VIMAL JYOTHI
ENGINEERING COLLEGE (AUTONOMOUS)
Jyothi Nagar, Chempen - 670632, Kannur D.T, Kerala

Minutes of the I[st]Board of Studies meeting of B.Tech (Mechanical Engineering Meeting held on 22 October 2024 at 11:00 AM

1. I[st] meeting IstBoard of Studies meeting of B.Tech (Mechanical Engineering Meeting held on 22 October 2024 at 11:00 in Hybrid mode (Online and at Conference room(VJEC).

Attendees:

Sl No	Name With Designation	Category	Presence
1.	Cdr Raju K Kuriakose(retd) Associate Professor & Head, Department of Mechanical Engineering Vimal Jyothi Engineering Collge,	Chairperson	in person
2.	Dr. Vinay V. Panicker Professor Department of Mechanical Engineering,NIT Calicut	Member - (Academic Council Nominee)	Online
3.	Dr Eswaramoorthy Muthusamy Professor School of Mechanical Engineering Shri Mata Vaishno Devi University	Member- (Academic Council Nominee)	Online
	Dr. Mathew Skaria Professor Department of Mechanical Engineering TKMCE Kollam	Member-(KTU-Nominee)	Online

4.	Shri .G.Jagadeeskumar, Managing Partner Raison Tech #C21, KSSIDC Industrial Area, Doddaballapura,Bangalore	Member-(Industry Nominee)	Online
5.	Mr Lince Thomas, Lecturer in Engineering Princes Road,Chelmsford, UK	Member (Alumni)	Online
	Mr Mejo M Francis	Member	In person
	Dr.S Christopher Ezhil Singh	-do -	Online
	Dr. P Sridharan	-do -	In person
	Mr.Ryne P M	-do -	Online
	Dr.Sreekanth MP	-do -	In person
	Mr.Shaji George	-do -	In person
	Mr.Appu C Kurian	-do -	Online
	Mr. Aji Augustine	-do -	In person

2. Cdr. Raju K Kuriakose(retd), Head of the Department, Mechanical Engineering welcomed all Members and outlined the objectives of the BoS meeting. He emphasized the significance of improving the curriculum to better align with industry requirements and presented the B.Tech Mechanical Engineering curriculum and syllabus for the S1 and S2 semesters.

Suggestion and recommendation by the Expert members :

3.Dr.M. Eswaramoorthy has discussed the following:-

(a) Total Credits:

- Dr. M Eswaramurthy has requested for a clarification regarding total number of credits for the B.Tech (ME) program, that the total number of credits required to complete the program is **170 credits**. Which is 10 credits more than AICTE model curriculum (which require only 160 credits)
- Chairperson has clarified that as per decision of the academic council , all the graduate programs in the college is to follow, KTU Curriculum for the first phase of autonomy and KTU curriculum 2024 prescribes 170 credits for all UG programs,

(b). Continuous Internal Assessment (CIA):

- Dr. M Eswaramoorthy requested clarification on the revised **internal assessment weightage pattern and time duration of internal exams** in comparison to KTU.
- Chairperson has clarified that the Academic council has approved the following pattern for the CIA, for theory courses, with each exam with :-

  - ✓ **First Internal Assessment:** 5 marks (Module 1)
  - ✓ **Second Internal Assessment:** 10 marks (Module 2&3)
  - ✓ **Third Internal Assessment:** 5 marks (Module 4)
  - ✓ The duration of exams will be 02 hours for all theory courses with maximum 60 marks,. This system is expected to encourages continuous evaluation throughout the course and aims to provide a fair representation of a student's performance.

4. Dr. Vinay Panicker has discussed the following: -

(a) Uniformity in syllabus w.r.t course Objectives and course outcomes : Dr Vinay Panicker has pointed out that in some syllabus course objectives and course outcomes are given and in some syllabus only course outcomes. He suggested that uniformity in syllabus may be maintained .

(b) Articulation matrix for the whole program.:

- Dr. Panikcer suggested that all POs should be mapped for each course outcomes , as this would provide a comprehensive understanding of how the curriculum supports the overall goals of the program.
- Chairperson has clarified that syllabus modification and revision COs for the higher semester courses are being carried out and will be presented in the subsequesnt BoS. At present only first year syllabus is being finalized .

