



# 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

## III - SEMESTER CIVIL ENGINEERING

### Scheme of Studies

Session-2020

S. No	Board of Studies	Category	Code	Course Title	Hours per week			Total Contact hrs /week	Credits L+T+P/2
					L	T	P		
1	Civil Engg	Program Core Course	2020371(020)	Construction Material	2	0	0	2	2
2	Civil Engg	Program Core Course	2020372(020)	Surveying-I	2	0	0	2	2
3	Civil Engg	Program Core Course	2020373(020)	Building Drawing and CAD	2	2	0	4	4
4	Civil Engg	Program Core Course	2020374(020)	Building Construction	2	0	0	2	2
5	Civil Engg	Program Core Course	2020375(020)	Hydraulics	3	1	0	4	4
6	Civil Engg	Program Core Course	2020362(020)	Construction Material (Lab)	0	0	2	2	1
7	Civil Engg	Program Core Course	2020363(020)	Surveying-I (Lab)	0	0	4	4	2
8	Civil Engg	Program Core Course	2020364(020)	Building Construction (Lab)	0	0	2	2	1
9	Civil Engg	Program Core Course	2020365(020)	CAD (Lab)	0	0	4	4	2
10	Civil Engg	Program Core Course	2020366(020)	Hydraulics (Lab)	0	0	2	2	1
11	Humanities	-	-	Health, Hygiene and Yoga	0	0	2	2	0
12	-	-	-	Library	0	0	2	2	0
<b>Total</b>					<b>11</b>	<b>03</b>	<b>18</b>	<b>32</b>	<b>21</b>



# CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

## III - SEMESTER CIVIL ENGINEERING

### Scheme of Examination

Session-2020

S. No	Board of Studies	Category	Code	Course Title	Maximum Marks			Total	Credits
					ESE	CT	TA		
1	Civil Engg	Program Core Course	2020371 (020)	Construction Material	70	20	30	120	2
2	Civil Engg	Program Core Course	2020372 (020)	Surveying I	70	20	30	120	2
3	Civil Engg	Program Core Course	2020373 (020)	Building Drawing and CAD	70	20	30	120	4
4	Civil Engg	Program Core Course	2020374 (020)	Building Construction	70	20	30	120	2
5	Civil Engg	Program Core Course	2020375 (020)	Hydraulics	70	20	30	120	4
6	Civil Engg	Program Core Course	2020362 (020)	Construction Material (Lab)	30	0	50	80	1
7	Civil Engg	Program Core Course	2020363 (020)	Surveying-I (Lab)	30	0	50	0	2
8	Civil Engg	Program Core Course	2020364 (020)	Building Construction (Lab)	30	0	50	80	1
9	Civil Engg	Program Core Course	2020365 (020)	CAD (Lab)	30	0	50	80	2
10	Civil Engg	Program Core Course	2020366 (020)	Hydraulics (Lab)	30	0	50	80	1
11	Humanities	-	-	Health, Hygiene and Yoga	0	0	0	0	0
12	-	-	-	Library	0	0	0	0	0
<b>Total</b>					<b>500</b>	<b>100</b>	<b>400</b>	<b>1000</b>	<b>21</b>



# CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

## IV - SEMESTER CIVIL ENGINEERING

### Scheme of Studies

Session-2020

S. No	Board of Studies	Category	Code	Course Title	Hours per week			Total Contact hrs /week	Credits L+T+P/2
					L	T	P		
1	Civil Engg	Program Core Course	2020471 (020)	Surveying-II	2	0	0	2	2
2	Civil Engg	Program Core Course	2020472 (020)	Strength of Material	3	1	0	4	4
3	Civil Engg	Program Core Course	2020473 (020)	Public Health Engineering	3	0	0	3	3
4	Civil Engg	Program Core Course	2020474 (020)	Concrete Technology	2	0	0	2	2
5	Civil Engg	Program Core Course	2020475 (020)	Transportation Engineering	3	0	0	3	3
6	Civil Engg	Program Core Course	2020461 (020)	Surveying-II (Lab)	0	0	4	4	2
7	Civil Engg	Program Core Course	2020462 (020)	Strength of Material (Lab)	0	0	2	2	1
8	Civil Engg	Program Core Course	2020463 (020)	Public Health Engineering (Lab)	0	0	2	2	1
9	Civil Engg	Program Core Course	2020464 (020)	Concrete Technology (Lab)	0	0	2	2	1
10	Civil Engg	Program Elective Course	2020465 (020)	Transportation Engineering (Lab)	0	0	2	2	1
11	-	-	-	Indian Constitution	2	0	0	2	0
12	-	-	-	Library	0	0	2	2	0
13	Humanities	-	-	Physical and Mental Fitness	0	0	2	2	0
<b>Total</b>					<b>15</b>	<b>1</b>	<b>16</b>	<b>32</b>	<b>20</b>



# CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

## IV - SEMESTER CIVIL ENGINEERING

### Scheme of Examination

Session-2020

S. No	Board of Studies	Category	Code	Course Title	Maximum Marks			Total	Credits
					ESE	CT	TA		
1	Civil Engg	Program Core Course	2020471 (020)	Surveying-II	70	20	30	120	2
2	Civil Engg	Program Core Course	2020472 (020)	Strength of Material	70	20	30	120	4
3	Civil Engg	Program Core Course	2020473 (020)	Public Health Engineering	70	20	30	120	3
4	Civil Engg	Program Core Course	2020474 (020)	Concrete Technology	70	20	30	120	2
5	Civil Engg	Program Core Course	2020475 (020)	Transportation Engineering	70	20	30	120	3
6	Civil Engg	Program Core Course	2020461 (020)	Surveying-II (Lab)	30	0	50	80	2
7	Civil Engg	Program Core Course	2020462 (020)	Strength of Material (Lab)	30	0	50	80	1
8	Civil Engg	Program Core Course	2020463 (020)	Public Health Engineering (Lab)	30	0	50	80	1
9	Civil Engg	Program Core Course	2020464 (020)	Concrete Technology (Lab)	30	0	50	80	1
10	Civil Engg	Program Elective Course	2020465 (020)	Transportation Engineering (Lab)	30	0	50	80	1
11	-	-	-	Indian Constitution	0	0	0	0	0
12	-	-	-	Library	0	0	0	0	0
13	Humanities	-	-	Physical and Mental Fitness	0	0	0	0	0
<b>Total</b>					<b>500</b>	<b>100</b>	<b>400</b>	<b>1000</b>	<b>20</b>





# CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

## V - SEMESTER CIVIL ENGINEERING

### Scheme of Studies

Session-2020

Sn.	Board of Studies	Category	Code	Course Title	Hours per week			Total Contact hrs/week	Credits L+T+P/2
					L	T	P		
1	Civil Engineering	Program Core Course	2020571 (020)	Quantity Surveying & Costing-I	3	0	0	3	3
2	Civil Engineering	Program Core Course	2020572 (020)	Structural Design & Drafting-I	3	0	0	3	3
3	Civil Engineering	Program Core Course	2020573 (020)	Water Resources Engineering	3	0	0	3	3
4	Civil Engineering	Program Core Course	2020574 (020)	Geotech Engineering	2	1	0	3	3
5	Civil Engineering	Program Elective Course	<b>Elective-I</b>		3	0	0	3	3
			2020581 (020)	Advanced Construction Technology					
			2020582 (020)	Traffic Engineering					
			2020583 (020)	Pavement Design Construction & Maintenance					
6	Civil Engineering	Program Core Course	2020561 (020)	Quantity Surveying & Costing-I (Lab)	0	0	2	2	1
7	Civil Engineering	Program Core Course	2020562 (020)	Structural Design & Drafting-I (Lab)	0	0	2	2	1
8	Civil Engineering	Program Core Course	2020563 (020)	Geotech Engineering (Lab)	0	0	2	2	1
9	Civil Engineering	Summer Internship – (6 weeks) after IV <sup>th</sup> Sem	2020564 (020)	Summer Internship	0	0	0	0	3
10	Civil Engineering	-	-	Major Project	0	0	2	2	^
<b>Total</b>					<b>14</b>	<b>1</b>	<b>8</b>	<b>23</b>	<b>21</b>



# CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

## V - SEMESTER CIVIL ENGINEERING

### Scheme of Examination

Session-2020

Sn.	Board of Studies	Category	Code	Course Title	Maximum Marks			Total Marks	Credits
					ESE	CT	TA		
1	Civil Engineering	Program Core Course	2020571 (020)	Quantity Surveying & Costing-I	70	20	30	120	3
2	Civil Engineering	Program Core Course	2020572 (020)	Structural Design & Drafting-I	70	20	30	120	3
3	Civil Engineering	Program Core Course	2020573 (020)	Water Resources Engineering	70	20	30	120	3
4	Civil Engineering	Program Core Course	2020574 (020)	Geotech Engineering	70	20	30	120	3
5	Civil Engineering	Program Elective Course	<b>Elective-I</b>		70	20	30	120	3
			2020581 (020)	Advanced Construction Technology					
			2020582 (020)	Traffic Engineering					
			2020583 (020)	Pavement Design Construction & Maintenance					
6	Civil Engineering	Program Core Course	2020561 (020)	Quantity Surveying & Costing-I (Lab)	40	0	60	100	1
7	Civil Engineering	Program Core Course	2020562 (020)	Structural Design & Drafting-I (Lab)	40	0	60	100	1
8	Civil Engineering	Program Core Course	2020563 (020)	Geotech Engineering (Lab)	40	0	60	100	1
9	Civil Engineering	Summer Internship – (6 weeks) after IV <sup>th</sup> Sem	2020564 (020)	Summer Internship	0	0	100	100	3
10	Civil Engineering	-	-	Major Project	0	0	0	0	^
<b>Total</b>					<b>470</b>	<b>100</b>	<b>430</b>	<b>1000</b>	<b>21</b>



# CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

## VI - SEMESTER CIVIL ENGINEERING

### Scheme of Studies

Session-2020

Sn.	Board of Studies	Category	Code	Course Title	Hours per week			Total Contact hrs/week	Credits L+T+P/2
					L	T	P		
1	Civil Engineering	Program Core Course	2020671 (020)	Quantity Surveying & Costing-II	3	0	0	3	3
2	Civil Engineering	Program Core Course	2020672 (020)	Structural Design & Drafting-II	3	0	0	3	3
3	Civil Engineering	Program Core Course	2020674 (020)	Construction Management	3	0	0	3	3
4	Mechanical Engineering	Humanities and Social Science Course	2000673 (037)	Entrepreneurship Development and Management	2	1	0	3	3
5	Civil Engineering	Program Elective Course	<b>Elective - II</b>		3	0	0	3	3
			2020681 (020)	<b>Repair and Maintenance of Structure</b>					
			2020682 (020)	<b>Precast and Prestressed Concrete</b>					
			2020683 (020)	<b>Green Building &amp; Energy Conservation</b>					
6	Civil Engineering	Program Core Course	2020661 (020)	Quantity Surveying & Costing-II (Lab)	0	0	2	2	1
7	Civil Engineering	Program Core Course	2020662 (020)	Structural Design & Drafting-II (Lab)	0	0	2	2	1
8	Humanities	Mandatory Course	2020663 (046)	Indian Constitution	2	0	0	2	0
9	Civil Engineering	-	2020664 (020)	Major Project	0	0	6	6	4 <sup>^</sup>
10	Civil Engineering	-	2020665 (020)	Seminar	1	0	0	1	1
<b>Total</b>					<b>17</b>	<b>01</b>	<b>10</b>	<b>28</b>	<b>22</b>

Note:- <sup>^</sup> One credit is carried forward from the V<sup>th</sup> semester major project evaluation.



# CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

## VI - SEMESTER CIVIL ENGINEERING

### Scheme of Examination

Session-2020

Sn.	Board of Studies	Category	Code	Course Title	Maximum Marks			Total Marks	Credits
					ESE	CT	TA		
1	Civil Engineering	Program Core Course	2020671 (020)	Quantity Surveying & Costing-II	70	20	30	120	3
2	Civil Engineering	Program Core Course	2020672 (020)	Structural Design & Drafting-II	70	20	30	120	3
3	Civil Engineering	Program Core Course	2020674 (020)	Construction Management	70	20	30	120	2
4	Mechanical Engineering	Humanities and Social Science Course	2000673 (037)	Entrepreneurship Development and Management	70	20	30	120	4
5	Civil Engineering	Program Elective Course	<b>Elective - II</b>		70	20	30	120	3
			2020681 (020)	<b>Repair and Maintenance of Structure</b>					
			2020682 (020)	<b>Precast and Prestressed Concrete</b>					
			2020683 (020)	<b>Green Building &amp; Energy Conservation</b>					
6	Civil Engineering	Program Core Course	2020661 (020)	Quantity Surveying & Costing-II (Lab)	40	0	60	100	1
7	Civil Engineering	Program Core Course	2020662 (020)	Structural Design & Drafting-II (Lab)	40	0	60	100	1
8	Humanities	Mandatory Course	2020663 (046)	Indian Constitution*	70*	20*	30*	120*	0
9	Civil Engineering	-	2020664 (020)	Major Project	60	0	80	140	4^
10	Civil Engineering	-	2020665 (020)	Seminar	0	0	60	60	1
<b>Total</b>					<b>490</b>	<b>100</b>	<b>410</b>	<b>1000</b>	<b>22</b>

**Note:- \* Not to be added in total marks.**