



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

SCHEME OF TEACHING AND EXAMINATION

B.Tech (Third Semester – Mechanical 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.	Mech. Engg.	Mechanical Measurement and Metrology	B037312(037)	2	1	-	100	20	30	150	3
3.	Mech. Engg.	Engineering Mechanics	B037313(037)	2	1	-	100	20	30	150	3
4.	Mech. Engg.	Engineering Thermodynamics	B037314(037)	2	1	-	100	20	30	150	3
5.	Mech. Engg.	Material Science	B037315(037)	2	1	-	100	20	30	150	3
6.	Mech. Engg.	Computer Aided Machine Drawing Lab	B037321(037)	-	-	4	40	-	20	60	2
7.	Mech. Engg.	Mechanical Measurement and Metrology Lab	B037322(037)	-	-	2	40	-	20	60	1
8.	Mech. Engg.	Engineering Thermodynamics Lab	B037323(037)	-	-	2	40	-	20	60	1
9.	Mech. Engg.	Software Lab	B037324(037)	-	-	2	40	-	20	60	1
10.	Humanities	Personality Development	B000306(046)	-	-	2	-	-	10	10	-
Total Marks				11	5	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, Bhilai

Scheme of Teaching and Examination

B.Tech. (Mechanical Engineering) IV Semester

S. No .	Board of Study	Courses (Subject)	CourseCode	Period per Week			Scheme of Examination			Total Marks	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1	Mech. Engg.	Applied Thermodynamics	B037411(037)	2	1	-	100	20	30	150	3
2	Mech. Engg.	Fluid Mechanics	B037412(037)	3	1	-	100	20	30	150	4
3	Mech. Engg.	Strength of Materials	B037413(037)	2	1	-	100	20	30	150	3
4	Mech. Engg.	Manufacturing Process	B037414(037)	2	1	-	100	20	30	150	3
5	Mech. Engg.	Kinematic of Machine	B037415(037)	3	1	-	100	20	30	150	4
6	Mech. Engg.	Fluid Mechanics Lab	B037421(037)	-	-	2	40	-	20	60	1
7	Mech. Engg.	Material Testing Lab	B037422(037)	-	-	2	40	-	20	60	1
8	Mech. Engg.	Manufacturing ProcessLab	B037423(037)	-	-	2	40	-	20	60	1
9	Mech. Engg.	Virtual Lab	B037424(037)	-	-	2	40	-	20	60	1
10	Mandatory Course	Indian Culture and Constitution of India	B000406(046)	-	-	2	-	-	10	10	-
Total Marks				12	5	10	660	100	240	1000	21

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

Teachers AssessmentNote: Duration of End Semester Examination all theory papers will be of Three Hours.

Note 1: Industrial Training of six weeks is mandatory for B.Tech. Students. It is to be completed in two parts. The first part will be in summer (afterIV semester) after which students have to submit a training report which will be evaluated by the college teachers during V Semester.



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

SCHEME OF TEACHING AND EXAMINATION

B Tech (Fifth Semester – Mechanical 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.	Mech. Engg.	Internal Combustion Engine	C037511(037)	2	1		100	20	30	150	3
2.	Mech. Engg.	Solid Mechanics	C037512(037)	3	1	-	100	20	30	150	4
3.	Mech. Engg.	Fluid Machines	C037513(037)	2	1	-	100	20	30	150	4
4.	Mech. Engg.	Dynamics of Machine	C037514(037)	3	1	-	100	20	30	150	3
5.	Professional Elective-1 (Refer Table I)			2	1	-	100	20	30	150	3
6.	Mech. Engg.	Internal Combustion Engine Lab	C037521(037)	-	-	2	40	-	20	60	1
7.	Mech. Engg.	Dynamics of Machine Lab	C037522(037)	-	-	2	40	-	20	60	1
8.	Mech. Engg.	Fluid Machines Lab	C037523(037)	-	-	2	40	-	20	60	1
9.	Mech. Engg.	Project-I based on Summer Internship/ Industrial Training	C037524(037)	-	-	2	40	-	20	60	1
10.	Civil Engg.	Environmental Studies	C000506(020)	-	-	2	-	-	10	10	-
Total				13	5	10	660	100	240	1000	21

L – Lecturer ,T – Tutorial, P – Practical , CT –ClassTest ESE – End Semester Exam TA – Teacher’s Assessment

- Note: - The students have to attend the four weeks industrial training / summer internship in B. Tech program after fourth semester, which will be evaluated in fifth semester.

Table I (Professional Elective I)

S.N.	Board of Studies	Course Code	Subject
1.	Mechanical Engg.	C037531(037)	Operation Research
2.	Mechanical Engg	C037532(037)	Composite Materials
3.	Mechanical Engg.	C037533(037)	Gas Dynamics and Jet Propulsion

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.



