



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

SCHEME OF TEACHING AND EXAMINATION

B.Tech (Third Semester – Electrical & Electronics 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.	EEE	Electrical Circuit Analysis	B025312(025)	3	1	-	100	20	30	150	4
3.	EEE	Electrical Machine-I	B025313(025)	3	1	-	100	20	30	150	4
4.	EEE	Electronics Devices & Circuits	B025314(025)	2	1	-	100	20	30	150	3
5.	EEE	Renewable & Environment Engineering	B025315(025)	2	-	-	100	20	30	150	2
6.	EEE	Electrical Machine-I Lab	B025321(025)		-	2	40	-	20	60	1
7.	EEE	Electronics Devices & Circuits I Lab	B025322(025)		-	2	40	-	20	60	1
8.	EEE	Electrical Circuit Analysis Lab	B025323(025)		-	2	40	-	20	60	1
9.	EEE	Software Lab	B025324(025)		-	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& ELECTRONICS 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.	EEE	Electro Magnetic Field	B025411(025)	3	1	-	100	20	30	150	4
2.	EEE	Electrical Machine-II	B025412(025)	3	1	-	100	20	30	150	4
3.	EEE	Network Analysis & Synthesis	B025413(025)	3	1	-	100	20	30	150	4
4.	EEE	Electrical Measurement & Instrumentation	B025414(025)	2	1	-	100	20	30	150	3
5.	EEE	Digital Electronics	B025415(025)	2	0	-	100	20	30	150	2
6.	EEE	Electrical Measurement & Instrumentation Lab	B025421(025)	-	-	2	40	-	20	60	1
7.	EEE	Electrical Machine-II Lab	B025422(025)	-	-	2	40	-	20	60	1
8.	EEE	Digital Electronics Lab	B025423(025)	-	-	2	40	-	20	60	1
9.	EEE	Virtual Lab	B025424(025)	-	-	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 & ELECTRONICS ENGINEERING)

Sl. No.	Board of Studies	Courses (Subject)	Course Code	L	T	P	Theory/Lab			Total Marks	Credits
							ESE	CT	TA		
1.	EEE	Signal & System	C025511(025)	3	1	-	100	20	30	150	4
2.	EEE	Control System	C025512(025)	3	1	-	100	20	30	150	4
3.	EEE	Electrical Power System-I	C025513(025)	3	1	-	100	20	30	150	4
4.	EEE	Micro Processor and Micro Controller	C025514(025)	2	1	-	100	20	30	150	3
5.	EEE	Professional Elective –I (Refer Table I)		2	0	-	100	20	30	150	2
6.	EEE	Control System Lab	C025521(025)	-	-	2	40	-	20	60	1
7.	EEE	Electrical Power System-I Lab	C025522(025)	-	-	2	40	-	20	60	1
8.	EEE	Micro Processor and Micro Controller Lab	C025523(025)	-	-	2	40	-	20	60	1
9.	EEE	Project-I based on Summer Internship/ Industrial Training	C025524(025)	-	-	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

Professional Elective I

S.N.	Board of Studies	Course Code	Subject
1	EEE	C025531(025)	Linear Integrated Circuit
2	EEE	C025532(025)	Electrical Machine Design
3	EEE	C025533(025)	Modern Instrumentation Techniques
4	EEE	C025534(025)	Wind and Solar Energy Systems
5	EEE	C025535(025)	Testing & Commissioning of Electrical Equipments

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 and Electronics 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.	EEE	Power Electronics	C025611(025)	3	1	-	100	20	30	150	4
2.	EEE	Electrical Power System-II	C025612(025)	3	1	-	100	20	30	150	4
3.	EEE	Digital Signal Processing	C025613(025)	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.	EEE	Power Electronics lab	C025621(025)	-	-	2	40	-	20	60	1
7.	EEE	Electrical Power System-II Lab	C025622(025)	-	-	2	40	-	20	60	1
8.	EEE	Computer Simulation Lab	C025623(025)	-	-	2	40	-	20	60	1
9.	EEE	Digital Signal Processing lab	C025624(025)	-	-	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.	EEE	Communication System	C025631(025)
2.	EEE	Distributed Generation	C025632(025)
3.	EEE	Testing & Commissioning of Electrical Equipments	C025633(025)
4.	EEE	Simulation & Programming	C025634(025)
5.	EEE	Medical Electronics	C025635(025)

