



## Implementation of NEP/LOCF/CBCS / ECS

### Minutes of Meetings (MoM) of Board of Studies (BoS)

**Academic Year : 2023-24**

**School : School of Engineering and Technology**

**Department : Chemical Engineering**

**Date and Time : 28 June 2023, 11:00 AM**

**Venue : Head Room**

#### Minutes of Meeting

The scheduled meeting of members of Board of Studies (BoS) of Department of Chemical Engineering, School of Studies of Engineering and Technology, Guru Ghasidas Vishwavidyalaya, Bilaspur was held today (June 28, 2023) in blended mode (online and offline). The agenda of the meeting was as follows:-

1. Approval of Scheme & Syllabus of B.Tech. Final Year (VII & VIII Semester) of Chemical Engineering (w.e.f. Session 2023-24).
2. Approval of Departmental Vision and Mission.
3. Review of COs of B.Tech. Chemical Engineering Subjects, as required.
4. Review of Scheme & Syllabus of M.Tech. (All Semester) of Chemical Engineering (w.e.f. Session 2023-24)

Following members were present in the meeting:

1. Dr. Raghwendra Singh Thakur, Chairman-BoS, Associate Prof. and Head, Dept. of Chemical Engg.
2. Prof. (Mrs) A B Soni, External Expert Member-BoS, Prof., Dept. of Chemical Engg., NIT Raipur
3. Er. Arvind Verma, External Industry Expert, Special Invitee-BoS, Senior Manager-Process, Nu-Vista (NUVOCO Cement), Baloda Bazar
4. Dr. Anil Kumar Chandrakar Member-BoS, Associate Prof., Dept. of Chemical Engg.
5. Dr. Saurabh Meshram, Member-BoS, Assistant Prof., Dept. of Chemical Engg.
6. Dr. Amit Jain, Invited Member, Associate Prof., Dept. of Chemical Engg.
7. Dr. Neeraj Chandrakar, Invited Member, Assistant Prof., Dept. of Chemical Engg.
8. Dr. Anuradha N. Joshi, Invited Member, Assistant Prof., Dept. of Chemical Engg.
9. Dr. Gautam Prasad Dewangan, Invited Member, Assistant Prof., Dept. of Chemical Engg.
10. Mr. Vishnu Prasad Yadav, Invited Member, Assistant Prof., Dept. of Chemical Engg.
11. Dr. Sandeep Dharmadhikari, Invited Member, Assistant Prof., Dept. of Chemical Engg.
12. Dr. Ghoshna Jyoti, Invited Member, Assistant Prof., Dept. of Chemical Engg.
13. Dr. Pankaj Kumar, Invited Member, Assistant Prof., Dept. of Chemical Engg.

Following decision has been made in the meeting.

1. The committee discussed the scheme and syllabi of B. Tech Fourth year (VII and VIII semesters) at length and after incorporating the changes, as identified by the BoS members, the final scheme and syllabi is to be sent to the external BoS members for their formal consent.



2. Two open elective courses, Waste To Energy (CH207TOE02) in B.Tech. VII Semester and Project Engineering Economics and Management (B.Tech. CH208TOE03) in B.Tech. VIII Semester, are to be offered by the department of chemical engineering.
3. Vision and Mission of the Department was finalized after discussion in the meeting.
4. Discussion was made on M. Tech. Scheme and Syllabus to modify and implement the changes in next BoS likely to be held in August 2023.

