



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

SCHEME OF TEACHING AND EXAMINATION

B.Tech (Third Semester – Electrical 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.	Electrical Engg.	Electrical Circuit Analysis	B024312(024)	3	1	-	100	20	30	150	4
3.	Electrical Engg.	Electrical Machines – I	B024313(024)	3	1	-	100	20	30	150	4
4.	Electrical Engg.	Digital Electronics	B024314(024)	2	1	-	100	20	30	150	3
5.	Electrical Engg.	Numerical Methods	B024315(024)	2	-	-	100	20	30	150	2
6.	Electrical Engg.	Electrical Machines Laboratory - I	B024321(024)	-	-	2	40	-	20	60	1
7.	Electrical Engg.	Electrical Circuit Analysis Laboratory	B024322(024)	-	-	2	40	-	20	60	1
8.	Electrical Engg.	Digital Electronics Laboratory	B024323(024)	-	-	2	40	-	20	60	1
9.	Electrical Engg.	Software Laboratory (Applications of Numerical Methods in Open Source)	B024324(024)	-	-	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, Bhilai (C.G.)

SCHEME OF TEACHING AND EXAMINATION

B Tech (ELECTRICAL ENGINEERING) IV Semester

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.	Electrical	Electromagnetic Fields	B024411(024)	3	1	-	100	20	30	150	4
2.	Electrical	Power Systems – I (Apparatus and Modeling)	B024412(024)	3	1	-	100	20	30	150	4
3.	Electrical	Electrical Machines – II	B024413(024)	3	0	-	100	20	30	150	3
4.	Electrical	Signals and Systems	B024414(024)	2	1	-	100	20	30	150	3
5.	Electrical	Analog Electronics	B024415(024)	2	1	-	100	20	30	150	3
6.	Electrical	Electrical Machines Laboratory II	B024421(024)	-	-	2	40	-	20	60	1
7.	Electrical	Power Systems Laboratory I	B024422(024)	-	-	2	40	-	20	60	1
8.	Electrical	Analog Electronics Laboratory	B024423(024)	-	-	2	40	-	20	60	1
9.	Electrical	Virtual Lab	B025424(024)	-	-	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: Teachers Assessment

Note: Duration of all theory papers will be of Three Hours.

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 (CSVTV, NEWAI (C.G.))

SCHEME OF TEACHING AND EXAMINATION

B Tech (Fifth Semester - ELECTRICAL ENGINEERING)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	L	T	P	Theory/Lab			Total Marks	Credits
							ESE	CT	TA		
1.	Electrical Engg.	Control System	C024511(024)	3	1	-	100	20	30	150	4
2.	Electrical Engg.	Power System Analysis	C024512(024)	3	1	-	100	20	30	150	4
3.	Electrical Engg.	Power Electronics	C024513(024)	3	1	-	100	20	30	150	4
4.	Electrical Engg.	Electrical Measurements	C024514(024)	2	1	-	100	20	30	150	3
5.	Electrical Engg.	Professional Elective –I(Refer Table I)		2	0	-	100	20	30	150	2
6.	Electrical Engg.	Control System LAB	C024521(024)	-	-	2	40	-	20	60	1
7.	Electrical Engg.	Electrical Measurements LAB	C024522(024)	-	-	2	40	-	20	60	1
8.	Electrical Engg.	Power Electronics Lab	C024523(024)	-	-	2	40	-	20	60	1
9.	Electrical Engg.	Project-I based on Summer Internship/ Industrial Training	C024524(024)	-	-	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 ,T – Tutorial, P – Practical , CT –ClassTest ESE – End Semester Exam TA – Teacher's Assessment

Table I (Professional Elective I)

S.N.	Board of Studies	Course Code	Subject
1	Electrical Engg.	C024531(024)	Analog and Digital Communication
2	Electrical Engg.	C024532(024)	Computer System Architecture
3	Electrical Engg.	C024533(024)	Power Plant Engineering
4	Electrical Engg.	C024534(024)	Electric Machine Design

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 – Electrical 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.	Electrical Engg.	Instrumentation Techniques	C024611(024)	3	1	-	100	20	30	150	4
2.	Electrical Engg.	Switchgear and Protection	C024612(024)	3	1	-	100	20	30	150	4
3.	Electrical Engg.	Microprocessor and its Applications	C024613(024)	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.	Electrical Engg.	Instrumentation Techniques Lab	C024621(024)	-	-	2	40	-	20	60	1
7.	Electrical Engg.	Switchgear and Protection LAB	C024622(024)	-	-	2	40	-	20	60	1
8.	Electrical Engg.	Microprocessors LAB	C024623(024)	-	-	2	40	-	20	60	1
9.	Electrical Engg.	Programming and Simulation Lab	C024624(024)	-	-	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.	Electrical Engineering	Fibre Optics	C024631(024)
2.	Electrical Engineering	Microcontroller and Embedded System	C024632(024)
3.	Electrical Engineering	Hybrid Electric vehicle	C024633(024)
4.	Electrical Engineering	Digital Control System	C024634(024)

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 – Electrical 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.	Electrical Engg.	Electric Drives	D024711(024)	3	1	-	100	20	30	150	4
2.	Electrical Engg.	Power Apparatus System	D024712(024)	2	1	-	100	20	30	150	3
3.	Electrical Engg.	High Voltage Engineering	D024713(024)	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.	Electrical Engg.	Electric Drives Laboratory	D024721(024)	-	-	2	40	-	20	60	1
7.	Electrical Engg.	High Voltage Engineering Laboratory	D024722(024)	-	-	2	40	-	20	60	1
8.	Electrical Engg.	Project (Phase I)	D024723(024)	-	-	6	60	-	40	100	3
9.	Electrical Engg.	Industrial Training	D024724(024)			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.	Electrical Engg.	D024731(024)	Energy Auditing and Management
2.	Electrical Engg.	D024732(024)	Systems Software
3.	Electrical Engg.	D024733(024)	Modeling & Simulation
4.	Electrical Engg.	D024734(024)	Advanced Microprocessor
5.	Electrical Engg.	D024735(024)	Embedded system software in C

6.	Electrical Engg.	D024736(024)	Microcontroller & embedded Systems
7.	Electrical Engg.	D024737(024)	Digital Image Processing
8.	Electrical Engg.	D024738(024)	Power Systems Operation and Control

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 (Eighth Semester – Electrical 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.	Electrical Engineering	Installation Maintenance & Testing of Electrical Equipments	D024811(024)	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.	Electrical Engineering	Installation Maintenance & Testing of Electrical Equipments (Lab)	D024821(024)	-	-	2	40	-	20	60	1
5.	Electrical Engineering	Simulation with MATLAB	D024822(024)	-	-	2	40	-	20	60	1
6.	Electrical Engineering	Project (Phase-II)	D024823(024)	-	-	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	Electrical Engineering	D024831(024)	EHV AC & DC Transmission
2	Electrical Engineering	D024832(024)	Flexible A C transmission System
3	Electrical Engineering	D024833(024)	Bio Medical Instrumentation
4	Electrical Engineering	D024834(024)	VLSI Design
5	Electrical Engineering	D024835(024)	Robotics and Automation
6	Electrical Engineering	D024836(024)	Energy Management Systems and SCADA (NPTEL) https://nptel.ac.in/courses/108/106/108106022/#
7	Electrical Engineering	D024837(024)	Smart Grid (NPTEL) https://nptel.ac.in/courses/108/107/108107113/
8	Electrical Engineering	D024838(024)	Electrical Estimation and Costing

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.