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 ((Except CSE & IT Branch)	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	Parallel Processing & Computing	C000618(022)
19	Computer Science Engg	Cryptography & Network Security	C000619(022)
20	Computer Science Engg	Cloud Computing	C000620(022)
21	Computer Science Engg	Computer Networks	C000621(022)
22	Computer Science Engg	Internet of Things	C000622(022)
23	Computer Science Engg	Data Structures and Algorithms	C000623(022)
24	Computer Science Engg	Big Data Analytics	C000624(022)
25	Electrical and Electronics Engg	Electrical Estimation and Costing	C000625(025)
26	Electrical and Electronics Engg	Energy Auditing and Management	C000626(025)
27	Management	Finance Management	C000627(076)
28	Mechanical Engineering	Safety Engineering	C000628(037)
29	Electronics & Telecom.	AI and Machine learning	C000629(028)
30	Electronics & Telecom.	Operating Systems	C000630(028)
31	Electronics & Telecom.	Internet & Web Technology	C000631(028)
32	Electronics & Telecom.	Database Management Systems (DBMS)	C000632(028)
33	Electronics & Telecom.	Device Modelling	C000633(028)
34	Electronics & Telecom.	Introduction to MEMS	C000634(028)
35	Mechanical Engineering	Principles of Management	C000635(037)
36	Mechanical Engineering	Advanced I.C. Engines	C000636(037)

37	Mechanical Engineering	Mechanical Vibrations & Condition Monitoring	C000637(037)
38	Mechatronics	Entrepreneurship Developments	C000638(067)
39	Plastic Engineering	Heat Transfer Operation	C000639(095)
40	Plastic Engineering	Process Economics and Management	C000640(095)
41	Plastic Engineering	Adhesive and Surface Coating	C000641(095)
42	Information Technology	E-Commerce	C000642(033)
43	Information Technology	Industrial Economics and Management	C000643(033)
44	Information Technology	Project Planning & Management	C000644(033)
45	Information Technology	Bio-Informatics	C000645(033)
46	Information Technology	Management Information System	C000646(033)
47	Chemical Engineering	Plant Utility & Safety Engineering	C000647(019)
48	Chemical Engineering	Environment Pollution & Control	C000648(019)

.



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

SCHEME OF TEACHING AND EXAMINATION

B Tech (Seventh Semester – Electrical & Electronics 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.	EEE	Power System Protection	D025711(025)	3	1	-	100	20	30	150	4
2.	EEE	Electrical Drives	D025712(025)	2	1	-	100	20	30	150	3
3.	EEE	High Voltage Engineering	D025713(025)	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.	EEE	Power System Protection Lab	D025721(025)	-	-	2	40	-	20	60	1
7.	EEE	High Voltage Engineering Lab	D025722(025)	-	-	2	40	-	20	60	1
8.	EEE	Project (Phase I)	D025723(025)	-	-	6	60	-	40	100	3
9.	EEE	Industrial Training	D025724(025)			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.	EEE	D025731(025)	Soft Computing Techniques
2.	EEE	D025732(025)	Illumination Engineering
3.	EEE	D025733(025)	Industrial Electrical Systems
4.	EEE	D025734(025)	Electric and Hybrid vehicle
5.	EEE	D025735(025)	VLSI 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.



