Department of Chemical Engineering

KPR Institute of Engineering and Technology

KPRIET
Learn Beyond

Thirteenth Board of Studies Meeting

Venue: Primrose Hall

Date: 21-11-2025

Time:10.00 A.M

Agenda:

1. Welcome address of BoS Members.
2. Action Taken Report on the recommendations of the previous BoS meeting.
3. Curriculum structure (Semesters III to VIII) under Regulations 2025.
4. Syllabi for Semesters III and IV under Regulations 2025.
5. Proposal for New Additional Credit Courses (e.g., 1CC, VAC, MOOC, etc.) under Regulations 2025.
6. Ratification of items, if any.
7. Review and discussion of CO/PO targets.
8. Review and discussion of CO–PO mapping.
9. Approval of Examiners for question paper setting and valuation.
10. Discussion on Any Other Matters.

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Members Present:

S. No.	Name of the member with Designation	Category	Signature
1.	**Dr. S. Balasubramanian** Professor & Head Department of Chemical Engineering KPRIET.	Chairman Board of Studies	
2.	**Dr. B. Uma Maheswari** Associate Professor, Department of Chemical Engineering, Coimbatore Institute of Technology, Coimbatore - 641 014.	Anna University Nominee	21/11/2025
3.	**Prof. Tanmay Basak** Professor, Department of Chemical Engineering, IIT Madras, Chennai – 600036.	Academic Experts (Outside the parent University)	21/11/2025
4.	**Dr. B. Rajmohan** Professor, Department of Chemical Engineering, NITK, Surathkal, Mangaluru Karnataka - 575025.	Academic Experts (Outside the parent University)	ONLINE
5.	**Mr. N. Manivannan** Manager, Process Engineering, SLB – Cameron, Coimbatore -641 014.	Industry Experts	ONLINE
6.	**Mr. K. R. Sanjay** Process Engineer, Kavin Engineering Service Pvt. Ltd. TIDEL Park, Coimbatore -641 014	Faculty member	ONLINE
7.	**Dr. A. K. Priya** Professor Department of Chemical Engineering KPRIET, Coimbatore - 641407	Faculty member	21/11/2025
8.	**Dr. S. Karunakaran** Associate Professor Department of Chemical Engineering, KPRIET	Faculty member	21/11/25
9.	**Dr. G. Surendran** Associate Professor Department of Chemical Engineering, KPRIET	Faculty member	21/11/25

10.	**Dr. E. Nakkeeran** Associate Professor Department of Chemical Engineering KPRIET, Coimbatore - 641407.	Faculty Member	
11.	**Dr. R. Umapriya** Assistant Professor (Sl. G) Department of Chemical Engineering KPRIET, Coimbatore - 641407.	Faculty Member	
12.	**Dr. M. Laxmi Deepak Bhatlu** Assistant Professor (Sl. G) Department of Chemical Engineering KPRIET, Coimbatore - 641407.	Faculty Member	
13.	**Mr. N. Arunkumar** Assistant Professor (Sr.G) Department of Chemical Engineering KPRIET, Coimbatore - 641407.	Faculty Member	
14.	**Ms. L. Dharani** Assistant Professor Department of Chemical Engineering KPRIET, Coimbatore - 641407.	Faculty Member	
15.	**Ms. Samyuktha Ramesh** II B.Tech. Chemical Engineering KPRIET, Coimbatore - 641407.	Student Member	
16.	**Mr. Muthuvel Rajan** II B.Tech. Chemical Engineering KPRIET, Coimbatore - 641407.	Student Member	

Minutes of the 13th Meeting of The Board of Studies (BoS)

The meeting started with the Chairman, Department of Chemical Engineering welcoming the members of the Board of Studies. The Vision, Mission of the Institute and the Department were presented. The points in the agenda were presented one-by-one and the following resolutions were discussed.

RESOLUTIONS

1. Action taken on the minutes of the 12th BoS meeting

Sl. No.	Suggestions	Suggested By	Action Taken
1.	Sought clarification on Chemical Engineering specific content in U25CSG03-Digital Technologies course in 1st Semester.	Dr. P. Kalaichelvi	Course title and content was finalized based on recommendations of the institute.

