



### List of New Course(s) Introduced

**Department : Chemical Engineering**

**Programme Name : B.Tech.**

**Academic Year : 2022-23**

### List of New Course(s) Introduced

Sr. No.	Course Code	Name of the Course
1	FOUATC2	Environmental Science and Ecology
2	PEUALS2	Sports and Yoga
3	CHUBTH2	Human Values and Ethics
4	NSUBLS1	NSS
5	CH306TMC02	Essence of Indian Knowledge Tradition
6	CH206TOE01	Industrial Utilities and Safety
	CE206TOE01	Metro Systems and Engineering
	CS206TOE01	Object Oriented Programming with C++
	EC206TOE01	Introduction to Electronic Devices and Circuits
	IP206TOE01	Operation Research
	IT206TOE01	Computer Graphics
	ME206TOE01	Automobile Engineering



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

**Academic Year : 2022-23**

**School : Engineering and Technology**

**Department : Chemical Engineering**

**Date and Time : 15 December 2022, 11:00 AM**

**Venue : HoD 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 (December 15, 2022) in blended mode (offline plus via Google Meet) to discuss the B.Tech. First year (I and II semesters) scheme and syllabi and minor correction in the scheme of B.Tech. VI Semester.

The following members were present in the meeting:

1. Prof. A. B. Soni, External Expert Member-BoS (Prof., Dept. of Chemical Engg., NIT Raipur)
2. Dr. Raghwendra Singh Thakur, Chairman-BoS (Assistant Prof. and Head, Dept. of Chemical Engg.)
3. Dr. Anil Kumar Chandrakar, Member-BoS (Associate Prof., Dept. of Chemical Engg.)
4. Dr. Saurabh Meshram, Member-BoS (Assistant Prof., Dept. of Chemical Engg.)
5. Mr. Arvind Verma, External Industry Expert, Special Invitee-BoS (Senior Manager-Process, Nu-Vista (NUVOCO Cement), Baloda Bazar)
6. Dr. Amt Jain, Invited Member (Associate Professor, Dept. of Chemical Engg.)
7. Mr. Neeraj Chandrakar, Invited Member (Assistant Prof., Dept. of Chemical Engg.)
8. Mrs. Anuradha N. Joshi, Invited Member (Assistant Prof., Dept. of Chemical Engg.)
9. Mr. 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.)

Following observations have been made in the meeting:

1. The committee discussed the scheme and syllabi of B. Tech First year (I and II semesters) at length and approved. The final scheme and syllabi are to be sent to the external BoS members for their formal consent.
2. As per the BOS meeting held on 14/06/2022, in B.Tech. III Year (VI Sem.) scheme (BoS held on 14.06.2022), the subject "Essence of Indian Knowledge Tradition" (Subject code: CH306TMC02) was inadvertently assigned with following scheme:

*[Handwritten signatures and dates]*  
15/12/2022  
15/12/2022  
15/12/2022  
15/12/2022  
15/12/2022  
15/12/2022  
15/12/2022



## Scheme and Syllabus

### SCHOOL OF STUDIES OF ENGINEERING AND TECHNOLOGY

Scheme of Teaching and Evaluation 2022-2023 (As per NEP-2020)  
Choice Based Credit System (CBCS) and Outcome Based Education (OBE)  
(Effective from the Academic Year 2022-2023)