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

B Tech (Seventh Semester)

List of Open Elective – II (Table III) (For 7th Semester)

S.N.	Board of Studies	Course Code	Subject
1	Agriculture Engg	D000701(094)	Biomass Management For Fodder And Energy.
2	Agriculture Engg	D000702(094)	Gully And Ravine Control Structures
3	Civil Engg	D000703(020)	Design Of Structures.
4	Agriculture Engg	D000704(094)	Reservoir And Farm Pond Design.
5	Mechanical	D000705(037)	3 D Printing & design
6	Management	D000706(076)	Technology Management
7	Information Technology	D000707(033)	Decision Support & Executive Information system
8	CSE	D000708(022)	Software Technology
9	Management	D000709(076)	Knowledge Entrepreneurship
10	Management	D000710(076)	Intellectual Property Rights
11	Biotechnology	D000711(018)	Phytochemistry
12	Biotechnology	D000712(018)	Clinical Research and Trial Management
13	Biotechnology	D000713(018)	Cellular and Molecular Diagnostics
14	Chemical Engineering	D000714(019)	Environmental Legislation & Impact Assessment
15	Civil Engineering	D000715(020)	Environmental management and Legislations
16	Civil Engineering	D000716(020)	Hydraulics of water and waste water
17	Civil Engineering	D000717(020)	Disaster Management
18	CSE	D000718(022)	Neural Network and Deep Learning
19	CSE	D000719(022)	Big data and Hadoop
20	CSE	D000720(022)	BioInformatics
21	CSE	D000721(022)	Software Testing
22	EEE	D000722(025)	Switched Mode Power Converter
23	EEE	D000723(025)	Internet of Things
25	EEE	D000724(025)	Non Conventional Energy Sources
26	EEE	D000725(025)	Sensors and Transducers
27	Information Technology	D000726(033)	E-Commerce & strategic IT
28	Management	D000727(076)	Entrepreneurship
29	Information Technology	D000728(033)	Decision Support & Executive Information system
30	Computer Science & Engg.	D000729(022)	Software Technology
31	Electrical Engineering	D000730(024)	Solar PV Energy System
32	Mechanical Engineering	D000731(037)	Energy Conservation & Management
33	Information Technology	D000732(033)	Information Theory & Coding
34	Management	D000733(076)	Project Planning, Management & Evaluation

35	Electronics & Telecom	D000734(028)	Java Programming
36	Electronics & Telecom	D000735(028)	Cloud computing
37	Electronics & Telecom	D000736(028)	Big data Mining
38	Electronics & Telecom	D000737(028)	Cryptography & Network security
39	Electronics & Telecom	D000738(028)	Neural Network & Fuzzy Logic
40	Electronics & Telecom	D000739(028)	RF IC Design
41	Information Technology	D000740(033)	Graph Theory And Applications
42	Information Technology	D000741(033)	Biometrics
43	Information Technology	D000742(033)	Quantum Computing
44	Information Technology	D000743(033)	Entrepreneurship essentials
45	Information Technology	D000744(033)	Managerial Skills
46	Mechanical Engineering	D000745(037)	Mechatronics
47	Mechanical Engineering	D000746(037)	Engineering Economics
48	Mechanical Engineering	D000747(037)	Computer Graphics
49	Mechanical Engineering	D000748(037)	Control Engineering
50	Management	D000749(076)	Technology Management
51	Information Technology	D000750(033)	Decision Support & Executive Information system
53	Management	D000751(076)	Finance Management
54	Management	D000752(076)	Project Planning, Management & Evaluation
55	Mechanical Engg.	D000753(037)	Safety Engineering
56	Mechanical Engg.	D000754(037)	Energy Conservation & Management
57	Computer Science & Engg.	D000755(022)	Bio Informatics
58	Management	D000756(076)	Knowledge Entrepreneurship
59	Plastics Engineering	D000757(095)	Renewable Energy
60	Plastics Engineering	D000758(095)	Plastics Waste Management and Recycling