2.	Enquired regarding inclusion of C Programming in Semester I and Python Programming.	Dr. L. Muruganandham	C Programming is offered in semester I, Python Programming is included in semester II.
3.	Suggestion to combine C and Python in Semester I.	Dr.L. Muruganandham	Based on institutional recommendations, C Programming is offered in semester I and Python Programming is included in semester II.
4.	Sought clarification on availability of open electives for students. Enquired on interdisciplinary final-year projects.	Dr. L. Muruganandham	List of open electives and final year Capstone project titles were displayed to the members.
5.	Requested detailed semester I and II curriculum structure of R2025	Dr. L. Muruganandham	Semester I & II structure presented. Final version was shared with members of the BoS.
6.	Sought clarification regarding total credits under R2025.	Dr. L. Muruganandham	Total credits fixed at 160 for B.Tech Chemical Engineering as per the recommendations of the institute, included in draft R2025.
7.	Recommended 12-week internship for better industry exposure.	Dr. L. Muruganandham	Total internship duration is 4 weeks without any break as per the recommendations of the institute.
8.	Enquired on support mechanism for slow learners; proposal for one-to-one mentoring.	Dr. L. Muruganandham	For the slow learners, special classes are conducted during evening hours (i) Dayscholars – 4.30-5.30 pm (ii) hostlers 4.30-6.30 pm.
9.	Appreciated the R2025 curriculum.	Dr. L. Muruganandham	Noted and added to feedback documentation.
10.	Proposal to shift Introduction to Chemical Engineering to Semester II.	Dr. S. Udhaya Bhaskar Reddy	It is offered in Semester I.
11.	Suggested to introduce AI in Chemical Engineering and Python Programming in Semester III.	Dr. S. Udhaya Bhaskar Reddy	U25CH201-Python Programming is offered in semester II and U25CH301-Basics of Artificial Intelligence in Chemical Engineering in semester III.

12.	Concern that the AI course is too early in the first year.	Mr. N. Arunkumar	U25CH301-Basics of Artificial Intelligence in Chemical Engineering is offered in semester III.
13.	Inclusion of Process Calculations in Semester II.	Dr. S. Karunakaran	U25CH302-Process Calculations is offered in semester III
14.	Include Chemical Process Industries in Semester II.	Dr. L. Muruganandham	U25CH501-Chemical Process Industries is offered in semester V.
15.	Sought clarification on inclusion of Machine learning and Data Structures under Chemical Engineering curriculum.	Dr. S. Karunakaran	Not yet finalised and it is under discussion.
16.	Suggested to align Introduction to Chemical Engineering course as foundation for AI course.	Dr. P. Kalaichelvi	U25CH301-Basics of Artificial Intelligence in Chemical Engineering is introduced in semester III.
17.	Recommended for one Industrial Visit in first year.	Dr. P. Kalaichelvi	Three industrial visits proposed and limplemented in the course U25CH101-Introduction to Chemical Engineering.
18.	Suggested to align internships with specialization verticals.	Dr. P. Kalaichelvi	It is under discussion.

2. Minutes of the 13th BoS meeting:

1. The XIII Board of Studies (BoS) meeting commenced with a welcome address to all the external and internal BoS members. Subsequently, the presentation-cum-discussion was continued.
2. Dr. B. Umamaheswari, enquired how the laboratory component is implemented in the mathematics course. Dr. S. Balasubramanian, explained that the theoretical concepts will be discussed in the classroom, followed by problem-solving sessions using MATLAB™.
3. Prof. Tanmay Basak, appreciated the approach followed in the English Proficiency courses, where reading, writing, and listening skills are integrated effectively in the Theory with Laboratory (TwL) component. He also, emphasized the importance of spoken English and

suggested to include the different accents (US and UK English), in Semester II. Dr. S. Balasubramanian informed that the suggestion will be taken up with the help of English department.

