



# 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.	<b>Professional Elective –I(Refer Table I)</b>		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	-
<b>Total</b>				<b>13</b>	<b>4</b>	<b>10</b>	<b>660</b>	<b>100</b>	<b>240</b>	<b>1000</b>	<b>21</b>

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)** 1/4<sup>th</sup> 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	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	C00625(025)	-	-	2	-	-	10	10	-
<b>Total</b>				<b>13</b>	<b>4</b>	<b>10</b>	<b>660</b>	<b>100</b>	<b>240</b>	<b>1000</b>	<b>21</b>

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.	Electrical Engineering	Analog and Digital Communication	C024631(024)
2.	Electrical Engineering	Computer System Architecture	C024632(024)
3.	Electrical Engineering	Power Plant Engineering	C024633(024)
4.	Electrical Engineering	Electric Machine Design	C024634(024)

**Note: (1)** 1/4<sup>th</sup> 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.

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## B Tech (Sixth Semester)

### List of Open Elective – I (Table III ) (For 6<sup>th</sup> 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	<b>C000638(037)</b>
39	Mechatronics	Entrepreneurship Developments	<b>C000639(067)</b>
40	Mechatronics	Enterprise Resource Planning (Except CSE & IT Branch)	<b>C000640(067)</b>
41	Plastic Engineering	Heat Transfer Operation	<b>C000641(095)</b>
42	Plastic Engineering	Process Economics and Management	<b>C000642(095)</b>
43	Plastic Engineering	Adhesive and Surface Coating	<b>C000643(095)</b>
44	Information Technology	E-Commerce	<b>C000644(033)</b>
45	Information Technology	Industrial Economics and Management	<b>C000645(033)</b>
46	Information Technology	Project Planning & Management	<b>C000646(033)</b>
47	Information Technology	Bio-Informatics	<b>C000647(033)</b>
48	Information Technology	Management Information System	<b>C000648(033)</b>