Dr. Raghwendra Singh Thakur

Prof. (Mrs) A B Soni

Er. Arvind Verma

Dr. Anil Kumar Chandrakar

Dr. Anht Jain

Dr. Sadrabh Meshram,

Dr. Neeraj Chandraker

Dr. Anuradha N. Joshi

Dr. Gautam Prasad Dewanga

Mr. Vishnu Prasad Yadav

Dr. Sandeep Dharmadhikari

Dr. Ghoshna Jyoti

Dr. Pankaj Kumar





*Asmi*  
06/10/23  
Prof. (Mrs) A B Soni  
External Expert Member, BoS  
Professor, Dept. of Chemical Engg.  
NIT Raipur

*Raghu*  
06/10/23  
Dr. Raghwendra Singh Thakur  
Head (I/c) & Chairman-BoS  
Associate Prof., Chemical  
Engg., GGV

*Chandrakar*  
06/10/2023  
Prof. Anil Kumar Chandrakar  
Professor, Member-BoS,  
Chemical Engg. GGV

Er. Arvind Verma  
External Industry Expert Member,  
BoS  
Senior Manager, NUVOCO Cement,  
Baloda Bazar

*Saurabh*  
06/10/23  
Dr. Saurabh Meshram  
Member, BoS  
Associate Prof., Chemical  
Engg., GGV

*Anuradha*  
06/10/23  
Dr. Anuradha N. Joshi  
Invited Member, BoS  
Associate Prof., Chemical Engg.,  
GGV

*Gautam*  
06/10/23  
Dr. Gautam Prasad Dewangan  
Invited Member, BoS  
Assistant Prof., Chemical Engg.,  
GGV

*Neeraj*  
06/10/23  
Dr. Neeraj Chandraker  
Invited Member, BoS  
Assistant Prof., Chemical  
Engg., GGV

*Amt Jain*  
06/10/2023  
Dr. Amt Jain  
Invited Member, BoS  
Associate Prof., Chemical Engg.,  
GGV

*Vishnu*  
06/10/23  
Mr. Vishnu Prasad Yadav  
Invited Member, BoS  
Assistant Prof., Chemical Engg.,  
GGV

*Sandeep*  
06/10/23  
Dr. Sandeep Dharmadhikari  
Invited Member, BoS  
Assistant Prof., Chemical  
Engg., GGV

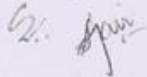
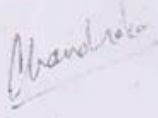

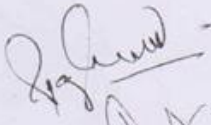


*Ghoshna*  
06/10/23  
Dr. Ghoshna Jyoti  
Invited Member, BoS  
Assistant Prof., Chemical Engg.,  
GGV

*Pankaj*  
06/10/23  
Dr. Pankaj Kumar  
Invited Member, BoS  
Assistant Prof., Chemical Engg.,  
GGV





## Scheme and Syllabus- UG

SCHOOL OF STUDIES OF ENGINEERING & TECHNOLOGY GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.) (A Central University Established by the Central University Ordinance 2009, No. 3 of 2009)									
SCHEME FOR EXAMINATION (Effective from Session 2023-24)									
B. TECH. (FOUR YEAR) DEGREE COURSE, CHEMICAL ENGINEERING									
SECOND YEAR, THIRD SEMESTER (NEP)									
S. No.	Subject Code	Subject Name	Periods			Evaluation Scheme			Credits
	THEORY		L	T	P	Sessional			
						CIA	SEA	TOTAL	
01.	CHUCTT1	Fluid Mechanics	3	1	0	40	60	100	4
02.	CHUCTT2	Chemical Engineering Thermodynamics	3	1	0	40	60	100	4
03.	CHUCTT3	Material & Energy Balances	3	0	0	40	60	100	3
04.	CHUCTK1	Process Utilities & Safety	3	0	0	40	60	100	3
	CHUCTK2	Water Treatment and Management							
05.	AMUCTE1	Mathematics-III	3	0	0	40	60	100	3
06.	CHUCTO1	Engineering Materials	3	0	0	40	60	100	3
	CEUCTO1	Green Buildings							
	MEUCTO1	Introduction to Thermodynamics							
	IPUCTO1	I. C. Engine							
	CSUCTO1	Data Structure With C++							
	ITUCTO1	Computer Organization & Architecture							
	ECUCTO1	Data Communication							
PRACTICAL									
01.	CHUCLT1	Basic Chemical Engineering Lab	0	0	2	25	25	50	1
02.	CHUCLT2	Fluid Mechanics Lab	0	0	2	25	25	50	1
Total			18	2	4	290	410	700	22
CIA – Continuous Internal Assessment SEA – Semester End Assessment					Total Credits – 22 Total Marks – 700 Total Periods / Week - 24				
CIA-Shall be two class test (CT) I & II each 15 marks, 05 marks for assignment, surprise test, quiz etc. and 05 marks attendance CH-Chemical Engineering, CE-Civil Engineering, ME-Mechanical Engineering, IT-Information Technology IP-Industrial and Mechanical Engineering, CSE-Computer Science & engineering, EC-Electronics and Communication Engineering									
BoS Held on 06-10-2023									
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SCHOOL OF STUDIES OF ENGINEERING & TECHNOLOGY  
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(A Central University Established by the Central University Ordinance 2009, No. 3 of 2009)