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

SCHEME OF TEACHING AND EXAMINATION

B Tech (Eight Semester – Electrical & Electronics 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 & Electronics Engineering	Computer Aided Power System	D025811(025)	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
6.	Electrical & Electronics Engineering	Computer Aided Power System (Lab)	D025821(025)	-	-	2	40	-	20	60	1
7.	Electrical & Electronics Engineering	Installation, Maintenance and Testing of Electrical Equipment (Lab)	D025822(025)	-	-	2	40	-	20	60	1
8.	Electrical & Electronics Engineering	Project (Phase-II)	D025823(025)	-	-	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 & Electronics Engineering	D025831(025)	Power Apparatus System
2.	Electrical & Electronics Engineering	D025832(025)	Power System Dynamics and Control
3.	Electrical & Electronics Engineering	D025833(025)	Control Systems Design
4.	Electrical & Electronics Engineering	D025834(025)	EHV AC & DC Transmission
5.	Electrical & Electronics Engineering	D025835(025)	Flexible AC Transmission System

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.))

B.Tech (Eight Semester)

List of Open Elective – III (Table – III) (For 8th Semester)

S.N.	Board of Studies	Course Code	Subject
1	Agriculture Engineering	D000801(094)	Environmental Science
2	Management	D000802(076)	Industrial Engineering & Management
3	Computer Science & Engineering	D000803(022)	Soft Computing Techniques
4	Mechanical	D000804(037)	Composite Materials
5	Electrical & Electronics Engineering	D000805(025)	Industrial Automation
6	Mechanical Engineering	D000806(037)	Production & Product Management
7	Electronics & Telecommunication	D000807(028)	Virtual Instrumentation
8	Computer Science & Engineering	D000808(022)	Data Sciences
9	Mechanical Engineering	D000809(037)	Computational Fluid Dynamics
10	Biotechnology	D000810(018)	Medical Biotechnology
11	Biotechnology	D000811(018)	Bioterrorism and National Security
12	Biotechnology	D000812(018)	Precision Medicine and Wellness
13	Chemical Engineering	D000813(019)	Non Conventional Energy Sources (NCES) (Except Electrical Engg. and Agriculture Engg.)
14	Civil Engineering	D000814(020)	Air pollution and control measures
15	Civil Engineering	D000815(020)	Solid and hazardous waste management
16	Computer Science Engineering	D000816(022)	Natural language processing
17	Computer Science Engineering	D000817(022)	Cluster and Grid Computing
18	Computer Science Engineering	D000818(022)	Blockchain
19	Computer Science Engineering	D000819(022)	Data Compression
20	Electrical & Electronics Engineering	D000820(025)	Power Plant Engineering
21	Electrical & Electronics Engineering	D000821(025)	Utilization of Electrical Energy and Electric Traction
22	Electrical & Electronics Engineering	D000822(025)	Introduction to Micro-electromechanical systems (MEMS)
23	Management	D000823(076)	Management Concept Techniques
24	Electronics & Telecom.	D000824(028)	Operational Research

25	Electronics & Telecom.	D000825(028)	Android Apps Development
26	Electronics & Telecom.	D000826(028)	Digital Switching & Multiplexing
27	Electronics & Telecom.	D000827(028)	Optimization Techniques
28	Information Technology	D000828(033)	Business Intelligence
29	Information Technology	D000829(033)	Game Theory
30	Information Technology	D000830(033)	Optimization Design And Techniques
31	Information Technology	D000831(033)	Software Metrics and Quality Assurance
33	Mechanical Engineering	D000833(037)	Energy Management and Audit
34	Information Technology	D000834(033)	Cyber Security and Information Security
35	Mechatronics Engineering	D000835(067)	Nanotechnology
36	Computer Science & Engineering	D000836(022)	Supply Chain Management
37	Electrical Engineering	D000837(024)	Electrical Estimation and Costing
38	Computer Science & Engineering	D000838(022)	Data Mining & Warehousing
39	Plastics Engineering	D000839(095)	Fiber Technology
40	Electrical Engineering	D000840(024)	Wind Energy