



# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Diploma in Civil/Electrical/EEE/Mining & Mine Surveying (Group-IA)

### Semester-I

Scheme of Studies:

Session-2020

S.No	Board of Study	Course Code	Course Titles	Scheme of Studies (Hours/Week)			
				L	P	T	Credit L+T+(P/2)
1	Humanities	2000171(046)	Communication Skills-I	2	-	1	3
2	Applied Science	2000172(014)	Applied Maths-I	2	-	1	3
3	Civil Engineering	2000175(020)	Environmental Engineering & Sustainable Development	2	-	1	3
4	Applied Science	2000174(015)	Applied Physics	2	-	1	3
5	Mechanical Engineering	2000179(037)	Basic Non-Conventional Energy Sources	1	-	1	2
6	Computer Science and Engineering	2000176(022)	Computer Fundamentals & Applications	2	-	0	2
7	Applied Science	2000190(015)	Applied Physics (Lab)	-	2	-	1
8	Mechanical Engineering	2000191(037)	Basic Non-Conventional Energy Sources (Lab)	-	2	-	1
9	Computer Science and Engineering	2000193(022)	Computer Fundamentals & Applications (Lab)	-	4	-	2
10	Humanities	2000195(046)	Seminar & Technical Presentation (Personality Development & Leadership) Skills	-	2	-	1
11	-	-	Library	-	2	-	-
12	-	-	Co-curricular & Academic Activity Societies	-	2	-	-
<b>Total</b>				<b>11</b>	<b>14</b>	<b>05</b>	<b>21</b>

L - Lecture, T - Tutorial, P – Practical

#### Legend:

Lecture (L) → CI Classroom Instruction (Includes different instructional strategies i.e Lecture and others.)

Practical (P) → LI Laboratory Instruction (Includes practical performances in Laboratory workshop, field or other locations using different instructional strategies).

Tutorial (T) → Includes sessional work (SW) (assignment, seminar, mini project etc), self Learning (SL)

**Note:** Leftover periods/week (6 periods/week) shall be utilized for Self Learning (SL) purpose.



# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Diploma in Civil/Electrical/EEE/Mining & Mine Surveying (Group-IA)

### Semester-I

Session-2020

#### Scheme of Examinations:

S. No	Board of Study	Course Code	Course Titles	Scheme of Examination					
				Theory			Practical		Total Marks
				ESE	CT	TA	ESE	TA	
1	Humanities	2000171(046)	Communication Skills-I	70	20	30	-	-	120
2	Applied Science	2000172(014)	Applied Maths-I	70	20	30	-	-	120
3	Civil Engineering	2000175(020)	Environmental Engineering & Sustainable Development	70	50	30	-	-	150
4	Applied Science	2000174(015)	Applied Physics	70	20	30	-	-	120
5	Mechanical Engineering	2000179(037)	Basic Non-Conventional Energy Sources	-	-	70	-	-	70
6	Computer Science and Engineering	2000176(022)	Computer Fundamentals & Applications	70	20	30	-	-	120
7	Applied Science	2000190(015)	Applied Physics (Lab)	-	-	-	30	50	80
8	Mechanical Engineering	2000191(037)	Basic Non-Conventional Energy Sources (Lab)	-	-	-	30	50	80
9	Computer Science and Engineering	2000193(022)	Computer Fundamentals & Applications (Lab)	-	-	-	30	50	80
10	Humanities	2000195(046)	Seminar & Technical Presentation (Personality Development & Leadership) Skills	-	-	-	-	60	60
<b>Total</b>				<b>350</b>	<b>130</b>	<b>220</b>	<b>90</b>	<b>210</b>	<b>1000</b>

ESE: End of Semester Exam, CT: Class Test, TA: Teachers Assessment

**Legend:** PRA: Process Assessment, PDA: Product Assessment

- Note :**
- TA in Theory includes Sessional work (SW) and Attendance (ATT) with weightage of 70% and 30% of total respectively.
  - TA in Practical includes performance of PRA, PDA and Viva-Voce with weightage of 50%, 40% and 10% of total respectively.
  - 85% attendance is essential in theory & Practical classes to appear in examination.



# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Diploma in Civil/Electrical/EEE/Mining & Mine Surveying (Group-IA)

### Semester-II

Session-2020

#### Scheme of Studies:

S.No.	Board of Study	Course Code	Course Titles	Scheme of Studies (Hours/Week)			
				L	P	T	Credit L+T+(P/2)
1	Humanities	2000271(046)	Communication Skills-II	2	-	1	3
2	Applied Science	2000272(014)	Applied Maths-II	2	-	1	3
3	Mechanical Engineering	2000275(037)	Applied Mechanics	2	-	1	3
4	Applied Science	2000278(011)	Applied Chemistry	2	-	1	3
5	Mechanical Engineering	2000277(037)	Engineering Drawing	2	-	1	3
6	Mechanical Engineering	2000276(037)	WorkShop Practice (Theory)	1	-	-	1
7	Mechanical Engineering	2000290(037)	Applied Mechanics (Lab)	-	2	-	1
8	Applied Science	2000291(011)	Applied Chemistry (Lab)	-	2	-	1
9	Mechanical Engineering	2000292(037)	Engineering Drawing (Practical)	-	2	-	1
10	Mechanical Engineering	2000294(037)	WorkShop Practice (Practical)	-	4	-	2
11	Humanities	2000293(046)	Seminar & Technical Presentation (Listening, Reading & Speaking) Skills	-	2	-	1
12	-	-	Library	-	2	-	-
13	-	-	Co-curricular & Academic Activity Societies	-	2	-	-
<b>Total</b>				<b>11</b>	<b>16</b>	<b>05</b>	<b>22</b>

L - Lecture, T - Tutorial, P – Practical

#### Legend:

Lecture (L) → CI Classroom Instruction (Includes different instructional strategies i.e Lecture and others.)

Practical (P) → LI Laboratory Instruction (Includes practical performances in Laboratory workshop, field or other locations using different instructional strategies).

Tutorial (T) → Includes sessional work (SW) (assignment, seminar, mini project etc), self Learning (SL)

**Note:** Leftover periods/week (4 periods/week) shall be utilized for Self Learning (SL) purpose.



# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Diploma in Civil/Electrical/EEE/Mining & Mine Surveying (Group-IA)

### Semester-II

Scheme of Examination:

Session-2020

S.No	Board of Study	Course Code	Course Titles	Scheme of Examination					
				Theory			Practical		Total Marks
				ESE	CT	TA	ESE	TA	
1	Humanities	2000271(046)	Communication Skills-II	70	20	30	-	-	120
2	Applied Science	2000272(014)	Applied Maths-II	70	20	30	-	-	120
3	Mechanical Engineering	2000275(037)	Applied Mechanics	70	20	30	-	-	120
4	Applied Science	2000278(011)	Applied Chemistry	70	20	30	-	-	120
5	Mechanical Engineering	2000277(037)	Engineering Drawing	70	20	30	-	-	120
6	Mechanical Engineering	2000276(037)	WorkShop Practice (Theory)	-	-	30	-	-	30
7	Mechanical Engineering	2000290(037)	Applied Mechanics (Lab)	-	-	-	30	50	80
8	Applied Science	2000291(011)	Applied Chemistry (Lab)	-	-	-	30	50	80
9	Mechanical Engineering	2000292(037)	Engineering Drawing (Practical)	-	-	-	30	50	80
10	Mechanical Engineering	2000294(037)	WorkShop Practice (Practical)	-	-	-	50	30	80
11	Humanities	2000293(046)	Seminar & Technical Presentation (Listening, Reading & Speaking) Skills	-	-	-	-	50	50
<b>Total</b>				350	100	180	140	230	1000

ESE: End of Semester Exam, CT: Class Test, TA: Teachers Assessment

**Legend:** PRA: Process Assessment, PDA: Product Assessment

**Note :** i. TA in Theory includes Sessional work (SW) and Attendance (ATT) with weightage of 70% and 30% of total respectively.

ii. TA in Practical includes performance of PRA, PDA and Viva-Voce with weightage of 50%, 40% and 10% of total respectively.

iii. 85% attendance is essential in theory & Practical classes to appear in examination.



# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Diploma in Electrical Engineering

### Semester – 3<sup>rd</sup> Sem

Session-2020

#### Scheme of Studies:

S. No.	Board of Study	Course Code	Course Titles	Scheme of Studies (Hours/Week)			
				L	P	T	Credit L+T+(P/2)
1	Electrical Engineering	2024371(024)	Electrical Circuits	2	-	1	3
2	Electrical Engineering	2024372(024)	Electrical and Electronic Measurements	2	-	1	3
3	Electrical Engineering	2024373(024)	DC Machines and Transformers	2	-	1	3
4	Electrical Engineering	2024374(024)	Electrical Drawing and CAD	3	-	0	3
5	Electrical & Electronics Engineering	2025375(025)	Basic Electronics	2	-	1	3
6	Electrical Engineering	2024361(024)	Electrical Circuits (Lab)	-	2	-	1
7	Electrical Engineering	2024362(024)	Electrical and Electronic Measurements (Lab)	-	2	-	1
8	Electrical Engineering	2024363(024)	DC Machines and Transformers (Lab)	-	2	-	1
9	Electrical & Electronics Engineering	2024364(025)	Basic Electronics (Lab)	-	2	-	1
10	Electrical Engineering	2024365(024)	Electrical Workshop Practice-I (Lab)	-	2	-	1
11	Humanities	-	Health, Hygiene and Yoga (Non-Credit Subject)	-	2	-	0
12			Library	-	2	-	0
<b>Total</b>				<b>11</b>	<b>14</b>	<b>04</b>	<b>20</b>
<b>Total</b>				<b>29</b>			

L- Lecture, T- Tutorial, P- Practical,

Lecture (L) → CL Classroom Instruction (Includes different instructional Strategies i.e Lecture and others.)

Practical (P) → LI Laboratory Instruction (Includes practical performances in Laboratory workshop, field or other locations using different instructional strategies).

Tutorial (T) → Includes sessional work (SW) (assignment, seminar, mini project etc), Self Learning (SL)



# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Diploma in Electrical Engineering

### Semester – 3<sup>rd</sup> Sem

Session-2020

#### Scheme of Examination:

S. No.	Board of Study	Course Code	Course Titles	Scheme of Examination					
				Theory			Practical (PRA+PDA+Viva)		Total Marks
				ESE	CT	TA	ESE	TA	
1	Electrical Engineering	2024371 (024)	Electrical Circuits	70	20	30	-	-	120
2	Electrical Engineering	2024372 (024)	Electrical and Electronic Measurements	70	20	30	-	-	120
3	Electrical Engineering	2024373 (024)	DC Machines and Transformers	70	20	30	-	-	120
4	Electrical Engineering	2024374 (024)	Electrical Drawing and CAD	70	20	30	-	-	120
5	Electrical & Electronics Engineering	2025375 (025)	Basic Electronics	70	20	30	-	-	120
6	Electrical Engineering	2024361 (024)	Electrical Circuits (Lab)	-	-	-	30	50	80
7	Electrical Engineering	2024362 (024)	Electrical and Electronic Measurements (Lab)	-	-	-	30	50	80
8	Electrical Engineering	2024363 (024)	DC Machines and Transformers (Lab)	-	-	-	30	50	80
9	Electrical & Electronics Engineering	2024364 (025)	Basic Electronics (Lab)	-	-	-	30	50	80
10	Electrical Engineering	2024365 (024)	Electrical Workshop Practice-I (Lab)				30	50	80
11	Humanities	-	Health, Hygiene and Yoga (Non-Credit Subject)	-	-	-	-	-	-
<b>Total</b>				<b>350</b>	<b>100</b>	<b>150</b>	<b>150</b>	<b>250</b>	<b>1000</b>

**ESE:** End Semester Exam

**CT:** Class Test

**TA:** Teachers Assessment

**PRA:** Process Assessment, **PDA:** Product Assessment

- Note:** i. TA in Theory includes Sessional work (SW) and Attendance (ATT), with weightage of 70% and 30 % weightage of total respectively.  
 ii. TA in Practical includes performance of PRA, PDA and Viva-Voce with weightage of 50%, 40% and 10 % weightage of total respectively.



# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Diploma in Electrical Engineering

### Semester – 4<sup>th</sup> Sem

Scheme of Studies :

Session-2020

S.No	Board of Study	Course Code	Course Titles	Scheme of Studies (Hours/Week)			
				L	P	T	Credit L+T+(P/2)
1	Electrical & Electronics Engg.	2025471(025)	Digital Electronics	2	-	1	3
2	Electrical Engg.	2024472(024)	AC Machines	2	-	1	3
3	Computer Science & Engineering	2025473(022)	Computer Programming and Basic Networking	3	-	0	3
4	Electrical Engineering	2024474(024)	Electrical Power Generation, Transmission & Distribution	2	-	1	3
5	Electrical Engg / Electrical & Electronics Engg.	2024475(024) / 2025476(025)	Electrical Estimating and Costing* / Analog Electronics**	3	-	0	3
6	Electrical & Electronics Engg.	2025461(025)	Digital Electronics (Lab)	-	2	-	1
7	Electrical Engg.	2024462(024)	AC Machines (Lab)	-	2	-	1
8	Computer Science & Engineering	2025463(022)	Computer Programming and Basic Networking (Lab)	-	2	-	1
9	Electrical Engg.	2024464(024)	Electrical Power Generation, Transmission & Distribution (Lab)	-	2	-	1
10	Electrical Engg. / Electrical & Electronics Engg.	2024465(024) / 2025466(025)	Electrical Workshop Practice-II (Lab*) / Analog Electronics (Lab**)	-	2	-	1
11	-	-	Indian Constitution (Non Credit Subject)	-	2	-	0
<b>Total</b>				<b>12</b>	<b>12</b>	<b>03</b>	<b>20</b>
<b>Total</b>				<b>27</b>			

\*Subject applicable for Electrical Branch

\*\* Subject applicable for Electrical & Electronic Branch

L- Lecture,

T- Tutorial,

P- Practical,

Lecture (L)→ CL Classroom Instruction (Includes different instructional Strategies i.e Lecture and others.)

Practical (P)→LI Laboratory Instruction (Includes practical performances in Laboratory workshop, field or other locations using different instructional strategies).

Tutorial (T)→ Includes Sessional work (SW) (assignment, seminar, mini project, etc), Self Learning (SL)

**Note: Summer Internship (Industrial Training) of 4 weeks will be carried out in summer vacation after completion of 4<sup>th</sup> sem and evaluation will be done in 5<sup>th</sup> sem.**



# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Diploma in Electrical Engineering

### Semester – 4<sup>th</sup> Sem

Scheme of Examination:

Session-2020

S. No	Board of Study	Course Code	Course Titles	Scheme of Examination					
				Theory			Practical (PRA+PDA+Viva)		Total Marks
				ESE	CT	TA	ESE	TA	
1	Electrical & Electronics Engg.	2025471(025)	Digital Electronics	70	20	30	-	-	120
2	Electrical Engg.	2024472(024)	AC Machines	70	20	30	-	-	120
3	Computer Science & Engineering	2025473(022)	Computer Programming and Basic Networking	70	20	30	-	-	120
4	Electrical Engg. Engineering	2024474(024)	Electrical Power Generation, Transmission & Distribution	70	20	30	-	-	120
5	Electrical Engg / Electrical & Electronics Engg.	2024475(024) / 2025476(025)	Electrical Estimating and Costing* / Analog Electronics**	70	20	30	-	-	120
6	Electrical & Electronics Engg.	2025461(025)	Digital Electronics (Lab)	-	-	-	30	50	80
7	Electrical Engg.	2024462(024)	AC Machines (Lab)	-	-	-	30	50	80
8	Computer Science & engineering	2025463(022)	Computer Programming and Basic Networking (Lab)	-	-	-	30	50	80
9	Electrical Engg.	2024464(024)	Electrical Power Generation, Transmission & Distribution (Lab)	-	-	-	30	50	80
10	Electrical Engg. / Electrical & Electronics Engg.	2024465(024) / 2025466(025)	Electrical Workshop Practice-II (Lab*) / Analog Electronics (Lab**)	-	-	-	30	50	80
11	-	-	Indian Constitution (Non Credit Subject)	-	-	-	-	-	-
<b>Total</b>				<b>350</b>	<b>100</b>	<b>150</b>	<b>150</b>	<b>250</b>	<b>1000</b>

\*Subject applicable for Electrical Branch

\*\* Subject applicable for Electrical & Electronic Branch

ESE: End of semester exam

CT: Class Test

TA: Teachers Assessment

PRA: Process Assessment, PDA: Product Assessment

**Note:** i. TA in Theory includes Sessional work (SW) and Attendance (ATT), with weightage of 70% and 30 % weightage of total respectively.

ii. TA in Practical includes performance of PRA, PDA and Viva-Voce with weightage of 50%, 40% and 10 % weightage of total respectively.

