

Ninth Board of Studies Meeting

Venue: Jasmine Hall

Date: 23-11-2023

Time: 10.00 A.M

Agenda:

1. Welcoming BoS Members
2. Discussion on the minutes of previous BoS meeting and action taken
3. Stakeholders inputs on curriculum design
4. Curriculum and syllabus for IV to VIII semesters of UG programme under Regulations 2021
5. Professional Electives offered in different verticals under Regulations 2021
6. Open electives offered to other branches under Regulations 2021
7. Methodologies for innovative teaching and evaluation techniques
8. MOOC / Online Courses
9. Industry oriented courses (one credit courses)
10. Value added courses
11. Industrial Training / Internship
12. Any other matter

Department of Chemical Engineering

KPR Institute of Engineering and Technology



Members Present:

S. No.	Name of the member with Designation	Category	Signature
1.	Dr. S. Balasubramanian Professor Department of Chemical Engineering KPRIET.	Chairman Board of Studies	 23/11/23
2.	Dr. P. Kalaichelvi Professor Department of Chemical Engineering National Institute of Technology Trichy - 620015 Tamil Nadu, India.	Anna University Nominee	ONLINE
3.	Dr. Udaya Bhaskar Reddy Ragula Associate Professor Department of Chemical Engineering Amrita Vishwa Vidyapeetham Amrita Nagar, Coimbatore - 641112, Tamil Nadu, India.	Academic Experts (Outside the parent University)	ONLINE
4.	Dr. L. Muruganandam Professor Department of Chemical Engineering Vellore Institute of Technology Vellore - 632014, Tamil Nadu, India.	Academic Experts (Outside the parent University)	ONLINE
5.	Mr. J. Ashwin Nirmal Engineer - Process WOOD India Engineering Project Pvt. Ltd. Chennai - 600113, Tamil Nadu, India.	Industry Experts	ONLINE
6.	Dr. M. Ramasamy Professor Department of Chemical Engineering KPRIET.	Faculty member	
7.	Dr. A. K. Priya Professor Department of Chemical Engineering KPRIET.	Faculty member	 23/11/23
8.	Dr. S. Karunakaran Associate Professor Department of Chemical Engineering, KPRIET.	Faculty member	 23/11/23
9.	Dr. G. Surendran Associate Professor Department of Chemical Engineering, KPRIET.	Faculty member	 23/11/23

Department of Chemical Engineering

KPR Institute of Engineering and Technology



10.	Dr. E. Nakkeeran Associate Professor Department of Chemical Engineering KPRIET.	Faculty member	<i>E. Nakkeeran</i> 23/11/23
11.	Dr. R. Umapriya Assistant Professor (Sl. G) Department of Chemical Engineering KPRIET.	Faculty member	<i>R. Umapriya</i> 23/11/23
12.	Dr. M. Laxmi Deepak Bhatlu Assistant Professor (Sl. G) Department of Chemical Engineering KPRIET.	Faculty member	<i>M. L. D.</i> 23/11/23
13.	Dr. Nitu Kumari Assistant Professor (Sr. G) Department of Chemical Engineering KPRIET.	Faculty member	<i>N. Kumari</i> 23/11/23
14.	Mr. K. Murugesan Assistant Professor (Sr.G) Department of Chemical Engineering, KPRIET	Faculty member	<i>K. Murugesan</i>
15.	Mr. N. Arunkumar Assistant Professor (Sr.G) Department of Chemical Engineering, KPRIET	Faculty member	<i>N. Arunkumar</i> 23/11/23
16.	Ms. L. Dharani Assistant Professor Department of Chemical Engineering, KPRIET.	Faculty member	<i>L. Dharani</i> 23/11/2023
17.	Mr. Teepak Soorya IV B.Tech. Chemical Engineering	Student member	<i>T. Soorya</i> 23/11/23
18.	Ms. Judith Infanta IV B.Tech. Chemical Engineering	Student member	<i>M. Judith Infanta</i>
19.	Mr. R. Mugunthan II B.Tech. Chemical Engineering	Student member	<i>R. Mugunthan</i> 23/11/23
20.	Ms. V. S. Prashitha II B.Tech. Chemical Engineering	Student member	<i>V. S. Prashitha</i>

Department of Chemical Engineering

KPR Institute of Engineering and Technology

Minutes of the 9th 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. Following points were discussed at the Board of Studies.

