

# **SETHU INSTITUTE OF TECHNOLOGY**

*(An Autonomous Institution)*



*Estd : 1995*

## **MINUTES OF THE MEETING**

### **Board of Studies of Chemical Engineering**

Pulloor, Kariapatti – 626 115, Virudhunagar District

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# SETHU INSTITUTE OF TECHNOLOGY

(An Autonomous Institution Affiliated to Anna University, Chennai)

Pulloor, Kariapatti - 626 115

## DEPARTMENT OF CHEMICAL ENGINEERING

### Minutes of Board of Studies Meeting

Held on 5.09.2020

The sixth Board of Studies meeting for Chemical Engineering was held on 5.09.20 at 11.00 A.M. through Google meet.

The following members were present.

S.No.	Name	Designation	Status
1.	Dr. C. Marimuthu	Associate Professor & Head	Board Chairperson
2.	Dr.S. Sabarunisha Begum	Professor	Faculty member
3.	Dr.S. Vinodha	Professor	Faculty member
4.	Mr.M. Arul Jayan	Assistant Professor (Sr.Grade)	Faculty member
5.	Dr.M.Sethuram	Assistant Professor (Sr.Grade)	Faculty member
6.	Mr.S. Nagul Dev	Assistant Professor	Faculty member
7.	Mr.M. Dakshnamoorthy	Assistant Professor	Faculty member
8.	Mr.G. Selva Dhamodharan	Assistant Professor	Faculty member
9.	Mr.K. Dharmaprabu	Assistant Professor	Faculty member
10.	Mr. M.Shilmiya	Alumni	Alumni member
11.	Mr.Sivaprasath	Alumni	Alumni member
12.	Dr. M. Arulmozhi	Professor & Head Department of Petrochemical Technology, University College of Engineering, BIT Campus, Tiruchirapalli – 620024	University Nominee
13.	Dr. A. BabuPonnusamy	Associate Professor, Department of Chemical Engineering, VIT University, Vellore – 632014	External Expert (Academic)
14.	Mr. U. Rajaram	Manager, Reliance industries Jam Nagar,Gujarat	External Expert (Industry)

## **1. Department Vision, Mission, PEOs, POs, PSO & PSC**

Chairperson gave introduction and brief description about the department vision & mission, PEOs, POs PSOs, PSC, for the Chemical Engineering program and the same had been approved in the BOS meeting

## **2. Stakeholders feedback**

Chairperson briefed the various feedback from the stakeholders through PAC & DAB meeting and resolved to implement in the curriculum 2019, which had been approved by the board members.

### **2.1 Students Feedback**

- 2.1.1 Good balance between theory and practical classes
- 2.1.2 A course on Nano Science and Technology has to be included
- 2.1.3 Need for Computational Laboratory
- 2.1.4 Needs sufficient courses on Chemical Engineering Design
- 2.1.5 Needs revision in the course 15UCH302 organic chemistry

### **2.2 Employers Feedback**

- 2.2.1 New courses on Carbon Trading, Green Protocol / Global Warming can be included
- 2.2.2 A course on Mathematical Models in Chemical Engineering shall be included
- 2.2.3 Need up-gradation of course 15UCH923 Chemical Process Plant Safety

### **2.3 Faculty - International Feedback**

- 2.3.1 A course on Extractive Metallurgy shall be included

### **2.4 Faculty Feedback**

- 2.4.1 A course on Nuclear Science and Technology has to be included
- 2.4.2 A course on Computational Fluid Dynamics has to be included
- 2.4.3 New courses on Environmental Impact Assessment shall be included

## **3. Inter Disciplinary Courses**

The Chairperson briefed the interdisciplinary courses offered in the Chemical Engineering program and the same has been resolved and approved in the BOS meeting. The programs includes

- Data Science for Engineers
- Waste to Energy Conversion



#### **4. Addition/Deletion of Courses/Topics**

The chairperson explained the Regulation 2019 curriculum and resolved to approve the following suggestions in the board.