4. Dr. G. Surendran, mentioned that the department has international students (Zimbabwe and Tanzania) and encouraged continuous interaction among Indian and international students to understand different accents of English. Dr. Srinivasan Jayakumar and Prof. Tanmay Basak shared their experiences and the challenges they faced in understanding the US accent during their first visits to abroad.
5. Prof. Tanmay Basak, stressed the importance of highlighting Python programming skills to students. He further recommended including Strength of Materials as a key topic under Elements of Mechanical Engineering, considering its relevance for Chemical Engineering students.
6. Regarding the Basics of Electrical and Electronics Engineering course, Prof. Tanmay Basak suggested to take the students for an industrial visit and expose them in electrical components and practical applications. He shared an experience from the Pulp and Paper industry where engineers from different domains struggled to identify responsibilities during equipment failure and emphasized the need for industrial exposure for better decision-making.
7. Prof. Tanmay Basak also enquired about the topics included under the course Tamils and Technology and recommended involving a Tamil history expert to strengthen the content. In the current syllabus, it is also observed that the technology/engineering related to architecture, civil, textiles, ceramics (pottery), production, agriculture and water through Tamil's heritage is available.
8. Dr. B. Umamaheswari sought clarification on Design Thinking course and its mode of delivery. Dr. R. Umapriya explained that students are encouraged to visit the field, identify problems, discuss with peers, and apply relevant tools, as part of a block teaching approach. Dr. B. Umamaheswari added that the application component shall be aligned with Chemical Engineering principles. Both Dr. B. Umamaheswari and Prof. Tanmay Basak appreciated that Dr. R. Umapriya is certified in Design Thinking and noted that such certification adds value while teaching the course.
9. Prof. Tanmay Basak recommended to have English professors from different regions of the world to strengthen students' accent and exposure, especially for English Proficiency III in Semester III.
10. Dr S. Balasubramanian informed the BoS members that the Process Instrumentation course has been introduced in Semester IV based on the suggestions from NBA experts, as it was not offered in the previous curriculum 2021.

11. Dr. B. Umamaheswari raised a concern regarding the absence of Transport Phenomena course. Prof. Tanmay Basak stated that even in IIT Madras, the course is not offered in the earlier stage, the fundamentals of Fluid Mechanics, Heat Transfer, and Mass Transfer was preserved.
12. Dr. B. Umamaheswari asked about the course Process Modelling and Simulation, is it a part of regular professional core courses? Mr. N. Arunkumar clarified that the course is offered as an professional elective.
13. Dr. B. Rajmohan remarked that the overall curriculum is good. Mr. N. Manivannan suggested inclusion of Carbon Capture in some part of the curriculum. Dr. S. Balasubramanian responded that the department has a strong connection with M/s. Nova Technologies, Coimbatore, which works on CO_2 capture, and added that the topic will be included in value-added courses, future professional electives, and as a vertical.
14. Mr. K. R. Sanjay, emphasized strengthening of Industry – Institute collaboration in the courses offered to the students. Dr. S. Balasubramanian informed that the department has a Professor of Practice, Mr. Ravi Ramasamy, who has strong industry links. Dr S. Balasubramanian, also mentioned that the course Insights into Chemical Engineering is offered as a 1-credit course for 15 hours, with lectures delivered by industry experts.
15. Dr. B. Rajmohan commented that 45 hours for a 3-credit course is too long. Prof. Tanmay Basak recommended conducting Process Calculations for 4 hours per week. Dr. B. Rajmohan suggested following 35 hours for 3-credit courses and 45 hours for 4-credit courses.
16. Prof. Tanmay Basak requested to include most popular text books written by foreign authors in all the core courses.
17. The NCC - Army, NCC - Navy and NCC - Air Force syllabi for the 3rd semester (3 credits) were presented and approved by the BoS members.
18. Dr. B. Rajmohan asked, who handles the value-added and one-credit courses. Dr. S. Balasubramanian clarified that these courses are taken by faculty members based on their expertise, along with industry professionals.
19. Dr. B. Rajmohan also enquired about monitoring Massive Open Online Courses (MOOCs). Dr. S. Balasubramanian responded that mentors oversee/monitor the progress of their mentees. He further suggested removing the Pulp and Paper Technology course is one of the classical courses offered by many of the chemical engineering department in the past. It is observed that the Chemical Engineering Department at KPR Institute of Engineering and Technology holds this course in Professional Elective. Dr. B. Umamaheswari conveyed that the course is helpful for placements, given the presence of pulp and paper industries. Dr. S. Balasubramanian also added that the course covers key unit operations relevant to the field.

20. Dr. B. Rajmohan asked about the pattern of internal and external question paper selection in end-semester examinations. Dr. S. Balasubramanian explained that the question selection process is carried out through a systematic procedure. He also enquired whether the institute has a language library. Dr. S. Balasubramanian replied that the Institute is planning to establish a dedicated space in library with the help of language department. Ms. Samyuktha from II Year Chemical Engineering shared the current practices followed in the English laboratory. The BoS members appreciated the current practices.
21. Dr. B. Rajmohan requested the contents of value-added course for review and sought details on the placement process. Dr. G. Surendran, explained that the majority of the students are interested in core chemical engineering jobs. In this context, we emphasize the core concepts through regular core courses and also train the students though value added courses (VAC). Dr Rajmohan also encouraged the students to take up higher education as a choice for their career growth.