



Chhattisgarh Swami Vivekanand Technical University (CSV TU), Bhilai (C.G.)

SCHEME OF TEACHING AND EXAMINATION

B Tech (Third Semester - Chemical Engineering)

Sl. No.	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Marks	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Basic Science	Mathematics - III	B000311(014)	3	1	-	100	20	30	150	4
2.	Chemical Engineering	Material and Energy Balance Computations	B019312(019)	3	1	-	100	20	30	150	4
3.	Chemical Engineering	Fuel Technology	B019313(019)	3	1	-	100	20	30	150	4
4.	Chemical Engineering	Inorganic Process Technology	B019314(019)	2	1	-	100	20	30	150	3
5.	Chemical Engineering	Instrumentation and Measurement	B019315(019)	2	-	-	100	20	30	150	2
6.	Chemical Engineering	Fuel Technology Lab	B019321(019)	-	-	2	40	-	20	60	1
7.	Chemical Engineering	Inorganic Process Technology Lab	B019322(019)	-	-	2	40	-	20	60	1
8.	Chemical Engineering	Instrumentation and Measurement Lab	B019323(019)	-	-	2	40	-	20	60	1
9.	Chemical Engineering	Software Lab	B019324(019)	-	-	2	40	-	20	60	1
10.	Humanities	Personality Development	B000306(046)	-	-	2	-	-	10	10	-
Total Marks				13	4	10	660	100	240	1000	21

L-Lecture, T-Tutorial, P-Practical, ESE-End Semester Exam, CT- Class Test, TA-Teacher's Assessment

Chhattisgarh Swami Vivekanand Technical University (CSVTU), Bhilai (CG)



SCHEME OF TEACHING AND EXAMINATION

B Tech (Fourth Semester - Chemical Engineering)

Sl. No .	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Marks	Credits
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Chemical Engineering	Fluid Mechanics	B019411(019)	3	1	-	100	20	30	150	4
2.	Chemical Engineering	Heat Transfer Operation	B019412(019)	3	1	-	100	20	30	150	4
3.	Chemical Engineering	Organic Process Technology	B019413(019)	3	1	-	100	20	30	150	4
4.	Chemical Engineering	Numerical Method in Chemical Engineering	B019414(019)	2	1	-	100	20	30	150	3
5.	Chemical Engineering	Material Science	B019415(019)	2	0	-	100	20	30	150	2
6.	Chemical Engineering	Fluid Mechanics Lab	B019421(019)	-	-	2	40	-	20	60	1
7.	Chemical Engineering	Heat Transfer Operation Lab	B019422(019)	-	-	2	40	-	20	60	1
8.	Chemical Engineering	Organic Process Technology Lab	B019423(019)	-	-	2	40	-	20	60	1
9.		Virtual Lab	B019424(019)	-	-	2	40	-	20	60	1
10.	Non-Credit	Indian Culture and Constitution of India	B000406(046)	-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L-Lecture, T-Tutorial, P-Practical, ESE-End Semester Exam, CT- Class Test,

TA-Teacher's Assessment

Note:

- Duration of End Semester Exam of all theory papers will be of Three Hours.
- Industrial Training of eight weeks is mandatory for B.Tech.. Student. It is to be completed in two parts.
 - The first part will be in summer after IV semester after which students have to submit a training report which will be evaluated by the college teachers during B.E. V semester.



Chhattisgarh Swami Vivekanand Technical University (CSV TU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Fifth Semester - Chemical Engineering)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Chemical Engineering	Chemical Engineering Thermodynamics	C019511(019)	3	1	-	100	20	30	150	4
2.	Chemical Engineering	Chemical Engineering Reaction	C019512(019)	3	1	-	100	20	30	150	4
3.	Chemical Engineering	Process Equipment Design – I	C019513(019)	3	1	-	100	20	30	150	4
4.	Chemical Engineering	Mechanical Operation	C019514(019)	2	1	-	100	20	30	150	3
5.	Professional Elective-I(Refer Table I)			2	0	-	100	20	30	150	2
6.	Chemical Engineering	Chemical Engineering Reaction Lab	C019521(019)	-	-	2	40	-	20	60	1
7.	Chemical Engineering	Process Equipment Design – I Viva	C019522(019)	-	-	2	40	-	20	60	1
8.	Chemical Engineering	Mechanical Operation Lab	C019523(019)	-	-	2	40	-	20	60	1
9.	Chemical Engineering	Project – I (Based on Summer Internship/ Industrial Training)	C019524(019)	-	-	2	40	-	20	60	1
10.	Non-Credit	Environmental Studies	C000506(020)	-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L – Lecturer
P – Practical,
TA – Teacher's Assessment

T – Tutorial,
ESE – End Semester Exam,

CT – Class Test

Table I (Professional Elective I)

S.N.	Board of Studies	Course Code	Subject
1.	Chemical Engineering	C019531(019)	Nanotechnology
2.	Chemical Engineering	C019532(019)	Optimization Techniques