**Note:** Summer Internship (Industrial Training) of 4 weeks will be carried out in summer vacation after completion of 4<sup>th</sup> semester and evaluation will be done in 5<sup>th</sup> sem.





# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Diploma in Electrical Engineering

### Semester – 5

Session-2020

#### Scheme of Studies:

S. No.	Board of Study	Course Code	Course Titles	Scheme of Studies (Hours/Week)				
				L	P	T	SL	Credit L+T+(P/2)
1.	Electrical Engineering	2024571 (024)	Power Electronics	3	-	1	1	4
2.	Electrical Engineering	2024572 (024)	Power System Operation and Protection	3	-	1	1	4
3.	Electrical & Electronics Engineering	2024573 (025)	Instrumentation and Process Control	2	-	1	1	3
4.	Electrical Engineering	2024574 (024)	Installation and Maintenance of Electrical Equipments	2	-	1	1	3
5.	Electrical & Electronics Engineering	2024561 (025)	Electrical and Electronics Simulation (Lab)	-	4	-	2	2
6.	Electrical Engineering	2024562 (024)	Power Electronics (Lab)	-	2	-	-	1
7.	Electrical Engineering	2024563 (024)	Power System Operation and Protection (Lab)	-	2	-	-	1
8.	Electrical & Electronics Engineering	2024564 (025)	Instrumentation and Process Control (Lab)	-	2	-	-	1
9.	Electrical Engineering	2024565 (024)	Installation and Maintenance of Electrical Equipments (Lab)	-	2	-	-	1
10.	Electrical Engineering	2024566 (024)	Industrial Training	-	2	-	2	1
<b>Total</b>				<b>10</b>	<b>14</b>	<b>04</b>	<b>08</b>	<b>21</b>
<b>Total</b>				<b>36</b>				

L-Lecture, T-Tutorial, P-Practical,

Lecture (L)→CL Classroom Instruction (Includes different instructional Strategies i.e Lecture and others.)

Practical (P)→LI Laboratory Instruction (Includes practical performances in Laboratory workshop, field or other locations using different instructional strategies).

Tutorial (T)→ Includes Sessional work (SW) (assignment, seminar, mini project etc), Self Learning (SL)



# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Diploma in Electrical Engineering

### Semester – 5

#### Scheme of Examination:

Session-2020

S. No.	Board of Study	Course Code	Course Titles	Scheme of Examination					
				Theory			Practical (PRA+PDA+Viva)		Total Marks
				ESE	CT	TA	ESE	TA	
1.	Electrical Engineering	2024571 (024)	Power Electronics	70	20	30	-	-	120
2.	Electrical Engineering	2024572 (024)	Power System Operation and Protection	70	20	30	-	-	120
3.	Electrical & Electronics Engineering	2024573 (025)	Instrumentation and Process Control	70	20	30	-	-	120
4.	Electrical Engineering	2024574 (024)	Installation and Maintenance of Electrical Equipments	70	20	30	-	-	120
5.	Electrical & Electronics Engineering	2024561 (025)	Electrical and Electronics Simulation (Lab)	-	-	-	40*	50	90
6.	Electrical Engineering	2024562 (024)	Power Electronics (Lab)	-	-	-	40	50	90
7.	Electrical Engineering	2024563 (024)	Power System Operation and Protection (Lab)	-	-	-	40	50	90
8.	Electrical & Electronics Engineering	2024564 (025)	Instrumentation and Process Control (Lab)	-	-	-	40	50	90
9.	Electrical Engineering	2024565 (024)	Installation and Maintenance of Electrical Equipments (Lab)	-	-	-	40	50	90
10.	Electrical Engineering	2024566 (024)	Industrial Training	-	-	-	30	40	70
<b>Total</b>				<b>280</b>	<b>80</b>	<b>120</b>	<b>230</b>	<b>290</b>	<b>1000</b>

**ESE:** End Semester Exam, **CT:** Class Test, **TA:** Teachers Assessment,

**PRA:** Process Assessment, **PDA:** Product Assessment

**Note:** i. TA in Theory includes Sessional work (SW) and Attendance (ATT), with weightage of 70% and 30 % weightage of total respectively.

ii. TA in Practical includes performance of PRA, PDA and Viva-Voce with weightage of 50%, 40% and 10 % weightage of total respectively.



# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Diploma in Electrical Engineering

### Semester – 6

#### Scheme of Studies:

Session-2020

S. No	Board of Study	Course Code	Course Titles	Scheme of Studies (Hours/Week)				
				L	P	T	SL	Credit L+T+(P/2)
1.	Electrical Engineering	2024671(024)	Utilization of Electrical Energy and Traction	3	-	1	1	4
2.	Electrical Engineering	2024672(024)	Wind and Solar Power Technology	3	-	1	1	4
3.	Mechanical Engineering	2000673(037)	Entrepreneurship Development and Management	2		1	1	3
4.	Electrical Engineering	<b>Elective (Any One)</b>		2	-	1	1	3
		<b>2024681(024)</b>	<b>Industrial Automation</b>					
		<b>2024682(024)</b>	<b>Energy Conservation &amp; Energy Audit</b>					
5.	Electrical Engineering	2024661(024)	Utilization of Electrical Energy and Traction (Lab)	-	2	-	1	1
6.	Electrical Engineering	2024662(024)	Wind and Solar Power Technology (Lab)	-	2	-	1	1
7.	Electrical Engineering	<b>Elective (Any One)</b>		-	2	-	1	1
		<b>2024691(024)</b>	<b>Industrial Automation (Lab)</b>					
		<b>2024692(024)</b>	<b>Energy Conservation &amp; Energy Audit (Lab)</b>					
8.	Electrical Engineering	2024663(024)	Major Project	-	3	-	2	2
<b>Total</b>				<b>10</b>	<b>09</b>	<b>04</b>	<b>09</b>	<b>19</b>
<b>Total</b>				<b>32</b>				

L-Lecture,

T-Tutorial,

P-Practical,

Lecture (L)→CL Classroom Instruction (Includes different instructional Strategies i.e Lecture and others.)

Practical (P)→LI Laboratory Instruction (Includes practical performances in Laboratory workshop, field or other locations using different instructional strategies).

Tutorial (T)→ Includes Sessional work (SW) (assignment, seminar, mini project etc), Self Learning (SL)



# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Diploma in Electrical Engineering

### Semester – 6

Session-2020

#### Scheme of Examination:

S. No	Board of Study	Course Code	Course Titles	Scheme of Examination					
				Theory			Practical (PRA+PDA+Viva)		Total Marks
				ESE	CT	TA	ESE	TA	
1.	Electrical Engineering	2024671(024)	Utilization of Electrical Energy and Traction	70	20	30	-	-	120
2.	Electrical Engineering	2024672(024)	Wind and Solar Power Technology	70	20	30	-	-	120
3.	Mechanical Engineering	2000673(037)	Entrepreneurship Development and Management	70	20	30	-	-	120
4	Electrical Engineering	<b>Elective (Any One)</b>		70	20	30	-	-	120
		<b>2024681(024)</b>	<b>Industrial Automation</b>						
		<b>2024682(024)</b>	<b>Energy Conservation &amp; Energy Audit</b>						
5.	Electrical Engineering	2024661(024)	Utilization of Electrical Energy and Traction (Lab)	-	-	-	40	60	100
6.	Electrical & Electronics Engineering	2024662(024)	Wind and Solar Power Technology (Lab)	-	-	-	40	60	100
7.	Electrical Engineering	<b>Elective (Any One)</b>		-	-	-	40	60	100
		<b>2024691(024)</b>	<b>Industrial Automation (Lab)</b>						
		<b>2024692(024)</b>	<b>Energy Conservation &amp; Energy Audit (Lab)</b>						
8.	Electrical Engineering	2024663(024)	Major Project	-	-	-	100	120	220
<b>Total</b>				<b>280</b>	<b>80</b>	<b>120</b>	<b>220</b>	<b>300</b>	<b>1000</b>

**ESE:** End Semester Exam,

**CT:** Class Test,

**TA:** Teachers Assessment

**PRA:** Process Assessment,

**PDA:** Product Assessment

- Note:** i. TA in Theory includes Sessional work (SW) and Attendance (ATT), with weightage of 70% and 30 % weightage of total respectively.  
 ii. TA in Practical includes performance of PRA, PDA and Viva-Voce with weightage of 50%, 40% and 10 % weightage of total respectively.