I-SEMESTER BTech Mechanical/IP/Chemical/Civil Engineering										
S.N.	Course Code	Course Title	Teaching Hours/week			Examination				Credits
			Theory/Lectures	Tutorial	Practical/ Drawing	Examination in Hours	CIA Marks	SEA Marks	Total Marks	
1	AMUATB1	Engineering Mathematics - A	3	1	-	03	40	60	100	4
2	CYUATB3	Engineering Chemistry	3	-	-	03	40	60	100	3
3	ECUATE4	Basic Electrical and Electronics Engineering	3	-	-	03	40	60	100	3
4	FOUATC2	Environmental Science and Ecology	2	-	-	03	40	60	100	2
5	CSUATE5	Computer Programming	3	-	-	03	40	60	100	3
6	LAUATC1	Indian Constitution	1	-	-	01	50	-	50	1
7	CYUALB3	Engineering Chemistry Laboratory	-	-	2	03	25	25	50	1
8	CSUALE5	Computer Programming Laboratory	-	-	2	03	25	25	50	1
9	IPUALL2	Engineering Workshop Practices	-	-	2	03	25	25	50	1
10	PEUALS2	Sports and Yoga	-	-	2	-	25	25	50	1
Total			15	1	08	25	350	400	750	20
Note: AM:Mathematics, PP:Physics, ME: Mechanical Engineering, IP: Industrial & Production Engineering, CE: Civil Engineering, CS: Computer Sc. & Engg., IT: Information Technology, PE: Physical Education, FO: Forestry, LA: Law, NS: NSS, U: Undergraduate, T: Theory, L: Laboratory,										
BASIC SCIENCE (B)		ENGINEERING SCIENCE (E)		SKILL ENHANCEMENT COURSE (L)		HUMANITIES SCIENCE (H)		MANDATORY COURSE (C)		EXTRA-CURRICULAR ACTIVITIES (S)
1. Mathematics – A 2. Physics 3. Chemistry 4. Mathematics - B		1. Engineering Mechanics 2. Introduction to Information Technology 3. Basic Electrical Engineering 4. Basic Electrical and Electronics Engineering 5. Computer Programming 6. Basic Communication Engineering		1. Engineering Graphics 2. Engineering Workshop Practices		1. English for communication 2. Human Values and Ethics		1. Indian Constitution 2. Environmental Science & Ecology		1. NSS 2. Sports and Yoga





## SCHOOL OF STUDIES OF ENGINEERING AND TECHNOLOGY

Scheme of Teaching and Evaluation 2022-2023 (As per NEP-2020)  
Choice Based Credit System (CBCS) and Outcome Based Education (OBE)  
(Effective from the Academic Year 2022-2023)

II-SEMESTER BTech Mechanical/IP/Chemical/Civil Engineering										
S.N.	Course Code	Course Title	Teaching Hours/week			Examination				Credits
			Theory lectures	Tutorial	Practical/ Drawing	Examination in Hours	CIA Marks	SEA Marks	Total Marks	
			L	T	P					
1	AMUBTB4	Engineering Mathematics-B	3	1	-	03	40	60	100	4
2	PPUBTB2	Engineering Physics	3	1	-	03	40	60	100	4
3	ITUBTE2	Introduction to Information Technology	3	-	-	03	40	60	100	3
4	ELUBTH1	English for Communication	3	-	-	03	40	60	100	3
5	CEUBTE1	Engineering Mechanics	3	-	-	03	40	60	100	3
6	MEUBTH2/CHUBTH2/ IPUBTH2/CEUBTH2	Human Values and Ethics	1	-	-	02	50	-	50	1
7	PPUBLB2	Engineering Physics Laboratory	-	-	2	03	25	25	50	1
8	CEUBLE1	Engineering Mechanics Laboratory	-	-	2	03	25	25	50	1
9	MEUBLL1	Engineering Graphics	1	-	3	03	25	25	50	3
10	NSUBLS1	NSS	-	-	2	01	25	25	50	1
Total			17	2	09	27	350	400	750	24
Note: AM:Mathematics, PP:Physics, ME: Mechanical Engineering, IP: Industrial & Production Engineering, CE: Civil Engineering, CS: Computer Sc. & Engg., IT: Information Technology, PE: Physical Education, NS: NSS, U: Undergraduate, T: Theory, L: Laboratory,										
BASIC SCIENCE (B) 1. Mathematics – A 2. Physics 3. Chemistry 4. Mathematics – B		ENGINEERING SCIENCE (E) 1. Engineering Mechanics 2. Introduction to Information Technology 3. Basic Electrical Engineering 4. Basic Electrical and Electronics Engineering 5. Computer Programming 6. Basic Communication Engineering		SKILL ENHANCEMENT COURSE (L) 1. Engineering Graphics 2. Engineering Workshop Practices		HUMANITIES SCIENCE (H) 1. English for communication 2. Human Values and Ethics		MANDATORY COURSE (C) 1. Indian Constitution 2. Environmental Science & Ecology		EXTRA-CURRICULAR ACTIVITIES (S) 1. NSS 2.Sports and Yoga



