



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

SCHEME OF TEACHING AND EXAMINATION

B.Tech (Third Semester – Automobile 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.	Mechanical Engg.	Engineering Thermodynamics	B082312(037)	3	1	-	100	20	30	150	4
3.	Mechanical Engg.	Mechanics of Solids	B082313(037)	3	1	-	100	20	30	150	4
4.	Automobile Engg.	Automotive Petrol Engines	B082314(082)	2	1	-	100	20	30	150	3
5.	Automobile Engg.	Two & Three Wheelers	B082315(082)	2	-	-	100	20	30	150	2
6.	Mechanical Engg	Material Testing Lab	B082321(037)	-	-	2	40	-	20	60	1
7.	Mechanical Engg	Engineering Thermodynamics Lab	B082322(037)	-	-	2	40	-	20	60	1
8.	Automobile Engg.	Two & Three Wheelers Lab	B082323(082)	-	-	2	40	-	20	60	1
9.	Automobile Engg	Software Lab	B082324(082)	-	-	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 (CSVTVU), Bhilai (CG)

SCHEME OF TEACHING AND EXAMINATION

B Tech (Fourth Semester - Automobile 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	Fluid Mechanics	B037412(037)	3	1	-	100	20	30	150	4
2.	Automobile	Automotive Diesel Engines	B037413(082)	3	1	-	100	20	30	150	4
3.	Mechanical	Applied Thermodynamics	B037411(037)	3	1	-	100	20	30	150	4
4.	Mechanical	Kinematics of Machines	B037415(037)	2	1	-	100	20	30	150	3
5.	Automobile	Automotive Chassis	B037414(082)	2	0	-	100	20	30	150	2
6.	Mechanical	Fluid Mechanics Lab	B037421(037)	-	-	2	40	-	20	60	1
7.	Automobile	Automotive Petrol & Diesel Engine Lab	B037422(082)	-	-	2	40	-	20	60	1
8.	Automobile	Automotive Chassis Lab	B037423(082)	-	-	2	40	-	20	60	1
9.	Automobile	Virtual Lab	B037424(082)	-	-	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:

1. Duration of End Semester Exam of all theory papers will be of Three Hours.
2. 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 (CSVTV, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Fifth Semester - AUTOMOBILE 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.	Mechanical	Design of Machine Elements	C082512(037)	3	1	-	100	20	30	150	4
2.	Automobile Engg.	Automotive Electricals & Electronics	C082511(082)	3	1	-	100	20	30	150	4
3.	Mechanical	Dynamics of Machines	C037514(037)	3	1	-	100	20	30	150	4
4.	Mechanical	Operation Research	C082513(037)	2	1	-	100	20	30	150	3
5.	Professional Elective -I (Refer Table I)			2	0	-	100	20	30	150	2
6.	Mechanical	Design of Machine Elements Lab	C037525(037)	-	-	2	40	-	20	60	1
7.	Automobile Engg.	Automotive Electrical & Electronics Lab	C082521(082)	-	-	2	40	-	20	60	1
8.	Mechanical	Dynamics of Machines Lab	C037522(037)	-	-	2	40	-	20	60	1
9.	Automobile Engg.	Project-I based on Summer Internship/ Industrial Training	C082523(082)	-	-	2	40	-	20	60	1
10.	Civil Engg.	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.	Automobile Engg.	C082531(082)	Engine Auxillary Systems
2.	Automobile Engg.	C082532(082)	Maintenance and Reliability
3.	Automobile Engg.	C082533(082)	Vehicle Transport Management

Note: (1) $1/4^{\text{th}}$ 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.



SCHEME OF TEACHING AND EXAMINATION

B Tech (Sixth Semester – Automobile 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.	Automobile	Vehicle Design & Maintenance	C082611(082)	3	1	-	100	20	30	150	4
2.	Automobile	Automotive Engine Component Design	C082612(082)	3	1	-	100	20	30	150	4
3.	Mechanical	Heat & Mass Transfer	C082613(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.	Automobile	Vehicle Maintenance Lab	C082621(082)	-	-	2	40	-	20	60	1
7.	Automobile	Automotive Engine Components Lab	C082622(082)	-	-	2	40	-	20	60	1
8.	Mechanical	Heat & Mass Transfer Lab	C082623(037)	-	-	2	40	-	20	60	1
9.	Automobile	Automotive Fuels & Lubricants Lab	C082624(082)	-	-	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,
TA – Teacher's Assessment

T – Tutorial,
ESE – End Semester Exam,

CT – Class Test

Table I (Professional Elective II)

S.N.	Board of Studies	Subject	Course Code
1.	Automobile Engineering	New Generation And Hybrid Vehicles	C082631(082)
2.	Automobile Engineering	Supercharging And Scavenging	C082632(082)
3.	Automobile Engineering	Automotive Aerodynamics	C082633(082)
4.	Automobile Engineering	Product Design & Development	C082634(082)

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 (CSVTVU, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Seventh Semester - Automobile 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.	Automobile	Automotive Air Conditioning	D082711(082)	3	1	-	100	20	30	150	4
2.	Automobile	Vehicle Dynamics	D082712(082)	2	1	-	100	20	30	150	3
3.	Mechanical	CAD, CAM	D082713(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 I)			2	0	-	100	20	30	150	2
6.	Automobile	Vehicle Testing Lab	D082721(082)	-	-	2	40	-	20	60	1
7.	Mechanical	CAD/M Lab	D082722(037)	-	-	2	40	-	20	60	1
8.	Automobile	Project (Phase I)	D082723(082)	-	-	6	60	-	40	100	3
9.	Automobile	Industrial Training	D082724(082)			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.	Automobile	D082731(082)	Vehicle Body Engineering & Safety
2.	Automobile	D082732(082)	Automobile Energy Sources
3.	Automobile	D082733(082)	Power Train Design
4.	Mechanical	D082734(037)	Computational Fluid Dynamics
5.	Mechanical	D082735(037)	Modeling and simulation of I.C. Engine
6.	Automobile	D082736(082)	Advanced materials for Green Vehicles

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 (Eight Semester - Automobile 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.	Automobile Engineering	Robotics	D082811(082)	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.	Automobile Engineering	Robotics (Lab)	D082821(082)	-	-	2	40	-	20	60	1
5.	Automobile Engineering	Computer Aided Chassis Design (Lab)	D082822(082)	-	-	2	40	-	20	60	1
6.	Automobile Engineering	Project (Phase–II)	D082823(082)	-	-	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.	Automobile Engineering	D082831(082)	Vehicle Design Characteristics
2.	Automobile Engineering	D082832(082)	Manufacturing Technology
3.	Automobile Engineering	D082833(082)	Mechatronics
4.	Automobile Engineering	D082834(082)	Combustion Process
5.	Automobile Engineering	D082835(082)	Vibration & Noise Control in Automobiles
6.	Automobile Engineering	D082836(082)	Automotive Styling
7.	Automobile Engineering	D082837(082)	Fuel Cell Technology

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.