

**BHARATI VIDYAPEETH UNIVERSITY, PUNE**  
**FACULTY OF ENGINEERING and TECHNOLOGY**

**Programme: B. Tech. (Civil) – Sem I - 2014 Course**

Sr. No.	Subject	Teaching Scheme (Hrs/Week)			Examination Scheme (Marks)						Credits		
		L	P/D	T	End Sem. Exam	Continuous Assessment			TW	Total	Theory	TW	Total
						Unit Test	Attendance	Assignments					
1.	Engineering Mathematics- I	3	--	1	60	20	10	10	--	100	4	-	4
2.	Fundamentals of Civil Engineering	3	2	--	60	20	10	10	25	125	3	1	4
3.	Engineering Graphics*	4	2	--	60	20	10	10	25	125	4	1	5
4.	Engineering Physics	4	2	--	60	20	10	10	25	125	4	1	5
5.	Fundamentals of Electrical Engineering	3	2	--	60	20	10	10	25	125	3	1	4
6.	Professional Skill Development-I	2	--	--	50	--	--	--	--	50	2	-	2
7.	Computer Applications in Civil Engineering-I	-	2	--	--	---	--	--	50	50	-	1	1
	<b>Total</b>	<b>19</b>	<b>10</b>	<b>1</b>	<b>350</b>	<b>100</b>	<b>50</b>	<b>50</b>	<b>150</b>	<b>700</b>	<b>20</b>	<b>5</b>	<b>25</b>

\*End Semester Exam of duration 4 hours.

**BHARATI VIDYAPEETH UNIVERSITY, PUNE**  
**FACULTY OF ENGINEERING and TECHNOLOGY**

**Programme: B. Tech. (Civil) – Sem II - 2014 Course**

Sr. No.	Subject	Teaching Scheme (Hrs/Week)			Examination Scheme (Marks)						Credits		
		L	P/D	T	End Sem. Exam	Unit Test	Attendance	Assignments	TW	Total	Theory	TW	Total
8.	Engineering Mathematics- II	3	--	1	60	20	10	10	--	100	4	-	4
9.	Fundamentals of Mechanical Engineering	3	2	--	60	20	10	10	25	125	3	1	4
10.	Engineering Mechanics	4	2	--	60	20	10	10	25	125	4	1	5
11.	Engineering Chemistry	4	2	--	60	20	10	10	25	125	4	1	5
12.	Building Construction	3	2	--	60	20	10	10	25	125	3	1	4
13.	Professional Skill Development-II	2	--	--	50	--	--	--	--	50	2	-	2
14.	Workshop Technology	--	2	--	--	---	--	--	50	50	-	1	1
	<b>Total</b>	<b>19</b>	<b>10</b>	<b>1</b>	<b>350</b>	<b>100</b>	<b>50</b>	<b>50</b>	<b>150</b>	<b>700</b>	<b>20</b>	<b>5</b>	<b>25</b>

**Total Credits**

**Semester I = 25**

**Semester II = 25**

**Grand Total = 50**

**BHARATI VIDYAPEETH UNIVERSITY, PUNE**  
**FACULTY OF ENGINEERING and TECHNOLOGY**

**Programme: B. Tech. (Civil) – Sem III - 2014 Course**

Sr. No.	Subject	Teaching Scheme (Hrs/Week)			Examination Scheme (Marks)							Credits		
		L	P/D	T	End Sem. Exam	Unit Test	Attendance	Assignments	TW & Oral	TW & Practical	Total	Theory	TW	Total
15	Building Planning, Design and Byelaws*	3	2	--	60	20	10	10	50	--	150	3	1	4
16	Applied Geology	3	2	--	60	20	10	10	--	50	150	3	1	4
17	Engineering Economics & Financial Accounting	3	-	-	60	20	10	10	--	---	100	3	--	3
18	Mechanics of Solids	4	--	1	60	20	10	10	---	---	100	5	-	5
19	Concrete Technology	3	--	--	60	20	10	10	--	----	100	3	-	3
20	Professional Skill Development-III	4	--	--	100	---	----	--	--	----	100	4	-	4
21	Computer Applications in Civil Engineering-II	---	2	--	---	--	---	---	---	50	50	---	1	1
22	Testing of Materials	--	2	--	--	--	--	--	50	---	50	--	1	1
	<b>Total</b>	<b>20</b>	<b>08</b>	<b>01</b>	<b>400</b>	<b>100</b>	<b>50</b>	<b>50</b>	<b>100</b>	<b>100</b>	<b>800</b>	<b>21</b>	<b>4</b>	<b>25</b>

\*End Semester Exam of duration 4 hours.