RESOLUTIONS:

1. Action taken on the minutes of the 8th BoS meeting:

Sl. No.	Suggestions	Suggested By	Action Taken
1.	Suggested that the syllabus content for U21CH201 Introduction to Chemical Engineering course be reduced and integrated into another relevant subject. It is recommended that the course coordinators and relevant faculty member review and consider this proposal in order to optimize the syllabus and ensure an effective and streamlined learning experience for students.	Dr. Ravi Ramaswamy	As per the suggestion, syllabus content of U21CH201/ Introduction to Chemical Engineering course is reduced.
2.	Suggested that the science subject lab is allocated two credits, while the core subject is allocated only one credit. In light of this, he recommends verifying the credit allocation and considering a reduction in the workload of the students accordingly. This feedback highlights the need to ensure that the credit allocation is fair and consistent across different subjects and components of the curriculum.	Dr. V.T. Perarasu	As per the AICTE guidelines the basic sciences have weightage of 25 ± 3 and we have 27 credits. Additional project components are introduced in theory courses. To balance the credits, we would like to retain the one credits in core labs.
3.	Suggested to use software tools whenever necessary in courses. This feedback emphasizes the potential benefits of incorporating technology and digital tools in the teaching and learning process. By using software tools, students can enhance their understanding of complex concepts and develop valuable technical skills that are relevant to their future careers. It is advisable to explore and incorporate appropriate software tools in courses as needed, in order to optimize the learning outcomes for	Dr. Udaya Bhaskar Reddy	Complied.

Department of Chemical Engineering

KPR Institute of Engineering and Technology



	students.		
4.	Recommended keeping the Mass Transfer course in the 5th and 6th semesters and the Chemical Reaction Engineering (CRE) lab in the 7th semester. He also suggested to reshuffle the Chemical Reaction Engineering, Chemical Engineering Thermodynamics, and Mass Transfer courses based on the order (or sequence) of learning of fundamental principles connected to each other.	Dr. Udaya Bhaskar Reddy	Chemical Reaction Engineering I and II are combined and renamed as Chemical Reaction Engineering which is offered in 6 th semester. The laboratory course also offered in the same 6 th semester.
5.	Enquired about the Chemical Process Industries course and recommended moving it to the 4 th semester. This feedback emphasizes the need to carefully consider the course offerings and sequence to ensure that students receive a well-rounded education in chemical engineering.	Dr. Udaya Bhaskar Reddy	Retained the course in the sixth semester for the current regulation R2021. However, we will consider the suggestion and incorporate in the next regulations.
6.	BoS members suggested to offer the following Open Elective courses, (i) Environmental Impact Assessment (ii) Industrial Waste water Treatment	BoS Members	Presented in Academic Council meeting and it is approved.
7.	Board recommended the following online courses to the standing committee of the Academic Council for discussions: (i) Membrane Technology (ii) Safety for professionals (iii) Utility systems in Chemical process plant (iv) Industrial piping engineering	BoS Members	Presented in Academic Council meeting and it is approved.
8.	Recommended the implementation of the FISK approach and recognized it as a useful and effective method. He emphasized that if this approach is properly communicated and taught to the students, it can have a significant impact on their learning outcomes. This feedback highlights the potential benefits of the FISK approach and encourages its continued use and dissemination among students.	Dr. L. Muruganandham	It is implemented in R2021 and the course Design Studio - I (III Semester) is in progress

9.	<p>Board Recommended the following one credit courses to the standing committee of the Academic Council for discussions:</p> <ul style="list-style-type: none"> (i) Safety management (ii) Industry 4.0 (iii) Chemical plant design 	BoS Members	Presented in Academic Council meeting and it is approved.
10.	<p>Board Recommended the following value added courses to the standing committee of the Academic Council for discussions:</p> <ul style="list-style-type: none"> (i) Food processing and preservation (ii) Design thinking 	BoS Members	Presented in Academic Council meeting and it is approved.
11.	<p>Suggested focusing efforts on a project that is based on funded project, as it would be highly beneficial to both students and the accreditation process. This recommendation recognizes the potential value of a funded project, which can enhance the learning experience of students and contribute to the overall quality and reputation of the institution. As such, it is advisable to explore and prioritize relevant projects that align with these goals.</p>	Dr. N. Selvaraju	The process is initiated.
12.	<p>Recommended incorporating the J component into the mini project, while also acknowledging that the FISK approach, which is project-based, can be demanding on students. This feedback recognizes the potential value of the J component and its contribution to the overall learning outcomes of the mini project. One key point to consider is the importance of the workload and expectations of the students, particularly in the context of project-based courses like FISK. It is advisable to strike a balance between these considerations in order to optimize the learning experience for students.</p>	Dr. P. Kalaichelvi	Mini project is not included in R2021 as FISK is added in curriculum. However, we will consider the suggestion and incorporate in upcoming curriculum.
13.	<p>Inquired about the use of Bloom's taxonomy in question papers. The Chairman of the Board of Studies (BoS) confirmed that KPRIET follows Bloom's taxonomy in its question</p>	Dr. P. Kalaichelvi	

