

NANDHA ENGINEERING COLLEGE (Autonomous), ERODE – 638 052

(An Autonomous Institution, Affiliated to Anna University Chennai and Approved by AICTE New Delhi)

DEPARTMENT OF CHEMICAL ENGINEERING

MINUTES OF THE 8th BOARD OF STUDIES MEETING

Name of the Body	Board of Studies
Name of the Board	B.Tech - Chemical Engineering
Meeting No.	08
Date & Time	12.06.2024, 11.00 A.M
Venue	NEC – Board Room

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Minutes of 8th Board of Studies Meeting (BoS) held on 12.06.2024

The 8th Board of Studies (BoS) meeting was held on **12.06.2024 at 11.00 A.M** through offline mode as per the requisition from University Nominee and Expert Members. The members attended the meeting are given in the **Annexure I.**

The Chairman of BoS, **Dr.A.Murugesan**, Professor (Chemical Engineering) delivered the welcome address and invited the Members for the meeting. Then the items listed below were taken for discussion. The proceedings of BoS started and Minutes of the Meeting recorded as follows:

Item - 8.01	Review of the 7 th BoS meeting minutes and Action Taken Report.	
Discussion	The salient decisions taken in the 7th BoS meeting and action taken were presented. The members have appreciated the efforts taken to implement the suggestions.	
Resolution	Resolved to approve the ATR of 7 th BoS meeting minutes.	
Item – 8.02	Review of the previous PAC & DAB meeting minutes.	
Discussion	The important suggestions given by the PAC and DAB members during the previous PAC and DAB meeting and action taken were presented.	
Resolution	Resolved to approve the PAC and DAB meeting minutes.	
Item – 8.03	Result Analysis and Attainment of the Odd Semester 2023-2024	
Discussion	More problems to be given for problems oriented courses to the slow learners. Fix the target as > 85 % for the courses like Laboratory and Project work in attainment level.	
Resolution	Resolved to record the suggestion given by BoS members	
Item-8.04	CAT Examination result analysis and Attainment of Even semester 2023- 2024, Identification of slow learners and corrective actions.	
Discussion	More number of failures were identified in Engineering graphics, Calculus and Linear Algebra and this result showed that the students' creativity skill is less. In Process Instrumentation Dynamics and Control course, CAT – I result is poor and therefore the following Teaching – Learning process to be formed > Remedial Classes for Slow learners. > Peer group learning. > Fast learners may give coaching to slow learners. > Special Schedule for remedial classes to slow learners with Geo-tag Photos as proof is required.	

	> Appreciation for slow learners is needed by providing certification to them.	
Resolution	Resolved to record the suggestion given by BoS members	
Item-8.05	Class Committee Meeting (CCM) reports and action taken	
Discussion	Aspen HYSYS software may be included as a practical course in department laboratories and students may be motivated by giving more training using design oriented modern tools.	
Resolution	Resolved to record the suggestion given by BoS members	
Item-8.06	Placement status of IV year (2020 - 2024 Batch) students and Training Plan for 2021-2025 batch students.	
Discussion	 As per the placement record, number of core industries visited to campus and salary package details were highlighted for 2024 batch students. AutoCAD Training details and Action plan of Aptitude, Verbal & Logical Reasoning Training and Core Training by external vendors for 2021 -2025 batch students. 	
Resolution	Resolved to record the suggestion given by BoS members	
Item-8.07	R22 Regulation, Curriculum, Syllabus modification and amendments.	
Discussion	The following courses syllabi are presented in the meeting for discussion and approval. V Semester 1. Mass Transfer I I Dr.M.Arulmozhi has suggested to change Adsorption & Membrane Separation Processes instead of adsorption in Unit – V Title. Dr.C.Karthikeyan has suggested to include Multi Component Distillation. Dr.M.Arivazhagan has suggested to combine Liquid – Liquid Extraction & Solid-Liquid Extraction/Leaching as a single unit. Process Engineering Economics Dr.C.Karthikeyan has suggested to include Breakeven analysis in unit I Process Dynamics and Control Dr.M.Arulmozhi has suggested to include control valve characterization in unit V Chemical Reaction Engineering Laboratory – No change Mass Transfer Laboratory – No change VI Semester Transport Phenomena Dr.M.Arivazhagan has suggested to change unit II title from Energy Transport to Heat Transport	

- 2. Process Modeling and Simulation—No change
- 3. Process Control Laboratory—No change
- 4. Process Modeling and Simulation Laboratory—No change