**BHARATI VIDYAPEETH UNIVERSITY, PUNE**  
**FACULTY OF ENGINEERING and TECHNOLOGY**

**Programme: B. Tech. (Civil) – Sem IV - 2014 Course**

Sr. No.	Subject	Teaching Scheme (Hrs/Week)			Examination Scheme (Marks)							Credits		
		L	P/D	T	End Sem. Exam	Unit Test	Attendance	Assignments	TW & Oral	TW & Practical	Total	Theory	TW	Total
23	Engineering Mathematics-III	3	--	1	60	20	10	10	--	---	100	4	-	4
24	Surveying	3	4	--	60	20	10	10	--	50	150	3	2	5
25	Mechanics of Fluids	3	2	--	60	20	10	10	50	----	150	3	1	4
26	Construction Techniques and Machinery	3	--	--	60	20	10	10	---	----	100	3	-	3
27	Structural Analysis- I	3	--	--	60	20	10	10	---		100	3	-	3
28	Professional Skill Development-IV	4	--	--	100	--	--	--	--	---	100	4	--	4
29	Computer Applications in Civil Engineering-III	---	2	--	---	--	---	---	---	50	50	---	1	1
30	Civil Engineering Construction Practice	--	2	--	--	--	--	--	50	----	50	--	1	1
	<b>Total</b>	<b>19</b>	<b>10</b>	<b>01</b>	<b>400</b>	<b>100</b>	<b>50</b>	<b>70</b>	<b>100</b>	<b>100</b>	<b>800</b>	<b>20</b>	<b>5</b>	<b>25</b>

**Total Credits**

**Semester III = 25**

**Semester IV = 25**

**Grand Total = 50**

**BHARATI VIDYAPEETH UNIVERSITY, PUNE**  
**FACULTY OF ENGINEERING and TECHNOLOGY**

**Programme: B. Tech. (Civil) – Sem V - 2014 Course**

Sr. No.	Subject	Teaching Scheme (Hrs/Week)			Examination Scheme-Marks							Credits		
		L	P/D	T	End Sem. Exam	Unit Test	Attendance	Assignments	TW & Oral	TW & Practical	Total	Theory	TW	Total
31.	Structural Design-I*	4	2	1	60	20	10	10	50	--	150	5	1	6
32.	Advanced Surveying	3	2	--	60	20	10	10	50	--	150	3	1	4
33.	Engineering Project Management	3	2	--	60	20	10	10	50	---	150	3	1	4
34.	Structural Analysis-II	3	--	-	60	20	10	10	---	---	100	3	--	3
35.	Advanced Mechanics of Fluid	3	2	--	60	20	10	10	50	----	150	3	1	4
36.	Professional Skill Development-V	4	--	--	100	--	--	--	--	---	100	4	--	4
	<b>Total</b>	<b>20</b>	<b>08</b>	<b>1</b>	<b>400</b>	<b>100</b>	<b>50</b>	<b>50</b>	<b>200</b>	<b>--</b>	<b>800</b>	<b>21</b>	<b>4</b>	<b>25</b>

\*End Sem Exam of duration 4 hours.

**Optional Subject**

Sr. No.	Subject	Teaching Scheme (Hrs/Week)			Examination Scheme-Marks							Credits		
		L	P/D	T	End Sem. Exam	Unit Test	Attendance	Assignments	TW & Oral	TW & Practical	Total	Theory	TW	Total
	Engineering Mathematics IV	4	--	--	60	20	10	10	--	--	100	4	--	4

**BHARATI VIDYAPEETH UNIVERSITY, PUNE**  
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**Programme: B. Tech. (Civil) – Sem VI - 2014 Course**

Sr. No.	Subject	Teaching Scheme (Hrs/Week)			Examination Scheme-Marks							Credits		
		L	P/D	T	End Sem. Exam	Unit Test	Attendance	Assignments	TW & Oral	TW & Practical	Total	Theory	TW	Total
37.	Structural Design-II*	3	2	1	60	20	10	10	50	--	150	4	1	5
38.	Environmental Engineering-I	3	2	--	60	20	10	10	--	50	150	3	1	4
39.	Estimation, Costing and Valuation*	3	2	1	60	20	10	10	50	---	150	4	1	5
40.	Geotechnical Engineering	3	2	--	60	20	10	10	50	---	150	3	1	4
41.	Elective-I	3	--	--	60	20	10	10	--	----	100	3	--	3
42.	Professional Skill Development-VI	4	-	--	100	--	--	--	--	---	100	4	-	4
	<b>Total</b>	<b>19</b>	<b>08</b>	<b>2</b>	<b>400</b>	<b>100</b>	<b>50</b>	<b>50</b>	<b>150</b>	<b>50</b>	<b>800</b>	<b>21</b>	<b>4</b>	<b>25</b>
<b>MD</b>	Environmental Studies	<b>3</b>	<b>-</b>	<b>-</b>	<b>100</b>	<b>-</b>	<b>-</b>	<b>25</b>	<b>-</b>	<b>-</b>	<b>125</b>	<b>-</b>	<b>-</b>	<b>--</b>

\*End Sem Exam of duration 4 hours.

