

**CHAITANYA BHARATI INSTITUTE OF TECHNOLOGY**

**DEPARTMENT OF CHEMICAL ENGINEERING**

**Stake holder involvement in Curriculum**

**Development AY 2022-23**

**Action taken and implementation in Curriculum**

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**Chaitanya Bharathi Institute of Technology**  
**Gandipet, Hyderabad-75.**

## 1) Students

S.no.	Suggestions & opinion	Actions Taken
1	Instrumentation Lab with modern equipment needed for material characterization	Implemented in IV Sem of R 22 Curriculum
2	Artificial Intelligence with core examples is required	Introduced in VI Sem of R 22 Curriculum
3	More skilling courses are needed	Presently NPTEL courses are present



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# Students Proofs



## CHEMICAL ENGINEERING DEPARTMENT

### Minutes of the 11<sup>th</sup> BoS Meeting

#### Minutes of the 11th BOS meeting held on 29th April 2023

The 11<sup>th</sup> BOS meeting was conducted in online mode as per the requests and availability of the external members. The meeting started at 1:00 PM as per the schedule given.

#### Agenda I: Introductory remarks by HOD (Chairman Board of Studies)

Dr M Mukunda Vani, Head of the Department and Chairman, BOS, cordially invited the Members of the BOS and briefed about the vision and achievements of the department, activities undertaken in the department during the previous academic year (2022-23) and the accreditations due for the AY 2023-24.

#### Agenda II: Introduction of the Members present by HOD

##### BOS Members Present

##### External Members:

1. Dr. Vinod Janardhan, Professor, Department of Chemical Engg, IIT-Hyderabad.
2. Dr.Sreepriya Vedantam, Principal Scientist, Chemical Engg Sciences, IICT, Hyderabad.
3. Sri. P.S.Pavan Kumar, Chief General Manager, Process Safety, Aurobindo Pharma Ltd., Hyderabad.
4. Sri. G. Venu Babu, Associate Vice President, Operations, Shilpa Pharma Life Sciences Ltd, Raichur
5. Dr. Disha Ahuja, Managing Director, Ahuja Green Technologies, Secunderabad

##### Internal Members

1. Dr. M. Mukunda Vani, HOD Chemical Engineering and Chairman BOS.
2. Dr P.V. Naga Prapurna, Associate Professor, Chemical Engineering Dept.
3. Dr M Mallaiiah, Associate Professor, Chemical Engineering Dept.
4. Sri. I. Balakrishna, Sr Assistant Professor, Chemical Engineering Dept.
5. Dr P Madhuri, Assistant Professor, Chemical Engineering Dept.

All other faculty members of the Chemical Engineering Department.

#### Agenda III: To review and approve the R22 Scheme for III to VIII semesters.

The Scheme for semesters III to VIII was approved by the BoS with minor modifications. Credits, Lecture hours and other details in the scheme are verified. The following are the highlights.

- i. Members expressed the opinion that Subject M-III to be changed to III semester and Chemical Technology to IV semester.
- ii. Members gave approval for the introduction of two new courses along with associated labs, as per the feedback collected from the stake holders viz., students, Alumni and employers.
- iii. In Semester IV, Instrumentation and Material characterization & associated lab and in

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**Agenda VI:** Any other matter with the permission of the Chair

i. The procedure to offer Value added courses was discussed and was agreed to offer at least one such course every semester, which would enhance the skills and employability of the students.



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## 2) Teachers

S.no.	Suggestions & opinion	Actions Taken
1	Students need knowledge on Characterization methods. Five Course outcomes are sufficient instead of six in all the subjects.	Implemented in IV Sem of R 22 Curriculum
2	More upskilling programs are needed. Core subjects' total credits can be increased	Value Added courses are planned. Core subjects' credits are increased in R22 Curriculum
3	AI,ML and related courses are needed in core Chemical Engineering	Introduced in VI Sem of R 22 Curriculum



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# CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)

Choice Based Credit System (With effect from 2022-2023)

B.Tech (Chemical Engineering)

Details of the Credit Weightage distribution for Sem I to Sem VIII in R22 Scheme

Sem I to Sem VIII

S.No	Credits weightage distribution	Credits Proposed	Credits Offered
1	Humanities and Social Sciences including Management courses	11.5	9.5
2	Basic Science courses	21	21
3	Basic Engineering Science Courses (BESC)	22.5	22.5
4	Professional Core Courses (PCC)	48 - 64	69
5	Professional Elective Courses (PEC): Relevant to the chosen specialization/branch	12 - 18	15
6	Open Elective Courses (OEC) –Electives from other technical and/or emerging subjects	15 - 09	09
7	Project work, Seminar & internship in industry or elsewhere	14	14
8	Mandatory Courses	NC	NC
9	Total	160	160



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### 3) Employers

S.no.	Suggestions & opinion	Actions Taken
1	Artificial Intelligence related courses needed very much.	Introduced in the scheme of R22 in VI sem
2	Include topic on Digital Technologies as manufacturing industry is transforming into smart factories  Focus should be more on hands on practice rather than theory	Planned to introduce Industry 4.0 in the open electives. Will be suggested in BoS at a relevant time  Three Internships are planned in the Curriculum which are compulsory.
3	More integrated approach required with different disciplines	This can be achieved through open electives and subjects like AI in Chemical Engg.



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#### 4) Alumni feedback

S.no.	Suggestions & opinion	Actions Taken
1	Different approach is needed for Chemical Engg Continuous Scheme	The students are participating in many activities curricular and Extra curricular, internships, Value added courses, other training activities
2	More exposure in core industry and hands on experience in operating and understanding equipment	Three internships are planned in the scheme of R22 curriculum
3	Interdisciplinary, industry oriented and research-oriented curriculum needed	More open electives will be proposed during the coming Bos meetings for 3 <sup>rd</sup> and 4 <sup>th</sup> years of R22 curriculum



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(In line with AICTE Model Curriculum with effect from AY 2023-24)

### B. Tech (Chemical Engineering)

#### SEMESTER- III

S. No	Course Code	Title of the Course	Scheme of Instruction			Scheme of Examination			Credits
			Hours per Week			Duration of SEE In Hours	Maximum Marks		
			L	T	P/D		CIE	SEE	
<b>THEORY</b>									
1	22CSC35	Data Structures using Python	2	-	-	3	40	60	2
2	22MTC10	Partial Differential Equations and Statistics	3	1	-	3	40	60	4
3	22CHC01	Chemical Engineering Thermodynamics-I	3	-	-	3	40	60	3
4	22CHC02	Fluid Mechanics	3	1	-	3	40	60	4
5	22CHC03	Mechanical Unit Operations	3	-	-	3	40	60	3
6	22CHC04	Material and Energy Balance Calculations	3	-	-	3	40	60	3
<b>PRACTICAL</b>									
7	22CSC36	Data Structures using Python Lab	-	-	2	3	50	50	1
8	22CHC05	Fluid Mechanics Lab	-	-	3	3	50	50	1.5
9	22CHC06	Mechanical Unit Operations Lab	-	-	3	3	50	50	1.5
10	22CHI01	MOOCs/Training/ Internship	2-3weeks/ 90 hours			-	50	-	2
<b>TOTAL</b>			<b>17</b>	<b>2</b>	<b>8</b>	-	<b>440</b>	<b>510</b>	<b>25</b>
<b>Clock Hours Per Week: 27</b>									

L: Lecture Evaluation

T: Tutorial

P: Practical

CIE-Continuous Internal

SEE - Semester End Examination

NC- Non-Credit

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