

**NANDHA ENGINEERING COLLEGE, ERODE – 638 052**  
**(An Autonomous Institution, Affiliated to Anna University Chennai and**  
**Approved by AICTE New Delhi)**

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**MINUTES OF THE 3<sup>rd</sup> BOARD OF STUDIES MEETING**

Name of the Body	Board of Studies
Name of the Board	B.Tech. Chemical Engineering
Meeting No.	03
Date & Time	01.12.2018, 10.00 AM
Venue	Board Room Nandha Engineering College (Autonomous) Erode – 638 052

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1/12/18

**NANDHA ENGINEERING COLLEGE, ERODE – 638 052**  
**(An Autonomous Institution, Affiliated to Anna University Chennai and**  
**approved by AICTE New Delhi)**  
**Minutes of 3<sup>rd</sup> Board of Studies Meeting (BoS) held on 01.12.2018**

The 3<sup>rd</sup> Board of Studies (BoS) meeting was held on 01.12.2018 by 10.00 am at Board Room, Nandha Engineering College, Erode - 52. The members attended the meeting are given in **Annexure I**.

The Chairman of BoS, Mr.G.Mohankumar, HOD (Chemical Engineering) welcomed the members for the meeting. Then the items listed below were taken for discussion.

The proceedings of BoS started and the minutes of the meeting are recorded as follows:

Item 3:01	To review and approve the syllabi under regulation R17 for 5 <sup>th</sup> to 8 <sup>th</sup> semesters for B.Tech chemical Engineering for the batch of students admitted in the year (2018 - 2019) onwards	
	<b>General suggestion:</b> <b>Dr.C.Karthikeyan</b> has suggested to add text book with latest publication for all the subjects.	Added
	<b>Mr.N.Thirumurugan</b> has suggested that faculty member undergo a industrial training.	To be Followed
	<b>Mass Transfer I</b> <b>Mr.R.Karthikeyan</b> has suggested to add title effect of tip speed in crystallization in unit V	Added
	<b>Chemical Process Industries</b> <b>Dr.K.V.Radha</b> has Suggested to change the order of units Unit 1 Industrial gases and acids Unit 2 Inorganic chemical industry Unit 3 Pharmaceuticals industry Unit 4 Sugar and starch industry Unit 5 Petroleum industry	Changed
	<b>Dr.N.Anantharaman</b> has suggested add new petrochemicals in unit 5	Added
	<b>Dr.K.V.Radha</b> has suggested to add 'Job opportunities in chemical industry" in unit '1.	Added
	<b>Mr.N.Thirumurugan</b> has suggested to add Industrial air and Instrumentation air to unit 1.	Added
	<b>Chemical Reaction Engineering</b> <b>Dr.K.V.Radha</b> has suggested to rearrange units as per the textbook O. Levenspiel.	Arranged

