 curriculum contains the course as “Antennas and Microwave Engineering” only, hence it can be accepted.
31. Dr.D.Sriram Kumar, Ph.D., appreciated that only one Online course is present in Eighth semester in addition to Project Work since the students can opt for industry internship projects. This will make the students industry ready and more easy for the students to get job offers from the industry.
32. Dr.D.Sriram Kumar, Ph.D., suggested that “Electronics Packaging” and “Bio MEMS” courses can be included in open electives list.
33. Dr.D.Sriram Kumar, Ph.D., suggested that the theory cum lab courses can be introduced gradually to reduce the number of credits in the curriculum.
34. Dr.A.Amalin Prince, Ph.D., suggested that for a Theory course and its corresponding Lab course, if possible, the students can be instructed to use the free simulator tools. For example, for some courses, PSPICE simulation tool can be used to explain the concepts involved
35. Dr.A.Amalin Prince, Ph.D., suggested that instead of giving semester wise list of professional elective subjects, pool of total professional electives list can be given so that students can select subjects with more flexibility. But it is accepted that if a student wants to move into a particular sector like Electronics Industry, Management based Industry etc., then the electives in a single basket may have different set of courses.
36. Dr.A.Amalin Prince, Ph.D., suggested that the students can be specifically insisted about the importance of “Object Oriented Programming” course to their placement interviews as the course is present in Electives List.
37. Dr.A.Amalin Prince, Ph.D., suggested that “Machine Learning” Course can be included in open electives list to enrich the students for the software based jobs.
38. Mr.M.Chinnathambi, M.E., suggested that for “Circuit Analysis” course and its corresponding Lab course, Matlab simulink tools can be used to simulate the circuits and concepts.

39. Mr.M.Chinnathambi, M.E., suggested that the courses such as “Software Engineering and Software Development Life Cycle” can be included in the professional Elective courses so that students will be finding easy to work in software industries also.
40. Mr.M.Chinnathambi, M.E., suggested that in addition to online courses from NPTEL and Swayam, online courses from UDEMY can also be considered for the online courses.
41. Dr.R.Preetha, Ph.D., accepted that the theory course “Computer Architecture and Organization” can be moved to professional electives since the concepts of this course is already available in other professional core courses such as “Microprocessors and Microcontrollers” and “Discrete Time Signal Processing”.
42. Dr.R.Preetha, Ph.D., suggested that Web Designing, Java Programming, IOT and Mobile App Development courses can be introduced in the Elective courses as the students are separately studying these courses for their placement purposes
43. Dr.R.Preetha, Ph.D., suggested that PCB Design Course can be included in open electives list.
44. **After this, Any other items on the consent of the Chairman of BoS was discussed.**
45. Dr. Sriram Kumar suggested that the courses such as “Green Environmental Engineering”, “Energy Audit” can be included in Audit courses.
46. Mr.M.Chinnathambi, Dr.A.Amalin Prince and Dr.R.Preetha suggested that the courses such as “Economics, Financial Management and Accounting” type of courses can be included in the Audit courses.
47. BoS members approved the NPTEL / SWAYAM online courses and if the students submit the NPTEL certificates, the corresponding grades can be awarded by CoE. Suppose if the student fails in online courses, Assessment of the Online Course can be done by the Three Members Committee within the department (HoD, Online Courses Coordinator, Corresponding Course Instructor/Expert) by evaluating the submitted assignments and also by setting a separate Question Paper for the particular online course. If the student passed in the exam, the three member committee will recommend the grades to CoE.
48. **The various general suggestions were given for the growth of the department.**
49. It is suggested to follow Innovation in teaching and Evaluation process.
50. The students should be exposed to practical knowledge and can introduce some class quiz regularly.
51. To improve the standard of question paper, the question paper pattern can be changed with some multiple choice questions.
52. The students can be trained to solve concept based questions.

53. Faculty should get upgraded to the new technology development.
54. More Open Book exams can be conducted.
55. Theory courses along with Design and Applications can be introduced.
56. **Date of next meeting:** The tentative date for the 2nd BoS Meeting (ECE Board) is suggested as 30-01-2021 (Saturday) by the BoS Members.
57. 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