SCHEME FOR EXAMINATION (Effective from Session 2023-24)

B. TECH. (FOUR YEAR) DEGREE COURSE, CHEMICAL ENGINEERING

SECOND YEAR, FOURTH SEMESTER (NEP)

S. No.	Subject Code	Subject Name	Periods			Evaluation Scheme			Credits
	THEORY					Sessional			
				L	T	P	CIA	SEA	
01.	CHUDTT1	Particle and Fluid Particle Operations	3	0	0	40	60	100	3
02.	CHUDTT2	Inorganic Chemical Technology <sup>a</sup>	3	0	0	40	60	100	3
03.	CHUDTT3	Numerical Methods in Chemical Engineering	3	0	0	40	60	100	3
04.	CHUDTK1	Process Instrumentation	3	0	0	40	60	100	3
	CHUDTK2	Fluidization Engineering							
05.	CHUDTO1	Energy and Environment	3	0	0	40	60	100	3
	CEUDTO1	Remote Sensing & GIS							
	MEUDTO1	Introduction to Fluid Mechanics							
	IPUDTO1	Automobile Engineering							
	CSUDTO1	Introduction to Information Science							
	ITUDTO1	Computer Network							
	ITUDTO2	Fundamentals of Python Programming							
	ECUDTO1	Introduction to Electronic Devices & Circuits							
	ESUDTO1	Effective Technical Communication							
PRACTICAL									
01.	CHUDLT1	Particle and Fluid Particle Operations Lab	0	0	2	25	25	50	1
02.	CHUDLT2	Numerical Methods in Chemical Engineering Lab	0	0	2	25	25	50	1
03.	CHUDPV1	Mini Project	0	0	4	50	50	100	2
Total			15	0	8	300	400	700	19

CIA – Continuous Internal Assessment SEA – Semester End Assessment	Total Credits – 19 Total Marks – 700	Total Periods / Week – 23
CIA-Shall be two class test (CT) I & II each 15 marks, 05 marks for assignment, surprise test, quiz etc. and 05 marks attendance CH-Chemical Engineering, CE-Civil Engineering, ME-Mechanical Engineering, IT-Information Technology IP-Industrial and Mechanical Engineering, CSE-Computer Science & engineering, EC-Electronics and Communication Engineering		

BoS Held on 06-10-2023

*(Signatures)*





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**SCHEME FOR EXAMINATION (Effective from Session 2023-24)**  
**B.TECH. (FOUR YEAR) DEGREE COURSE, CHEMICAL ENGINEERING**  
**FOURTH YEAR, SEVENTH SEMESTER (AICTE-NEW)**

S. No.	Subject Code	Subject Name	Periods			Evaluation Scheme			Credits
	Sessional								
	THEORY		L	T	P	IA	ESE	TOTAL	
01.	CH407TPC14	Process Equipment Design-II	3	0	0	30	70	100	3
02.	CH407TPC15	Transport Phenomena	3	0	0	30	70	100	3
03.	CH407TPE4X	Professional Elective-IV	3	0	0	30	70	100	3
04.	CH407TPE5X	Professional Elective-V	3	0	0	30	70	100	3
05.	XX207TOEXX	Open Elective-II	3	0	0	30	70	100	3
PRACTICAL									
01.	CH407PPC09	Vocational Training Viva cum Seminar	0	0	4	30	20	50	2
02.	CH407PPC10	Minor Project	0	0	6	30	20	50	3
Total			15		10	210	390	600	20

