# 1st Board of Studies Meeting - Minutes

Minutes of the meeting of Board of Studies in the Department of ECE held on 31/08/2024 at 11 am to 2:00 pm.

Members Present:

| Sl.No | Name of the member | Designation | Role in the BOS |
|---|---|---|---|
| 1 | Dr. N N Murthy | Professor, Dept. of ECE, IIT, Tirupati | VTU Nominee |
| 2 | Dr.S B BhanuPrashanth | Professor, Dept. of Medical Electronics, BMSCE, Bangalore | Academic Expert |
| 3 | Dr. A M Vijaya Prakash | Professor, Dept. of ECE, BIT, Bangalore | Academic Expert |
| 4 | Mr. Shivakumar P M | SAP labs, Whitefield, Bangalore | Industry Expert |
| 5 | Mr.Srikanth K S | Intel India Ltd, Hyderabad | Industry Expert |
| 6 | Mr.Vishwajith V Pai | Product Manager, Synopsis Inc, Bangalore | Alumini Member |
| 7 | Dr. G Sadashivappa | Professor & COE | Academic Expert, RRCE |
| 8 | Dr. L Rangaiah | Professor & Dean-Academics | Academic Expert, RRCE |
| 9 | Dr. Sunitha R | HOD, Dept. of ECE | Chairperson |
| 10 | Dr.A Muruganadham | Professor | Member |
| 11 | Dr.Vijaya S M | Associate Professor | Member |
| 12 | Dr.Sumitha Manoj | Associate Professor | Member |
| 13 | Dr. Deepika J | Associate Professor | Member |
| 14 | Prof. V Sreepathi | Assistant Professor | Member |
| 15 | Prof. Lokesha K | Assistant Professor | Member |
| 16 | Prof. Chaithanya S | Assistant Professor | Member |
| 17 | Prof. Vani S B | Assistant Professor | Member |
| 18 | Prof. Santhosh Chavan | Assistant Professor | Member |
| 19 | Prof. Ajay M | Assistant Professor | Member |
| 20 | Prof. Haritha K S | Assistant Professor | Member |
| 21 | Prof. Suresh M | Assistant Professor | Member |

The meeting was convened by Dr. L. Rangaiah, Dean – Academics offline and virtually on Google meet platform.

Welcome Address : Dr. L Rangaiah, Dean – Academics, RRCE

Introduction of Members : Dr. Sunitha R – Dr. N N Murthy, IIT, Tirupati
Dr. Vijaya S M – Dr. S B Bhanu prashanth, Professor Dept. of Medical Electronics, BMSCE
Dr. Deepika J – Dr. Vijaya Prakash, Professor, Dept. of ECE, Bangalore Institute of Technology
Dr. Deepika J – Mr. Srikanth K S, Manager, Intel India Ltd, Bangalore
Dr. Sunitha R – Mr. Vishwajith V Pai, Synopsis Inc

Presentation of Syllabus 1st Year : Dr. L Rangaiah, Dean – Academics, RRCE

The agenda for the meeting was as under:

1) Discussion on Scheme and Syllabus of Electronics and Communication Engineering of 1st and 2nd Semester (Chemistry and Physics cycle).
2) Syllabus of Basic Electronics for ECE and Introduction to Electronics and Communication for other programmes.
3) Discussion on Scheme of B.E ( 3rd and 4th) semester and evaluation mechanism for CIE & SEE

Chairman Dr. Rangaiah L welcomed dignitaries including BoS members Dr.S B Bhanu Prashanth, Dr. A M Vijaya Prakash, Mr.Shivkumar P M, Mr. Vishwajith V Pai and diginitaries connected in online are Dr. N N Murty and Mr. Srikanth K S and faculty members. He briefed the agenda to the B O S members and Invitees.

Principal Dr. Balakrishna R emphasized focusing the syllabus on project-based learning for future generations.

Dr. L Rangaiah highlighted that the syllabus is designed for activity-based learning and aims for effective results.

Dr. S B Bhanu Prashanth suggested that faculty should plan course with clear semester objectives and align syllabus according to defined course outcomes. No common syllabus for Physics, Chemistry and Mathematics subjects, it should be specific to **stream (CSE, EEE, ME, CV).**

Dr.Vijaya prakash suggested to remove year from the course code(24BEC101) and mention the scheme(like 24 scheme/26 scheme) on the question paper and equivalent subject will be considered as present scheme/syllabus and suggested to discuss with Controller of Examinations(CoE) and take decision.

The chairman initiated the session discussing; the upper limit of the credits for B-Tech courses should be about 160 credits. Circuit brances, CSE and Allied branches' 1st year UG course schemes and syllabi, starting with institution and departmental missions and introducing BoS members to all present faculty, both online and offline. The chairperson continued by outlining the 1st year program for both Physics and Chemistry cycles. BoS members then reviewed and provided suggestions and comments on the syllabi for all 1st year subjects.

Mr.Srikanth, suggests about the Design Thinking course being taught by external experts and explained to students. The Chairman suggested that faculties have undergone training through NPTEL and other FDP courses to be adequately prepared.

Mr.Shivakumar proposed providing hands-on training on Google Design Sprint to all faculties, emphasizing its market relevance.

**Mathematics:**

- Dr.Vijaya prakash and Dr. S B Bhanu Prashanth questioned why Mathematics is common for all branches, suggesting it be tailored to **stream-specific** needs for better student engagement and lifelong learning.
- Are our Mathematics faculties trained in Python, given the 2-hour lab component? Please oversee the programming and assessment process in Mathematics lab using Python.
- Regarding CIE and SEE, can faculties modify the rubrics for 50 internal marks, such as designing splits like 30+20 or 30+10+10, with approval from the Dean Academics.