	papers. This exchange highlights the importance of using appropriate assessment methods and strategies that are aligned with the learning outcomes and objectives of the course. By utilizing Bloom's taxonomy, KPRIET is able to ensure that its question papers are designed to evaluate students' critical thinking skills and higher-order cognitive abilities.		Question papers are prepared as per the revised Bloom's taxonomy.
14.	Emphasized to concentrate on achieving the CO-PO (Course Outcome Program Outcome) requirements for the National Board of Accreditation (NBA). This suggestion highlights the importance of meeting the necessary standards and benchmarks set by the NBA for accreditation purposes. It is advisable to prioritize activities and initiatives that are aligned with these requirements in order to ensure a successful accreditation outcome.	Dr. L. Muruganandam	The activities are prioritized and initiatives are taken.
15.	Recommended removing the term "understanding" from the course outcome (CO) attainment criteria, as it is not a verb. He suggests reworking the COs for all courses accordingly. This feedback highlights the importance of clear and concise language in defining learning outcomes and objectives. By using appropriate verbs in the COs, it is easier to assess and measure students' achievement of the intended learning outcomes.	Dr. Udaya Bhaskar Reddy	Suggestions are incorporated during framing of the CO-PO
16.	Recommended that our current mission statement would benefit from further development to include a clear vision statement. As such, it is advised that department allocate resources towards crafting a more defined vision statement to guide our future organizational efforts.	Dr. Ravi Ramaswamy	We reframed our vision and mission.

17.	Recommended that the process of formulating a vision statement should be viewed as a long-term endeavor, spanning approximately 15 years. In light of this perspective, it is advisable to approach the development of vision statements with a forward-thinking and strategic mindset, carefully considering the potential impact and alignment with future institutional objectives.	Dr. Udaya Bhaskar Reddy	We reframed our vision and mission.
-----	--	-------------------------	-------------------------------------

2. Minutes of the 9th BoS meeting:

1. All members of the Board of Studies (BoS) appreciated the comprehensive action taken report presented for the minutes of VIII BoS meeting.
2. Dr. P. Kalaichelvi inquired about the software used in the course U21MEG01- Engineering Graphics. She suggested to use AutoCAD in the course Engineering Graphics.
3. Dr. P. Kalaichelvi suggested combining Chemical Engineering Thermodynamics I & II into a single course and concentrate more on design oriented subjects in curriculum.
4. Dr. P. Kalaichelvi recommended engaging specific academic experts and industry professionals to handle the Artificial Intelligence (AI) and Industrial Internet of Things (IIoT) courses in B.Tech Chemical Engineering Program.
5. Dr. P. Kalachelvi sought clarification regarding the procedure for the online course registration, credit waivers and minimum number of courses that students are eligible to register for waiver.
6. Dr. P. Kalachelvi proposed to encourage the students to pursue their internships and projects in prestigious laboratories under Council for Scientist and Industrial Research institutions (CSIR), and premier institutions such as IISC, IITs and NITs in the country.
7. Dr. L. Muruganandham suggested that the mandatory non-credit course offered in the fifth semester, U21MYC04 - Cyber Security Essentials shall have content related to chemical industry security and its relevance to the field beyond computer science.
8. Dr. L. Muruganandham suggested to consider more online courses as elective courses.
9. Dr. L. Muruganandham suggested to ensure that more than 80% of students register for the value added courses.
10. Dr. Udaya Bhaskar Reddy Ragula suggested to allocate individual projects to students for J component courses rather than group and review their assessment.

11. Dr. Udaya Bhaskar Reddy Ragula suggested to include Chemical Process safety in the Design and manufacturing vertical.
12. Dr. M. Ramasamy suggested to rename the project work as project phase I and project phase II.
13. Mr. J. Ashwin Nirmal suggested to consider the industrial internships in Engineering Procurement and Construction (EPC) companies. As many students prefer the conventional production companies.
14. The BoS Chairman proposed to add the open elective course U21CHX06 - Membrane Technology in the VI semester, and all members approved the proposal.

SB
23/11/2023

Chairman - BoS / Chemical

Dr. S. Balasubramanian, M.Tech., Ph.D.
Professor & Head
Department of Chemical Engineering
KPR Institute of Engineering & Technology
Arasur, Coimbatore - 641 407