VII Semester

- 1. Process Computation laboratory– No change
- 2. Chemical Equipment Design laboratory— No change
- 3. Industrial Training / Internships— No change

VIII Semester

1. Project Work- No change

Vertical 1: Chemical Industry 4.0

Members suggested change Vertical title from Industry 4.0 to Chemical Industry 4.0

- 1. Introduction to Computational Fluid Dynamics No change
- 2. Modern Separation Techniques No change
- 3. Chemical Process Utilities No change
- 4. Corrosion Technology No change
- 5. Materials of Construction for Process Industries
 - Members Suggested to change the title from "Materials of Construction for Chemical Industries" to "Materials of Construction for Process Industries"
- 6. Process Instrumentation No change
- 7. Pharmaceutical Technology No change
- 8. Separation and Purification Processes No change

Vertical II: Petroleum Technology

- 1. Petroleum Chemistry and Refining Fundamentals No change
- 2. Primary Refining Technology No change
- 3. Petroleum Refining Primary Processing Technology No change
- 4. Secondary Refining Technology No change
- 5. Petrochemical Unit Processes No change
- 6. Petrochemical Derivatives No change
- 7. Petrochemical Technology No change
- 8. Polymer Technology No change
- 9. Fertilizer Technology No change

Vertical III : Food Technology

1. Food Chemistry – No change

- 2. Food Materials Science No change
- 3. Processing of Dairy Products No change
- 4. Fruit and Vegetable Processing and Preservation No change
- 5. Baking and Confectionery Technology No change
- 6. Technology of Fruit and Vegetable Processing No change
- 7. Food Structuring Techniques No change
- 8. Food Quality and Safety No change

Vertical IV: Environmental and Safety Engineering

- 1. Air Pollution Engineering No change
- 2. Waste Water Treatment
 - Members suggested to change title from "Waste Water Management" to "Waste Water Treatment"
 - Dr.C.Karthikeyan has suggested to change unit IV title from "Treatment Methods" to "Aerobic And Anaerobic Treatment Methods"
- 3. Solid waste Management
 - Mr.S.Nikhileswar has suggested to remove the topic bioreactor from unit V
- 4. Environmental Impact Assessment No change
- 5. Process Safety Management No change
- 6. Risk and HAZOP Analysis No change
- 7. Industrial Pollution Control and Management No change
- 8. Environmental Biotechnology No change

Minor Degree Courses

Chemical Engineering

- 1. Fundamentals of Chemical Engineering
 - Dr.M.Arulmozhi has suggested to add topics on unit operations in unit I
- 2. Fluid Mechanics No change
- 3. Basic Process Calculations No change
- 4. Heat Transfer Operations No change
- 5. Mass Transfer Operations No change
- 6. Chemical Reaction Engineering No change
- 7. Process Plant Utilities No change
- 8. Process Plant Safety
 - Mr.S.Nikhileswar has suggested to add fire extinguisher in unit II.

General Observations

Internship / Industrial Training:

Minimum one month duration is required for Industrial Training / Internship for students.

	Project Work;
	• Students have to carry out their projects related to products manufacturing /
	Synthesis.
	• Students have to acquire a skill set as in the form of Reskilling / Up-skilling
	to fabricate the chemical equipment (pilot version), which may be used in
	Chemical Process Industries.
	 Mapping should be properly done for all COs/POs with graduate attributes.
	Verticals;
	• In all Verticals Course Order should be changed as per Hierarchy.
	• Vertical – V – Change Vertical entitled as Chemical Industry 4.0 instead of
	Industry 4.0.
	 Mapping to be checked in all Courses in above verticals.
Resolution	Resolved to record the suggestion given by BoS members
	Suggestions from the following;
	> Curriculum Review and Updates
	> Program Accreditation and Compliance
	> Teaching and Learning Innovations
	> Assessment and Evaluation
Item-8.08	> Faculty Development and Research
	> Industry Collaboration and Internships
	> Infrastructure and Resource Enhancement
	> Student Support and Extracurricular Activities
	> Policy Formulation and Administrative Decisions
	➤ Future Planning with NEP – 2020 features
	Above points were shown to the BoS members for their additional valuable
Discussion	suggestions. External members were asked to send the same through email with sub
	parameters to suggest further.
Item – 8.09	Any other matter
Discussion	Alumni Mentoring in addition to faculty members to currently pursuing students.
Resolution	Plan to identify alumni from Process and Design Sector to implement.
	Mr.T.Sathish, Assistant Professor, Chemical Engineering, proposed vote of
	thanks.

Date: 12.06.2024



(Chairman/BoS - Chemical Engineering)

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