

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Date: 05-08-2023

Minutes of 17th Meeting of Board of Studies (BOS)

- 1. Discussion and Approval of Syllabi of B.Tech I & II semesters, specification of COs and CO-PO articulation matrix:
 - The meeting began by considering the proposed R23 course structure as the initial agenda point based on the priority.
 - All the members were informed about the semester wise course structure along with the semester wise distribution of courses. The modifications proposed in the R23 regulations were highlighted.
 - It was told that while framing the course structure, AICTE guide lines as well as the earlier directions given by APSCHE were considered. Design Thinking, Idea lab, Biology for engineers have been included. Further, it was mentioned that Analog Communications and Digital Communications are combined as Analog and Digital Communications. Advanced Communications course along with the lab has been introduced, as informed.
 - It was informed that programming courses have been included as the skilloriented courses.
 - Once the information on the course structure was given, the opinion of the members was sought.
 - Dr.N.V.S.N.Sarma mentioned that in 1st semester, it is better to have both Engineering Graphics and workshop. It was mentioned that it is essential for engineering students to have the experience of workshop where everything is done hands on, which is useful in several applications.
 - It was also advised that the engineering workshop cab be accommodated in the place of chemistry lab, where the students are restricted to gain knowledge on titration kind of things. However, chemistry as a theory course can be considered for inclusion in the course structure.

- Regarding Design thinking and Idea lab in 1st semester, it was suggested that Design thinking should be separated from Idea Lab and included as a theory Course.
- Design thinking can be highly valuable for a variety of reasons, as it equips the engineers with a structured and creative approach to problem-solving, innovation, and product development. In this context, it is better to have Design thinking as a separate course as suggested.
- Further, it is better to depute an industry expert to deliver the contents of Design thinking as specified by Dr.Sarma.
- In 3rd semester, it is better to have Data structures as a complete theory course than as a skill course as suggested. The need for inclusion of DSD lab was sought which was answered as practising of HDL.
- The merging of Analog and Digital Communications was not advisable as suggested, because being core courses for a communication engineer, they need to be dealt separately. It is also suggested to have Optical Communication as the core course instead of an Elective course.
- The inclusion of computer networks as both theory and lab courses were appreciated, as it is the current trending course in the context of 5G/6G evolution.
- It was pointed out that inclusion of Microwave Engineering and Radar Systems together as a single course is not proper. As the communication is evolving around 5G/6G these days, Microwave Engineering should be dealt separately by placing Radar Systems as an Elective if needed.
- Dr.Sarma has appreciated the idea of including biology for engineers as an elective and he informed that in NIT, Warangal the course has been introduced long back by him.
- Dr. John Bedford Solomon appreciated the idea of including Design thinking and Biology of Engineers. These two are good changes in the modern scenario of Molecular Computing / Bioinformatics and System Design Perspective.
- The student should have a firm grounding to do Interdisciplinary activities and take up challenges with deeper understanding from a Product Design and Manufacturing Perspective which is need of the hour in the "Indian market" scenario.

- It is required to create enough people who can understand customer requirements and translate that into complete products for the end customer, as felt.
- Dr.U.V.Ratna Kumari, Nominee from JNTUK, has supported the recommendations made by Dr.Sarma. However, it was informed that Andhra Pradesh State Council of Higher Education (APSCHE) is preparing common guidelines for the Engineering colleges and in this context it better to wait for the university directions, as advised.
- The members were informed about the tentative course structure proposed by JNTUK, Kakindada. When asked about the inclusion of Drone Technology in 1st Semester, Dr.Sarma felt that the course can be introduced at any level, but by whom and how it will be dealt with is to be carefully planned out.
- The meeting has reviewed the syllabus for the courses offered by the department for 1st and 2nd semesters.
- Regarding Basic Electrical Engineering, Dr.Sarma felt that it is not necessary to use the terminology 'fundamentals'. The availability of lecture hours for the course has been sought and told to plan the contents effectively. It was also told to include transformers as it is needed in electronic circuits also.
- In EDC course, it is suggested to change the order of clippers and clampers and power supplies to the possible extent. Further, the concepts in BJT can be reduced and FET can be more emphasized as it is the current trending technology. In Digital Logic Circuits it is suggested to change the CO level as remember level is too level.
- Regarding textbooks and reference books, it is preferable to follow common pattern for prescribing them, as mentioned by Dr.Sarma.
- The experiments included in the Electronic Circuits Lab were reviewed in the meeting. It was pointed by Dr.Sarma that students need to be informed that diode acts as both linear and non-linear device based on the volage level. Further, the order of the experiments should be reordered as suggested.
- As ab no specific design is being performed in DLC lab, it is suggested by Dr.Sarma that better another lab can be accommodated in that slot. Few of the experiments from DLC lab can be included in the EDC lab and use the slot for another better purpose.

2. Review of Action Taken Report (ATR)on the minutes of 16th BoS meeting held on 06-01-2023

All the members were told that the recommendations made in earlier BoS meeting, dated on 06-01-2023 for improving the teaching and learning activity in the department were either implemented or under implementation.

3. Approval of SWAYAM courses for Minor/Honor program for the A.Y 2023-24:

- The members were informed that Computer Architecture has been considered as the MOOC course for both honor and minor students. Dr.Sarma has felt that it is better to prepare a list of courses to be given as a choice for the students instead of directly suggesting a single course.
- It was informed by the BoS Chairman that Cloud Computing and Embedded System design courses were also considered.
- It was also informed that faculty members have been asked to register for Design Thinking under NPTEL certification which was appreciated by Dr.Sarma.