**Total Credits**

**Semester V = 25**

**Semester VI = 25      Grand Total = 50**

**BHARATI VIDYAPEETH UNIVERSITY, PUNE**  
**FACULTY OF ENGINEERING and TECHNOLOGY**

**Programme: B. Tech. (Civil) – Sem VII - 2014 Course**

Sr. No.	Subject	Teaching Scheme (Hrs/Week)			Examination Scheme-Marks							Credits		
		L	P/D	T	End Sem. Exam	Unit Test	Attendance	Assignments	TW & Oral	TW & Practical	Total	Theory	TW	Total
43	Structural Design-III*	3	2	-	60	20	10	10	50	--	150	3	1	4
44	Environmental Engineering-II	3	2	--	60	20	10	10	50	--	150	3	1	4
45	Foundation Engineering	3	-	--	60	20	10	10	--	---	100	3	-	3
46	Urban Planning	3	-	--	60	20	10	10	--	---	100	3	-	3
47	Elective-II	3	--	--	60	20	10	10	---	---	100	3	--	3
48	Computer Applications in Civil Engineering-IV	--	2	-	--	--	-	---	50	--	50	--	1	1
49	Project Stage- I	--	2	--	-	-	-	-	50	---	50	--	4	4
50	In plant Training for 45 days	--	--	--	--	--	--	--	50	---	50	--	3	3
	<b>Total</b>	<b>15</b>	<b>12</b>	<b>-</b>	<b>300</b>	<b>100</b>	<b>50</b>	<b>50</b>	<b>250</b>	<b>00</b>	<b>750</b>	<b>15</b>	<b>10</b>	<b>25</b>

\*End Sem Exam of duration 4 hours.

**BHARATI VIDYAPEETH UNIVERSITY, PUNE**  
**FACULTY OF ENGINEERING and TECHNOLOGY**

**Programme: B. Tech. (Civil) – Sem VIII - 2014 Course**

Sr. No.	Subject	Teaching Scheme (Hrs/Week)			Examination Scheme-Marks							Credits		
		L	P/D	T	End Sem. Exam	Unit Test	Attendance	Assignments	TW & Oral	TW& Practical	Total	Theory	TW	Total
51	Earthquake Resistant Design of Structures	3	2	--	60	20	10	10	50	--	150	3	1	4
52	Water Resources Engineering	3	2	1	60	20	10	10	--	50	150	4	1	5
53	Infrastructure Engineering	3	2	-	60	20	10	10	50	---	150	3	1	4
54	Elective-III	3	2	--	60	20	10	10	50	---	150	3	1	4
55	Project Stage- II	--	6	--	--	-	--	--	150	----	150	--	8	8
	<b>Total</b>	<b>12</b>	<b>14</b>	<b>1</b>	<b>240</b>	<b>80</b>	<b>40</b>	<b>40</b>	<b>300</b>	<b>50</b>	<b>750</b>	<b>13</b>	<b>12</b>	<b>25</b>

**Total Credits**

**Semester -VII = 25**

**Semester -VIII = 25**

**Grand Total = 50**

**Total Credits from Sem - I to Sem-VIII= 200**

**BHARATI VIDYAPEETH UNIVERSITY, PUNE**  
**FACULTY OF ENGINEERING and TECHNOLOGY**

**Programme: B. Tech. (Civil)**

<b>Sr. No.</b>	<b>41 Elective –I (Sem VI)</b>		<b>Sr. No.</b>	<b>47 Elective II ( Sem VII)</b>
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41 A	Financial Management		47A	Construction Management
41 B	Advanced Structural Analysis		47B	Maintenance & Rehabilitation of the Structures
41 C	Urban Water Management		47C	Environmental Impact Assessment
41 D	Docks, Ports and Harbours		47D	Bridge and Tunnel Engineering
41 E	Human Resource Management		47E	Ground Water Hydrology
41 F	Green Construction Practices		47F	Geo informatics
41 G	Numerical Methods in Civil Engineering		47G	Advances in Concrete technology & Composites
<b>Sr. No.</b>	<b>54 Elective-III (Sem VIII)</b>			
54A	Disaster Management			
54B	Advanced Steel Design			
54C	Solid Waste Management			
54D	Entrepreneurship Development			
54E	Hydraulic Structures			
54F	Social and Legal Aspects in Civil Engineering			
54G	Advanced Engineering Geology with Rock Mechanics			
54 H	Development Engineering			

**Revised Structure**

**BHARATI VIDYAPEETH UNIVERSITY, PUNE  
FACULTY OF ENGINEERING and TECHNOLOGY**

**Programme: B. Tech. Civil**

**Reasons for Revision:**

- 1. Letter from Secretary, University Grants Commission, New Delhi (D. O. No. F 14-12/2016(CPP II) dated 13<sup>th</sup> June 2016)**

**Action:**

- a. Addition of new course Urban Planning at B. Tech. Civil Sem VII
  - b. Subsequent removal of Elective II of B. Tech. Civil Sem VII
  - c. Adjustment of the courses of Elective II in Elective III (Sem VII) and Elective IV (Sem VIII).
  - d. Renaming of Elective III and Elective IV as Elective II (Sem VII) and Elective III (Sem VIII) respectively.
2. Subject Environmental Studies shifted from Sem VIII to Sem VI.