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



Chhattisgarh Swami Vivekanand Technical University (CSVTV, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Sixth Semester – Chemical Engineering)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	Period per Week			Theory/Lab			Total Marks	Credits
				L	T	P	ESE	CT	TA		
1.	Chemical Engineering	Mass Transfer –I	C019611(019)	3	1	-	100	20	30	150	4
2.	Chemical Engineering	Transport Phenomena	C019612(019)	3	1	-	100	20	30	150	4
3.	Chemical Engineering	Process Equipment Design –II	C019613(019)	3	1	-	100	20	30	150	4
4.	Professional Elective-II (Refer Table I)			2	1	-	100	20	30	150	3
5.	Open Elective – I (Refer Table III)			2	0	-	100	20	30	150	2
6.	Chemical Engineering	Mass Transfer –I Lab	C019621(019)	-	-	2	40	-	20	60	1
7.	Chemical Engineering	Transport Phenomena - Lab	C019622(019)	-	-	2	40	-	20	60	1
8.	Chemical Engineering	Process Equipment Design –II - Viva	C019623(019)	-	-	2	40	-	20	60	1
9.	Professional Elective – II Lab (Refer Table II)			-	-	2	40	-	20	60	1
10.	Humanities	Technical Communication and Soft Skill		-	-	2	-	-	10	10	-
Total				13	4	10	660	100	240	1000	21

L – Lecturer
P – Practical,

T – Tutorial, TA – Teacher's Assessment
ESE – End Semester Exam, CT –ClassTest

Table I (Professional Elective II)

S.N.	Board of Studies	Subject	Course Code
1.	Chemical Engineering	Petroleum Refinery Engineering	C019631(019)
2.	Chemical Engineering	Polymer Science & Engineering	C019632(019)

Table I (Professional Elective II)

S.N.	Board of Studies	Subject	Course Code
1.	Chemical Engineering	Petroleum Refinery Engineering	C019624(019)
2.	Chemical Engineering	Polymer Science & Engineering	C019625(019)

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

(2) Choice of elective course once made for an examination cannot be changed in future examinations.



Chhattisgarh Swami Vivekanand Technical University (CSVTV, NEWAI (C.G.))

B Tech (Sixth Semester)

List of Open Elective – I (Table III) (For 6th Semester)

S.N.	Board of Studies	Subject	Course Code
1	Agriculture Engg.	Food Packaging Technology	C000601(094)
2	Agriculture Engg	Energy Management & Audit	C000602(094)
3	Agriculture Engg	Energy Conservation & Management	C000603(094)
4	Agriculture Engg	Disaster Management	C000604(094)
5	Agriculture Engg	Ecology and Sustainable Development	C000605(094)
6	Agriculture Engg	Non Conventional Energy Sources	C000606(094)
7	Mechanical Engineering	Safety Engineering	C000607(037)
8	Mechanical Engineering	Value Engineering	C000608(037)
9	Mechanical Engineering	Managing Innovation & Entrepreneurship	C000609(037)
10	Mechanical Engineering	Environment Pollution & Control	C000610(037)
11	Management	Enterprise Resource Planning	C000611(076)
12	Computer Science Engg.	Artificial Intelligence	C000612(022)
13	Computer Science Engg	Quantum Computing	C000613(022)
14	Computer Science Engg	Cyber Security	C000614(022)
15	Civil Engg	Construction engineering and management	C000615(020)
16	Civil Engg	Metro system and engineering	C000616(020)
17	Civil Engg	Infrastructure Planning and Management	C000617(020)
18	Computer Science Engg	Cyber Security	C000618(022)
19	Computer Science Engg	Parallel Processing & Computing	C000619(022)
20	Computer Science Engg	Cryptography & Network Security	C000620(022)
21	Computer Science Engg	Cloud Computing	C000621(022)
22	Electrical Engineering	Fibre Optics	C000622(024)
23	Electrical Engineering	Microcontroller and Embedded System	C000623(024)
24	Electrical Engineering	Hybrid Electric vehicle	C000624(024)
25	Electrical Engineering	Digital Control System	C000625(024)
26	Electrical and Electronics Engg	Electrical Estimation and Costing	C000626(025)
27	Electrical and Electronics Engg	Energy Auditing and Management	C000627(025)
28	Management	Finance Management	C000628(076)
29	Mechanical Engineering	Safety Engineering	C000629(037)
30	Electronics & Telecom.	AI and Machine learning	C000630(028)
31	Electronics & Telecom.	Operating Systems	C000631(028)
32	Electronics & Telecom.	Internet & Web Technology	C000632(028)
33	Electronics & Telecom.	Database Management Systems (DBMS)	C000633(028)
34	Electronics & Telecom.	Device Modelling	C000634(028)
35	Electronics & Telecom.	Introduction to MEMS	C000635(028)
36	Mechanical Engineering	Principles of Management	C000636(037)
37	Mechanical Engineering	Advanced I.C. Engines	C000637(037)

38	Mechanical Engineering	Mechanical Vibrations & Condition Monitoring	C000638(037)
39	Mechatronics	Entrepreneurship Developments	C000639(067)
40	Mechatronics	Enterprise Resource Planning (Except CSE & IT Branch)	C000640(067)
41	Plastic Engineering	Heat Transfer Operation	C000641(095)
42	Plastic Engineering	Process Economics and Management	C000642(095)
43	Plastic Engineering	Adhesive and Surface Coating	C000643(095)
44	Information Technology	E-Commerce	C000644(033)
45	Information Technology	Industrial Economics and Management	C000645(033)
46	Information Technology	Project Planning & Management	C000646(033)
47	Information Technology	Bio-Informatics	C000647(033)
48	Information Technology	Management Information System	C000648(033)