##### **Suggestions from Experts:**

##### **4.1 Mr. U. Rajaram (Industry Nominee) suggested to**

- Include the topic 'Special type heat exchangers' in the course Heat Transfer offered in IV Semester
- Purchase educational version software's for the department

##### **4.2 Dr. M. Arul mozhi (Anna University Nominee) suggested to**

Include placement and learning in the mission statements of the department

- Refer IIChe Association and Petrochemical society for Program Specific Criteria.
- Maintain up-gradated lab facility while Computational related courses are offered
- Include Pharmaceutical Technology as a compulsory course for Chemical Engineering students
- Mention the latest edition of the text book in syllabus
- Remove some topics from Chemical Process Industries and make it less complicated

##### **4.3 Dr.A.Babu Ponnusamy (Academic Expert) suggested to**

- Include the applications of Chemical Engineering in Numerical Methods course (19UMA423)
- Consider higher studies in mission statement
- Include compressors and vacuum system in Heat Power Engineering
- Add theoretical flame temperature in combustion unit as a topic in Process Calculations.
- Focus only on materials related to Chemical Engineering Applications in the course Engineering Materials and Mechanics
- Add topics on advanced laws of thermodynamics and aspen plus applications in the course Chemical Engineering Thermodynamics
- Consider/add topics like reboiler, condensers and special type of heat exchangers in the course Heat Transfer (15UCH403)

## **5. Employability, Entrepreneurship & Skill Development Courses**

The Chairperson briefed the classification of courses for Employability, Entrepreneurship & Skill Development and resolved to approve in the board.

## **6. Value Added Courses**

The Chairperson briefed the following value added courses in the curriculum and resolve to approve in the board.

1. MATLAB for Chemical Engineers
2. Simulation on Process Fundamentals
3. ANSYS – CFD
4. CHEMCAD
5. ASPEN – HYSYS

## **7. Examiners (Question paper setting, Paper Evaluation, Project Viva voce)**

The Chairperson presented the list of examiners for question paper setting, paper evaluation, project viva voce and the same has been accepted and approved by the board.

## **8. New Courses under Curriculum 2019**

The chairperson briefed the following new courses included in the curriculum 2019 and resolved to approve in the board.

<b>S.No</b>	<b>Course Title</b>
1	Induction Programme
2	Problem Solving and Python Programming
3	Problem Solving and Python Programming Lab
4	Calculus, Complex Analysis, Transform Techniques
5	Energy Science and EVS Lab
6	Heat Power Engineering
7	Engineering Materials for Process Industries
8	Biology for Engineering Application
9	Gender Equality
10	Seminar
11	Creative Thinking and Innovation
12	Interpersonal Skills Lab
13	Process Equipment Design
14	Process Computation Lab
15	Indian Constitution/Essence of Indian Traditional Knowledge
16	Soft Skills and Communication Lab
17	Technical Project and Product Development
18	Process Modeling and Simulation
19	Process Design and Simulation Lab
20	Project Management and Finance
21	Summer Internship

### 9. The Overall Course Structure of the Curriculum 2019

Category	No of Courses	SIT	
		Credit	Credit %
Humanities & Social Science (HS)	11	14.5	8%
Basic Science (BS)	12	31.5	18%
Engineering Science (ES)	7	19	11%
Professional Core (PC)	21	65	38%
Professional Elective (PE)	6	18	10%
Open Elective (OE)	4	12	7%
Projects (P)	4	14	8%
<b>TOTAL</b>	<b>65</b>	<b>174</b>	<b>100%</b>

Semester	I	II	III	IV	V	VI	VII	VIII	TOTAL
Total Credit of Courses	23	20.5	21	24	22.5	24.5	24.5	14	174

The Chairperson thanked the members for their contribution and suggestions in framing the curriculum and syllabi in Regulation 2019 for B.Tech. Chemical Engineering under Autonomous Regulations.