IA - Internal Assessment  
Total Marks - 600

ESE - End Semester Examination  
Total Periods / Week - 25

Total Credits - 20

*[Signatures and Date: 28/06/2023]*

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**SCHEME FOR EXAMINATION (Effective from Session 2023-24)**  
**B.TECH. (FOUR YEAR) DEGREE COURSE, CHEMICAL ENGINEERING**  
**FOURTH YEAR, EIGHTH SEMESTER (AICTE-NEW)**

S. No.	Subject Code	Subject Name	Periods			Evaluation Scheme			Credits
	THEORY					Sessional			
			L	T	P	IA	ESE	TOTAL	
01.	CH408TPC16	Process Equipment Design-III	3	1	0	30	70	100	4
02.	CH408TPE6X	Professional Elective-VI	3	0	0	30	70	100	3
03.	XX208TOEXX	Open Elective-III	3	0	0	30	70	100	3
PRACTICAL									
01.	CH408PPC11	Major Project	0	0	12	120	80	200	6
Total			9	1	12	210	290	500	16

IA - Internal Assessment  
Total Marks - 500

ESE - End Semester Examination  
Total Periods / Week - 22

Total Credits - 16

*[Signatures and Date: 28/06/2023]*

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**DEPARTMENT OF CHEMICAL ENGINEERING**

**List of Professional Elective Courses (Seventh and Eighth Semester)**

S.No.	Semester	Course No.	Subjects
01.	VII	CH407TPE41	New Separation Processes
02.		CH407TPE42	Water Conservation and Management
03.		CH407TPE43	Process Modeling and Simulation
01.	VII	CH407TPE51	Petroleum Refinery Engineering
02.		CH407TPE52	Process Utilities and Safety
03.		CH407TPE53	Design and Development of Catalyst
01.	VIII	CH408TPE61	Environmental Engineering
02.		CH408TPE62	Optimization Techniques
03.		CH408TPE63	Petrochemical Technology

*Handwritten signatures and dates:*  
 Sd/- Chaudhary, Sd/- Guler, Sd/- Bhat, Sd/- Guler, Sd/- Singh, 28/06/2023  
 Sd/-

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**List of Open Elective Courses (Seventh and Eighth semester)**

S.NO.	SEMESTER	COURSE NO.	SUBJECTS	DEPARTMENT CODE
01.	VII	CH207TOE02	WASTE TO ENERGY	CH
02.		ME207TOE02	PRINCIPLES OF MANAGEMENT	ME
03.		EC207TOE02	CMOS DIGITAL VLSI DESIGN	EC
04.		CE207TOE02	GREEN BUILDING AND SUSTAINABLE MATERIALS	CE
05.		IT207TOE01	MACHINE LEARNING	IT
06.		CS207TOE01	GIS & REMOTE SENSING	CS
07.		IP207TOE02	MANUFACTURING PROCESSES-I	IP
01.	VIII	CH208TOE03	PROJECT ENGINEERING ECONOMICS AND MANAGEMENT	CH
02.		ME208TOE03	SUPPLY CHAIN MANAGEMENT	ME
03.		EC208TOE03	INTRODUCTION TO IOT	EC
04.		CE208TOE03	INFRASTRUCTURE PLANNING AND MANAGEMENT	CE
05.		IT208TOE01	SOFT COMPUTING	IT
06.		CS208TOE01	ARTIFICIAL INTELLIGENCE	CS
07.		IP208TOE03	ADVANCED MANUFACTURING PROCESSES	IP

*Handwritten signatures and dates:*  
 Sd/- Chaudhary, Sd/- Guler, Sd/- Bhat, Sd/- Guler, Sd/- Singh, 28/06/2023  
 Sd/-

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