**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 2022-23)**

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

**THIRD YEAR, FIFTH SEMESTER (AICTE-NEW)**

S. No.	Subject Code	Subject Name	Periods			Evaluation Scheme			Credits
	THEORY					Sessional			
				L	T	P	IA	ESE	
01.	CH305TPC07	Heat Transfer	3	1	0	30	70	100	4
02.	CH305TPC08	Mass Transfer-I	3	1	0	30	70	100	4
03.	CH305TPC09	Chemical Reaction Engineering-I	3	1	0	30	70	100	4
04.	CH305TPC10	Process Equipment Design-I	3	1	0	30	70	100	4
05.	CH305TPE1X		3	0	0	30	70	100	3
06.	CH305TPE2X		3	0	0	30	70	100	3
PRACTICAL									
01.	CH305PPC05	Heat Transfer Lab	0	0	3	30	20	50	1.5
02.	CH305PPC06	Chemical Reaction Engineering Lab	0	0	3	30	20	50	1.5
Total			18	4	6	240	460	700	25

IA – Internal Assessment

ESE - End Semester Examination

Total Credits – 25

Total Marks – 700

Total Periods / week - 28

*Sisaha*

*Gaur*

*K. Anil*

*Pradeep*

*Dr. Gaur*

*Dr. Anil*

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**SCHEME FOR EXAMINATION (Effective from session 2022-23)**

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

**THIRD YEAR, SIXTH SEMESTER (AICTE)**

S. No.	Subject Code	Subject Name	Periods			Evaluation Scheme			Credits
	THEORY					Sessional			
				L	T	P	IA	ESE	
01.	CH306TPC11	Mass Transfer-II	3	1	0	30	70	100	4
02.	CH306TPC12	Process Dynamics and Control	3	1	0	30	70	100	4
03.	CH306TPC13	Chemical Reaction Engineering-II	3	1	0	30	70	100	4
04.	CH306TPE3X		3	0	0	30	70	100	3
05.	CH306TMC02	Essence of Indian Knowledge Tradition	2	0	0	30	70	100	3
06.		Open Elective	3	0	0	30	70	100	3
PRACTICAL									
01.	CH306PPC07	Mass Transfer Lab	0	0	3	30	20	50	1.5
02.	CH306PPC08	Process Dynamics and Control Lab	0	0	3	30	20	50	1.5
Total			18	3	6	240	460	700	24

IA – Internal Assessment

ESE - End Semester Examination

Total Credits – 24

Total Marks – 700

Total Periods / week - 27

*R*

*Gaur*

*Dr. Anil*

*K.*

*Pradeep*

*Dr. Gaur*

*Sisaha*



SCHOOL OF STUDIES OF ENGINEERING & TECHNOLOGY

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DEPARTMENT OF CHEMICAL ENGINEERING

List of Professional Elective Courses (Fifth and Sixth Semester)

S.No.	Semester	Course No.	Subjects
01.	V	CH305TPE11	Engineering Materials
02.		CH305TPE12	Polymer Technology
01.	V	CH305TPE21	Inorganic Chemical Technology
02.		CH305TPE22	Fluidization Engineering
01.	VI	CH306TPE31	Organic Chemical Technology
02.		CH306TPE32	Fuel Combustion Energy Technology

*(Signatures)*





**List of open electives for 6th semester B.Tech students**

S.No	Course code	Course name	Offered by
1	CH206TOE01	Industrial utilities and safety	Chemical
2	CE206TOE01	Metro systems and Engineering	Civil
3	CS206TOE01	Object Oriented Programming with C++	CSE
4	EC206TOE01	Introduction to electronic devices and circuits	ECE
5	IP206TOE01	Operation Research	IPE
6	IT206TOE01	Computer Graphics	IT
7	ME206TOE01	Automobile Engineering	MECH

  
  
  
  
  
  
  