  
Dr. S. Sabarunisha Begum





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### DEPARTMENT OF CHEMICAL ENGINEERING

#### Action taken report of 6<sup>th</sup> Board of Studies Meeting held on 5/9/2020

##### 1. Department Vision, Mission, PEOs, POs, PSO & PSC

S.No	Suggestion given	Action taken
1	The department Vision, mission, PEOs, POs, PSOs, PSC, for chemical Engineering program were presented	It is resolved to approve the same with no modification

##### 2. Stake Holders Feedback

###### Student Feedback

Student Name	Suggestion	Proposed action
M.Anuchitra IV Yr, Chemical Engineering	Introduce some more simulation software course in curriculum	MATLAB and ASPEN HYSIS is included in syllabus of regulation 2019
	Removal of Instrumental method of analysis from curriculum and introduction of these topics in Engineering physics	Will be considered
T.Maria Thersha, IV Yr, Chemical Engineering	Introduce a software course on primavera	Will be considered and can be included as elective course
R.Sriraksha, IV Yr, Chemical Engineering	Introduce a course on momentum transfer	Transport phenomena will help undergraduate level students to understand about momentum transfer.
V. Vijila, IV Yr, Chemical Engineering	Introduce a course on plant design management	Will be considered and can be included in regulation 2019 as elective course
	Removal of Instrumental method of analysis from curriculum and introduction of these topics in Engineering physics	Will be considered
G.Jothika III Yr student, Chemical Engineering	Need pharmaceutical technology course in curriculum Waste water treatment can be removed from elective and it can be a unit in petroleum refinery Engineering paper	Pharmaceutical subject is there as an elective in curriculum 2019 Will be considered when upgrading regulation 2019

**Faculty Feedback:**

G.Selva Dhamodharan Assistant Professor, Faculty, Dept of Chemical Engineering SIT	A course on piping Engineering can be introduced	Will be considered
Mr.Arul Jayan, Assistant Professor (SG) Department of chemical Engineering, SIT	Practical courses on Industrial and fire safety can be added	Proposed to introduce as Value added courses
Dr. M. Arulmozhi Professor & Head Department of Petrochemical technology, University College of Engineering, BIT Campus, Tiruchirapalli – 620024	Pharmaceutical technology subject can be a compulsory subject and it can be removed from elective	Will be considered during revision of syllabus.
Dr. A. Babu Ponnusamy Associate Professor, Department of Chemical Engineering, VIT University, Vellore – 632014	Numerical methods can be removed from the curriculum and it can be replaced by computational Engineering	Will be considered during the revision of syllabus.

**Industry Person (Abroad) Feedback:**

Mr. S.Kamalakanthan, Controller, Al-Zour LNG Import and Re-gasification terminal, Kuwait integrated petroleum industries company, Kuwait	Software course on flare net can be included in curriculum	Course will be added in the Elective
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**Industry Person Feedback:**

Mr. Mr. Rajaram Manager, Reliance industries Jamnagar, Gujarat	Special type of heat exchangers should be included in the syllabus	Will be included when revision is done.
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**3. Inter Disciplinary Courses**

S. No	Suggestion given	Action taken
1	The following interdisciplinary courses were presented 1. Data Science forengineers 2. Waste to EnergyConversion	It is resolved to approve in the board

**4. Employability, Entrepreneurship & Skill Development Courses**

S. No	Suggestion given	Action taken
1	The classification of courses for Employability, Entrepreneurship&SkillDevelopmentinannexure1 were presented	It is resolved to approve the same with no modification

**5. Value Added Courses**

S. No	Suggestion given	Action taken
1	The following interdisciplinary courses were presented 1. MATLAB for ChemicalEngineers 2. Simulation on ProcessFundamentals 3. ANSYS – CFD 4. CHEMCAD 5. ASPEN –HYSYS	It is resolved to approve the same with no modification

**6. Examiners (Question paper setting, Paper Evaluation, Project Viva voce)**

S. No	Suggestion given	Action taken
1	The Examiners for Question paper setting, Paper Evaluation, Project Viva voce were presented	It is resolved to approve the same with no modification

**7. New Courses under Curriculum 2019**

S. No	Suggestion given	Action taken
1	The following new courses in the annexure 2 were presented	It is resolved to approve the same with no modification

  
Dr. C. Marimuthu

**HEAD**  
**DEPT. OF CHEMICAL ENGO**  
**SETHU INSTITUTE OF TECHNOLOG**  
**PULLOOR, KARIAPATTI - 626 114**