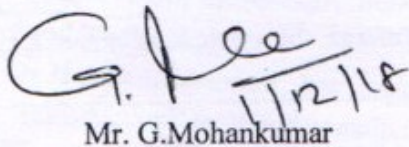
<p><b>Chemical Equipment Design –I</b>  <b>Dr.C.Karthikeyan</b> has suggested the order of unit title  Unit 1 Design basics  Unit 2 Reactor design  Unit 3 Heat exchangers  Unit 4 Evaporators and condensers  Unit 5 Crystallizers and centrifuge</p>	<p>Arranged</p>
<p><b>Dr.K.V.Radha</b> has suggested to give more importance to design of equipments</p>	<p>To be followed</p>
<p><b>Heat transfer lab:</b>  <b>Dr.N.Anantharaman</b> has suggested to add experiments on radiation.  <b>Dr.N.Anantharaman</b> has suggested to arrange the order of experiments and course objectives by</p> <ul style="list-style-type: none"> <li>• Conduction</li> <li>• Convection</li> <li>• Radiation</li> <li>• Heat exchangers and</li> <li>• Evaporator</li> </ul>	<p>Added</p> <p>Arranged</p>
<p><b>Chemical Reaction Engineering Laboratory</b>  <b>Dr.N.Anantharaman</b> has suggested to remove the experiment “study of packed bed catalytic reactor”.</p>	<p>Removed</p>
<p><b>Mass Transfer II (Embedded)</b>  <b>Dr.C.Karthikeyan</b> has suggested to remove the experiment “Mass transfer studies in membrane separations”.</p>	<p>Removed</p>
<p><b>Chemical Equipment Design - II</b>  <b>Dr.C.Karthikeyan</b> has suggested the order of units  Unit 1 Distillation column  Unit 2 Absorption column  Unit 3 Dryers  Unit 4 Tall column and pressure vessels  Unit 5 Storage vessels</p>	<p>Arranged</p>
<p><b>Mr.N.Thirimurugan</b> has suggested to add freeze dryer and rotary dryer in dryers design</p>	<p>Added</p>
<p><b>Process Instrumentation Dynamics And Control</b>  <b>Dr.K.V.Radha</b> has suggested to remove “p<sup>H</sup> and concentration” from unit 1</p>	<p>Removed</p>
<p><b>Chemical Process Plant Safety And Hazard Analysis</b>  <b>Dr.K.V.Radha</b> has suggested to add safety symbols and spill control in unit 1</p>	<p>Added</p>

<b>Mr.N.Thirimurugan</b> has suggested to add emergency planning in unit 2	Added
<b>Mr.R.Karthikeyan</b> has suggested to add safety data sheet in unit 3 and OHSAS and ISO standard in unit5.	Added
<b>Process Computation Laboratory</b> <b>Dr.N.Anantharaman</b> has suggested to change the name of experiment no. 14 from “Estimation of WBT and DBT” to “Estimation of Humidity”	Changed
<b>Process Engineering Economics And Management</b> <b>Dr.K.V.Radha</b> has suggested to arrange an industrial lecture on overview about the course. <b>Dr.N.Anantharaman</b> has suggested to change unit 2 title “Project profitability and financial ratios” to “Cost estimation and financial ratios”	Will be arranged Changed
<b>Mr.N.Thirumurugan</b> has suggested to include process optimization in unit 2	Included
<b>Process Modeling And Simulation(Embedded)</b> <b>Dr.N.Anantharaman</b> has suggested to change title of exp. No. 6 from “Simulation of distillation column” to “Simulation of distillation rate”	Changed
<b>Food Technology</b> <b>Dr.N.Anantharaman</b> has suggested to change title of unit 1 from “Introduction” to “Food constituents and Quality standards” & unit 3 from “Deterioration and preservation” to “Food preservation”. <b>Mr.R.Karthikeyan</b> has suggested to add ‘milling and sieving’ in unit 2 <b>Mr.N.Thirumurugan</b> has suggested to add ‘labeling procedure’ in unit 5	Changed Added Added
<b>Petroleum Refining Engineering</b> <b>Dr.K.V.Radha</b> has suggested to remove the line ‘in all petroleum fractions to improve performance’ from unit 3	Removed
<b>Drugs And Pharmaceuticals Technology</b> <b>Dr.K.V.Radha</b> has suggested to add classification of drugs and remove the content “uses and its economics” in unit 1 <b>Dr. C.Karthikeyan</b> has suggested to remove the content “ standard of hygiene and manufacturing practice “ in unit 4 <b>Mr.N.Thirumurugan</b> has suggested to add HPLC in unit 5 <b>Mr.R.Karthikeyan</b> has suggested to add particle size distribution in unit 5 <b>Dr.N.Anantharaman</b> has advised to add one more textbook.	Removed Removed Added Added Added
<b>Chemical Process Utilities</b> <b>Dr.C.Karthikeyan</b> has suggested to add hard water in unit 2.	Added