4. Information on Teaching Learning Process:

- It was informed that senior faculty have been deputed for teaching core subjects and most of the cases further all senior faculty are going to handle 1st or 2nd year courses.
- The course hand outs in the department have been prepared in line with outcome-based education.
- The members have been informed that Neo labs have been introduced from the previous academic year onwards and students can perform the modules in online. As per the directions from government, virtual labs have been introduced and students are continuously encouraged to make use of the same.
- > It was informed that three smart class rooms are available in the department.
- Dr.Sarma queried about the availability of any learning management tools that can enhance the student learning skills.

5. Discussion and approval of changes in Vision, Mission, PEO and PSO statements (if any)

The members were informed about the Vision, Mission, PEO and PSO statements of the department and the opinion of the members was sought. It was felt that time being it is not required do any modification in the same.

6. Information and discussion on COs, POs & PSOs attainment and ATR for 2019-23 batch

The members were told informed about the attainment process and it was told that during the framing of new regulations care is being taken to strengthen the attainment.

7. Information on Academic Performance of the students for the A.Y 2022-23

- The members have been informed about the academic performance of the students for the A.Y:2022-23 leaving II semester.
- It was informed that the courses with poor pass percentage were identified and remedial courses have been arranged for students having backlogs.

8. Information & Discussion on R&D and Training & Placement Activities for the A.Y: 2022- 23:

- The statistics of R&D activities were put before the members by the BoS chairman. It was told that good number of publications were done by the faculty in the department and statistics of the R&D achievements were put before the members.
- Department faculty have been sanctioned Rs.1 Lakh towards seed money for purchasing GPU for machine learning applications.
- It was informed that during academic year 2022-23, two faculty have been awarded Ph.D and 18 members are currently pursuing the same. It was also mentioned that department R & D center has been recognized by JNTUK , Kakinada.
- It was mentioned that management is continuously supporting the faculty towards research. Staff Colloquium is being conducted weekly to expose the faculty to latest developments.
- The members have been informed about the MoUs the department is having. It was told that the faculty have been told to visit nearby industries to carry out consultancy activities. It was told that two Faculty members are deputed for Industrial Training in Efftronics Systems Pvt. Ltd for 3 Months.
- The members were informed that Efftronics is going to establish Industry Oriented IoT Lab in the department to train the students for satisfying the industry needs.

It was told that technical training is scheduled for 30 students to get placement opportunity in core companies.

9. Information on events organized & Attended for the A.Y 2022-23

- The chairman informed the members about the various activities that have been organized in the department. To strengthen the faculty, students and nonteaching staff activities are being organized in the department.
- Three research groups in the department are conducting faculty development programs regularly, as informed.
- The achievements of the students during the Academic Year: 2022-23 was informed to the members.

10. Any Other Matter

- The opinion of the members regarding multiple entry and multiple exit was sought. Dr.Sarma felt that it is better for the premier institutions to implement the policy first and later the possibility of implementing then can be sought. It was opinioned that exit at third year level is acceptable but leaving at second year level is not at all acceptable, as felt by Dr.Sarma. The Diploma degree awarded at second year level is nowhere comparable with Diploma done in three years.
- The meeting has also reviewed the feed back given by stakeholders. Design thinking, Computer networks lab and Biology have been introduced in the course structure as informed.
- The opinion of the members was asked about the Digital fabrication course suggested by AICTE. It was suggested by Dr.Sarma that the background of the students need to be considered while incorporating the course.

Chairman

Board of Studies

HEAD Department of Electronics & Communication Engineering Lakireddy Bali Reddy College of Engineering MYLAVARAM, Krishna Dt, Andhra Bradoah

BOARD OF STUDIES(BOS)

05.08.2023

S.No	Name & Designation	Position in BOS	Signature with Date
1.	Dr.Y.Amar Babu, Professor & HOD	Chairman	40518123
2.	Dr.U.V.Ratna Kumari, Professor of ECE, University College of Engineering, JNTUK, Kakinada	University Nominee	Attended online
3.	Dr. N.V.S.N.Sarma, Director, Indian Institute of Information Technology, Trichy	External Member, Subject Expert	Attended
4.	Dr.P.Srihari Rao, Professor, Department of ECE, NIT,Warangal	External Member, Subject Expert	-Ab->
5.	Dr.John Bedford Solomon, Principal Engineer, DFT, NXP Semicondcutors,	External Member, Industry	A thousded
6.	Bengaluru Dr.B.Anil Kumar, Associate Professor, Department of ECE, KL University, Hyderabad	Alumni	Attended
7.	Dr.E.V.Krishna Rao, Professor, Dean of R &D	Internal Member	KN 5/8/2023
8.	Dr.B.Ramesh Reddy, Professor & IQAC In Charge	Internal Member	Stears
9.	Dr.M.Venkata Sudhakar, Professor	Internal Member	N2gsks
10.	Dr.P.Lachi Reddy, Professor	Internal Member	518[23
11.	Dr.G.Srinivasulu, Professor	Internal Member	Q. due 18/23
12.	Dr.G.L.N.Murthy, Professor	Internal Member	518/23
13.	Dr.B.Poornaiah,, Professor	Internal Member	-P. Nolp 5/8
14.	Mr.M.K.Linga Murthy, Sr. Assistant Professor	Internal Member	Kantho 5/8/23