**English:**

- Dr.N N Murthy, VTU Nominee expressed concern about English assessment outcomes, emphasizing the need for specific course outcomes in fluency for speaking and writing.

They requested clarification on assessment tools and methods to support students' future career development in English.

- Using Kannada medium students as an example, assess their English proficiency levels by the end of the 1st and 2nd semesters. By the 2nd semester, aim for a fluency level where Kannada medium students score 9 out of 10, crucial for placement readiness.
- Mr.Shivakumar P M, suggested practical courses in English speaking, technical writing, and business development to address the industry demand for technical writers and business communicators. Encourage English teachers to focus on placement-oriented performance in English.
- Online member Mr. Srikanth K S, highlighted the importance of enhancing English skills over two semesters through storytelling, debates, and effective presentation skills, emphasizing the role of communication in team dynamics and productivity. He recommended introducing Toastmasters to enhance communication and leadership skills, thereby improving English proficiency among students.
- VTU Nominee asked about the outcomes and assessment process for English 1 in the 1st semester and English 2 in the 2nd semester.

**Programming in C:**

- Dr. S B Banu Prashanth suggested to keep the subject title as Programming using C(2:0:2) or Introduction to Programming using C instead of Principles of Programming using C and asked all the faculties to consider two cases:
- Case 1: Designing the syllabus with the aim of mastering C programming
- Case 2: Focusing on mastering programming using C. Students should analyze which case suits them best.
- Emphasize method-oriented learning to develop problem-solving skills. Practicing this approach ensures students are prepared for placements by the 6th semester.
- Mr. Vishwajith V Pai agrees with the Dr.S B Bhanu Prashnath. Our goal is to design the syllabus to focus on problem-solving and programming skills, not just mastering C.

- Encourage students to learn from their errors by focusing on logic rather than just syntax. Students should debug their own and their peers' code to foster collaboration and motivation in learning programming.

- Mr.Vishawajith V Pai emphasized the importance of students practicing analysis, design, and project planning. He suggested allocating 60% of focus on analysis and design, 20% on writing pseudocode, and 20% on selecting the programming language.
- Dr.Vijaya Prakash inquired about the precision of lab programs. The response indicated using 2 to 3 scenario-based programs per module. He urged simplifying questions, focusing more on clarity and less on complexity in framing them, to foster student interest and enthusiasm for learning C programming.
- Ensure a mandatory Question Bank for all students, with scenario-based questions provided to capable students who finish labs early.
- Tailor scenarios to suit both weak and advanced learners, ensuring challenges are appropriate to their abilities.
- Implement a Question Bank categorizing questions into Easy, Moderate, and Tough levels to challenge students accordingly.

- Suggested refer to the separate lab component in the syllabus, categorized into easy, moderate, and high-level programming exercises. This approach is designed to build student interest and skills progressively, essential for placement. Introducing high-level tasks too early might discourage students from programming.

- Assign expert faculty to teach 1st-year programming to ensure fun-based learning and motivate students.

- Apply the same structure for all modules, categorizing exercises into easy, medium, and high levels. Focus on training students to understand and develop logical solutions before choosing a programming language, reducing syntax errors. The goal is for students to write both logic and syntax accurately.

**Basic Electronics**

- Dr. Vijaya Prakash suggested to keep the module in the order like Module-1, Module-4, Module-2, Module-3 and module-5 and also suggested to avoid sections in each module .

- Dr. N N Murty, VTU Nominee suggested to add relays, relay using power transistor, voltage regulator or else can be given as self-study or can be given as assignment.

- Dr. Banu Prashanth suggests, for all subjects, need to mention arbitrary levels for all objectives and outcomes with active verbs.

Before starting programming, ensure students are familiar with operating systems and essential tools as prerequisites. In the induction program, for students, should be given to awareness about the subject, subject code for their specific domain.

Mr. Shivakumar P M emphasizes that as developers increasingly use no-code tools, focusing excessively on scenario-based learning may hinder students' critical thinking skills in the long run. Instead, the curriculum should prioritize logic-oriented approaches. Students should be familiar with Ubuntu environment and commands before starting lab programming.
Provide each student with a unique programming assignment and prepare a diverse list of additional question bank for them. Students should independently utilize input and output data, develop logic and pseudocode, and handle compilation processes.

Dr.Vijaya Prakash suggests prioritizing online courses like NPTEL and VTU offerings. Expand online courses to cover recent trends in the corporate sector. He suggests that due to the current extensive industry focus on NLP, consider moving it from an elective to a core subject.

The chair asked BoS members if we could present the scheme from the 3rd to 8th semesters, but they agreed it's unnecessary at this time. We will discuss it in the next BoS meeting; for now, focus is on the 1st year.After obtaining signatures on the necessary documents, the meeting concluded.

| | | |
|---|---|---|
| **Dr. Sunitha R** | **Dr. Rangaiah E** | **Dr. R Balakrishna** |
| **HOD, BOS Chairperson** | **DEAN Academics** | **Principal** |
| CHAIRMAN BOARD OF STUDIES Dept. of Electronics and Communication Engg. Rajarajeswari College of Engineering Bengaluru - 560074 | DEAN ACADEMICS Rajarajeswari College of Engineering Bengaluru - 560074 | Principal RAJARAJESWARI COLLEGE OF ENGINEERING Ramohalli Cross, Bengaluru-74 |