(c) Term paper instead of Seminar: Dr Panicker has suggested that instead of seminar ,students may be encouraged to prepare term papers so that they are encouraged to do research into some interesting topics. Chairperson has agreed to take up the matter with BoS/academic council

5. Dr. Mathew Skaria has discussed the following:

(a) Bridge Courses for Ist year students :

- Dr. Mathew Skaria emphasized the importance of offering **Bridge course** that cater to computer science courses and mathematics for science/biology stream students.
- Chairperson has clarified that 10 days mandatory induction programme covering bridge courses is included in the syllabus for S1.

(b) Add on Courses:

- Dr. Mathew Skaria has suggested that add on courses focusing on recent mechanical engineering techniques may be included to keep students updated with the latest advancements in the field.
- Chairperson has clarified that the department offers at least one addon course per year to higher semester students (S3 onwards). He promised that the practice of offering additional courses (add on courses) will be continued with the approval of academic council.

6. Mr. Lince Thomas has discussed the following:

(a) Introduction of Health and Safety-Related Courses:

- Mr. Lince Thomas initiated the discussion by proposing the introduction of health and safety-related courses within the engineering curriculum, similar to programs offered in foreign universities.
- He highlighted the growing importance of health and safety regulations in engineering practices across various industries, stressing that students should be well-versed in these areas before entering the workforce.
- The proposed courses would cover topics such as occupational health, safety management systems, hazard identification, and emergency response procedures, preparing students to handle safety risks in engineering environments.
- He suggested that engineering students should be trained in conducting risk assessments as part of their practical work, which would include identifying potential hazards, assessing the level of risk, and taking preventive measures.
- Chairperson agreed to take up this suggestion, to be implemented in the higher **semesters ,if not included in the syllabus of industrial systems and management.**

(b) Industry sponsored Projects Instead of Regular Course Projects:

- Mr. Lince Thomas suggested replacing traditional course projects may be replaced with projects that focus on real-world applications and industry needs.
- Unlike regular academic projects, Industry related projects would be designed to enhance students' employability by working on industry-relevant problems and developing solutions that can be directly applied in a professional setting.
- These projects would provide students with hands-on experience, making them more competitive in the job market. Mr. Lince recommended involving industry professionals in defining project scopes and outcomes to ensure relevance.

- Chairperson has clarified that the department is always encourages students to take up industry sponsored projects, however, lack of developed industries near to vicinity of the college is one of the major challenge in getting such projects. However, the department will take this suggestion seriously and will encourage students to pursue industry related projects in future also.

7. Mr. Jagadheeshkumar has discussed the following:-

Importance of Practical Courses:

- Mr. Jagadheeshkumar highlighted the critical role of practical courses in the engineering curriculum, stressing that hands-on learning is essential for developing real-world skills.
- He emphasized the need to increase the focus on lab-based courses, workshops, and simulation-based learning in order to prepare students for real-life engineering challenges.
- Chairperson has clarified that the curriculum has covered all essential lab and workshop sessions to encourage students in hands- on learning. Long internship (4-6 months), and industrial visits are included in the curriculum to have hands-on experience in industries and upgrade real-world skills

S1 and S2 Syllabus :

8. Chairperson has presented the modification in syllabus of following courses:-

(a) GCEST 104 -Introduction to Mechanical Engineering & Civil Engineering

(b) GCEST103- Engineering Mechanics

(c) PCMET 205 Material Science and Engineering

- Above courses minor modification to syllabus and revision of Course outcomes and subsequent CO-PO mapping was done by subject experts and approved by the program tcurriculum committee.
- **The changes and modifications were submitted forr the approval of BoS .**

10. The Board of Studies members approved the proposed B.Tech (Mechanical Engineering) curriculum-2024 and the syllabus for the S1 and S2 semesters.

11. **As there being no other points ,I[st] Board of Studies meeting of B.Tech (Mechanical Engineering Meeting was concluded with a vote of thanks by Mr. Mejo M Francis, Assistant Professor of Mechanical Engineering.**

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22 Oct 2024

Cdr Raju K Kuriakose (retd)
Chairperson
Board of Studies (ME)