SCHEME OF TEACHING AND EXAMINATION

B Tech (Sixth Semester – Mechanical 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.	Mech. Engg.	Design of Machine Elements	C037611(037)	3	1	-	100	20	30	150	4
2.	Mech. Engg.	Manufacturing Technology	C037612(037)	3	1	-	100	20	30	150	4
3.	Mech. Engg.	Heat & Mass Transfer	C037613(037)	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 II)			2	0	-	100	20	30	150	2
6.	Mech. Engg.	Design of Machine Elements Lab	C037621(037)	-	-	2	40	-	20	60	1
7.	Mech. Engg.	Computer Aided Modeling & Analysis Lab	C037622(037)	-	-	2	40	-	20	60	1
8.	Mech. Engg.	Heat & Mass Transfer Lab	C037623(037)	-	-	2	40	-	20	60	1
9.	Mech. Engg.	Virtual Lab-2	C037624(037)	-	-	2	40	-	20	60	1
10.	Humanities	Technical Communication and Soft Skill	C000601(046)	-	-	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 – Class Test

Table I (Professional Elective II)

S.N.	Board of Studies	Subject	Course Code
1.	Mechanical Engineering	Finite Element Analysis	C037631(037)
2.	Mechanical Engineering	Power Plant Engineering	C037632(037)
3.	Mechanical Engineering	Maintenance and Reliability	C037633(037)

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 (CSV TU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Seventh Semester – Mechanical 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.	Mechanical Engg.	Design of Transmission System	D037711(037)	3	1	-	100	20	30	150	4
2.	Mechanical Engg.	Refrigeration & Air-Conditioning	D037712(037)	2	1	-	100	20	30	150	3
3.	Mechanical Engg.	Automation in Manufacturing	D037713(037)	2	1	-	100	20	30	150	3
4.	Professional Elective –III (Refer to Table I)			1	1	-	100	20	30	150	2
5.	Open Elective- II (Refer to Table II)			2	0	-	100	20	30	150	2
6.	Mechanical Engg.	Refrigeration & Air-Conditioning Lab	D037721(037)	-	-	2	40	-	20	60	1
7.	Mechanical Engg.	CIM & Automation Lab	D037722(037)	-	-	2	40	-	20	60	1
8.	Mechanical Engg.	Project (Phase I)	D037723(037)	-	-	6	60	-	40	100	3
9.	Mechanical Engg.	Industrial Training	D037724(037)			2			20	20	1
10.	Humanities	Universal Human Values 2	D000701(046)	-	-	2	-	-	10	10	-
Total Marks				10	4	14	640	100	260	1000	20

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

➤ Note: - The students have to attend the four weeks industrial training / summer internship in B. Tech program after sixth semester, which will be evaluated in seventh semester.

Table I (Professional Elective III)

S.N.	Board of Studies	Course Code	Subject
1.	Mechanical Engg.	D037731(037)	Machine Tool Technology
2.	Mechanical Engg.	D037732(037)	Quality Control and Total Quality Management
3.	Mechanical Engg.	D037733(037)	Thermal System Design
4.	Mechanical Engg.	D037734(037)	Industrial Hydraulics
5.	Mechanical Engg.	D037735(037)	Applied Elasticity and Plasticity

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 (CSV TU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B.Tech (Eighth Semester – Mechanical Engineering)

Sl.No.	Board of Studies (BOS)	Courses (Subject)	Course Code	Period per Week			Scheme of Examination			Total Mark	Credit
				L	T	P	Theory/Lab				
							ESE	CT	TA		
1.	Mechanical Engineering	Robotics	D037811(037)	3	1	-	100	20	30	150	4
2.	Professional Elective – IV (Refer to Table – I)			2	1	-	100	20	30	150	3
3.	Open Elective – III (Refer to Table – III)			2	0	-	100	20	30	150	2
4.	Mechanical Engineering	Robotics (Lab)	D037821(037)	-	-	2	40	-	20	60	1
5.	Mechanical Engineering	Computer Aided Simulation & Analysis (Lab)	D037822(037)	-	-	2	40	-	20	60	1
6.	Mechanical Engineering	Project (Phase-II)	D037823(037)	-	-	14	350	-	80	430	7
Total Marks				7	2	18	730	60	210	1000	18

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

Table – I (Professional Elective – IV)

S.N.	Board of Studies	Course Code	Subject
1	Mechanical Engineering	D037831(037)	Automobile Engineering
2	Mechanical Engineering	D037832(037)	Computational Fluid Dynamics
3	Mechanical Engineering	D037833(037)	Product Design and Development
4	Mechanical Engineering	D037834(037)	Vibration and Noise Control
5	Mechanical Engineering	D037835(037)	Mechanical Handling System and Equipments
6	Mechanical Engineering	D037836(037)	Numerical Control of Machine Tools

Note: (1) 1/4 th 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.