<p><b>Modern Separation Processes</b>  <b>Dr.K.V.Radha</b> has suggested to change the subject title to "Separation and Purification Processes" and change the word "Recent advances" to 'Modern' in unit 1  <b>Mr.R.Karthikeyan</b> has suggested to add diafiltration in unit 2  <b>Mr.N.Thirumurugan</b> has suggested to remove the content "Ion exchange chromatography" in unit 4.  <b>Dr.N.Anantharaman</b> has suggested to change title of unit 5 as Applications of modern separation techniques.</p>	<p>Changed  Added  Removed  Changed</p>
<p><b>Air Pollution And Control</b>  <b>Dr.C.Karthikeyan</b> has suggested to change the unit order and reorganize the contents.</p>	<p>Changed</p>
<p><b>Polymer Technology</b>  <b>Mr.N.Thirumurugan</b> has suggested to add latest techniques in unit 4  <b>Dr.K.V.Radha</b> has suggested to change the title of unit 5 as "Industrial polymers".</p>	<p>Added  Changed</p>
<p><b>Pilot Plant And Scale Up Methods</b>  <b>Dr.K.V.Radha</b> has suggested to alter the title of all units  <b>Dr.N.Anantharaman</b> has suggested to merge the content of mass and heat operations in single unit.</p>	<p>Changed  Changed</p>
<p><b>Heterogeneous Catalytic Reactions</b>  <b>Dr.N.Anantharaman</b> has suggested to add book "J.M.Smith chemical engineering kinetics" in textbook and J.J.Carberry "Chemical and catalytic reaction engineering" in reference.</p>	<p>Added</p>
<p><b>Petroleum Process Equipment Auxiliaries</b>  <b>Dr.K.V.Radha</b> has suggested to change the subject title to "Chemical process equipment and auxiliaries".</p>	<p>Changed</p>
<p><b>Design Of Pressure Vessels And Piping</b>  <b>Mr.N.Thirumurugan</b> has suggested to add DIN codes in unit 2.</p>	<p>Added</p>
<p><b>Drying Technology</b>  <b>Dr.C.Karthikeyan</b> has suggested to change the contents of all units.</p>	<p>Changed</p>
<p><b>Waste Water Treatment</b>  <b>Dr.K.V.Radha</b> has suggested to add 'Physical and chemical properties of waste water' and 'Thermal treatment process' to unit 1.  <b>Dr.C.Karthikeyan</b> has suggested to add 'Types of waste water' to unit 1 and 'Chemical reactors and filters' to unit 3  <b>Dr.N.Anantharaman</b> has suggested to add 'Environment regulation' and change the content 'Impact of regulation' to 'Impact of waste water' in unit 1.  <b>Dr.N.Anantharaman</b> has suggested to change the content from 'Reactors</p>	<p>Added  Added  Added  Changed</p>

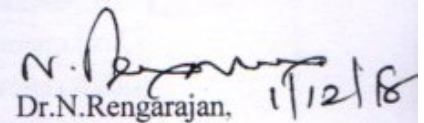
	used in waste water treatment' to 'Design and analysis of biological reactors for waste water treatment' in unit V.	
	<b>Piping Engineering</b> <b>Dr.K.V.Radha</b> has suggested to change the unit 3 title from 'Piping design I' to 'Piping design for utilities' and unit 4 title from 'Piping design II' to 'Piping design for processes'.	Changed
	<b>Mr.N.Thirumurugan</b> has suggested to add the content 'waste water' in unit 4.	Added
	<b>Process Automation</b> <b>Dr.K.V.Radha</b> has suggested to change unit 1 title from 'Introduction' to 'Introduction to unit operations'.	Changed
Resolution	Resolved to approve the syllabi under regulation R17 for 5 <sup>th</sup> to 8 <sup>th</sup> semesters of B.Tech Chemical Engineering for the batch of students admitted in the year (2018-2019) on wards	
Item 3.02	Vote of thanks	
	K.Rajasekaran, AP (Chemical Engineering) proposed the vote of thanks.	

Date: 01.12.2018

  
11/12/18

Mr. G.Mohankumar

(Chairman, BoS/HOD – Chemical Engineering)

  
11/12/18

Dr.N.Rengarajan,

Principal