

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

**M. Tech. in Power Electronics & Power Systems**

**FIRST SEMESTER**

S. No.	Board of Study	Subject Code	Subject	Periods per week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	Theory/Practical				
							ESE	CT	TA		
1.	Electrical & Electronics Engg.	559112 (24)	Computer Aided Power System	3	1	-	100	20	20	140	4
2.	Electrical & Electronics Engg.	559114 (24)	Flexible AC Transmission System	3	1	-	100	20	20	140	4
3.	Electrical & Electronics Engg.	597111 (25)	Advanced Power Electronics	3	1	-	100	20	20	140	4
4.	Electrical & Electronics Engg.	597113 (25)	Power System Dynamics & Control	3	1	-	100	20	20	140	4
5.	<b>Refer Table-I</b>		<b>Elective-I</b>	3	1	-	100	20	20	140	4
6.	Electrical & Electronics Engg	597121 (25)	Advanced Power Electronics Lab	-	-	3	75	-	75	150	2
7.	Electrical & Electronics Engg	597122 (25)	Power System Dynamics & Control Lab	-	-	3	75	-	75	150	2
<b>Total</b>				<b>15</b>	<b>5</b>	<b>6</b>	<b>650</b>	<b>100</b>	<b>250</b>	<b>1000</b>	<b>24</b>

**Table – I**

<b>Elective – I</b>			
S.No.	Board of Study	Subject Code	Subject
1	Electrical & Electronics Engg.	597131 (25)	Micro and Smart Grid
2	Electrical & Electronics Engg.	597132 (25)	Power Electronics for Renewable Energy Systems
3	Electrical & Electronics Engg.	597133 (25)	Application of DSP to Power System

L-Lecture  
CT- Class Test

T- Tutorial  
TA- Teachers Assessment

P-Practical  
ESE- End Semester Exam

**Note: (1)** 1/4<sup>th</sup> of total strength of students subject to minimum of twenty students is required to offer an 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, Bilai (C.G.)**

**M. Tech. in Power Electronics & Power Systems**

**SECOND SEMESTER**

S. No	Board of Study	Subject Code	Subject	Periods per week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	Theory/Practical				
							ESE	CT	TA		
1.	Electrical & Electronics. Engg .	559212 (24)	Power Quality	3	1	-	100	20	20	140	4
2.	Electrical & Electronics. Engg .	597211 (25)	PWM Converters & Drives	3	1	-	100	20	20	140	4
3.	Electrical & Electronics. Engg .	597213 (25)	Advanced Control System	3	1	-	100	20	20	140	4
4.	Electrical & Electronics. Engg .	597214 (25)	Protection in Power System	3	1	-	100	20	20	140	4
5.	<b>Refer Table-II</b>		<b>Elective-II</b>	3	1	-	100	20	20	140	4
6.	Electrical & Electronics. Engg.	559222 (24)	Power Quality Lab	-	-	3	75	-	75	150	2
7.	Electrical & Electronics. Engg ..	597221 (25)	PWM converters & Drives Lab	-	-	3	75	-	75	150	2
<b>Total</b>				<b>15</b>	<b>5</b>	<b>6</b>	<b>650</b>	<b>100</b>	<b>250</b>	<b>1000</b>	<b>24</b>

**Table-II**

<b>Elective-II</b>			
S.No	Board of Study	Subject Code	Subject
1.	Electrical & Electronics Engg.	559231 (24)	Transients in Power System
2.	Electrical & Electronics Engg.	597231 (25)	Optimization Techniques
3.	Electrical & Electronics Engg.	597232 (25)	Energy Conservation, Audit & Management

L- Lecture  
CT- Class Test

T- Tutorial  
TA- Teachers Assessment

P-Practical  
ESE- End Semester Exam

**Note: (1)** 1/4<sup>th</sup> of total strength of students subject to minimum of twenty students is required to offer an 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, Bhilai (C.G.)**

**M. Tech. in Power Electronics & Power Systems**

**THIRD SEMESTER**

S. No.	Board of Study	Subject Code	Subject	Periods per week			Scheme of Exam			Total Marks	Credit L+(T+P)/2
				L	T	P	Theory/Practical				
							ESE	CT	TA		
1.	Electrical & Electronics Engg.	597311 (25)	Research Methodology	3	1	-	100	20	20	140	4
2.	<b>Refer Table-III</b>		<b>Elective-III</b>	3	1	-	100	20	20	140	4
3.	Electrical & Electronics Engg.	597321 (25)	Project	-	-	28	100	-	100	200	14
4.	Electrical & Electronics Engg.	597322 (25)	Seminar	-	-	3			20	20	2
<b>Total</b>				<b>6</b>	<b>2</b>	<b>31</b>	<b>300</b>	<b>40</b>	<b>160</b>	<b>500</b>	<b>24</b>

**Table - III**

Elective - III			
S.No.	Board of Study	Subject Code	Subject
1.	Electrical & Electronics Engg.	559332 (24)	ANN & Fuzzy Techniques
2.	Electrical & Electronics Engg.	597333 (25)	Applications of Microcontroller in Electrical System
3.	Electrical & Electronics Engg.	597334 (25)	PLC, SCADA & Drives

L-Lecture  
CT- Class Test

T- Tutorial  
TA- Teachers Assessment

P-Practical  
ESE- End Semester Exam

**Note: (1)** 1/4<sup>th</sup> of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a Particular academic session.

**Note (2)** Choice of elective course once made for an examination cannot be changed in future examinations.

**Chhattisgarh Swami Vivekanand Technical University, Bilai (C.G.)**

M. Tech. in Power Electronics & Power Systems

**FOURTH SEMESTER**

S.No	Board of Study	Subject Code	Subject	Periods per week			Scheme of exam			Total Marks	Credit L+(T+P)/2
				L	T	P	Theory/Practical				
							ESE	CT	TA		
1.	Electrical & Electronics Engg.	597421 (25)	Project + Seminar	6	-	34	300	-	200	500	23
<b>Total</b>				<b>6</b>	<b>-</b>	<b>34</b>	<b>300</b>	<b>-</b>	<b>200</b>	<b>500</b>	<b>23</b>

L- Lecture T- Tutorial

P-Practical ESE- End Semester Exam

CT- Class Test TA- Teachers Assessment

**Scheme of Marks Allotment**

Semester	Total Marks	Grand Total
I	1000	3000
II	1000	
III	500	
IV	500	