

**COURSE STRUCTURE FOR BACHELOR OF TECHNOLOGY IN CIVIL ENGINEERING**

Dept t.	Semest er	Course Code	Course Title	L	T	P	Credit s	Total Credit / Sem
<b>B. Tech. (Civil. Engg.) SEMESTER - I</b>								
CE	1	HS 1101	Communicative English	3	0	0	3	
CE	1	PH 1101	Physics	3	0	3	5	
CE	1	MA 1101	Mathematics - I	3	1	0	4	
CE	1	EE 1101	Basic Electrical Engineering	3	0	3	5	
CE	1	IT 1101	Fundamentals of Information Technology	3	0	3	5	
CE	1	ME 1102	Engineering Graphics	2	0	3	4	
CE	1	GE 1101	EAA I - NSS					26.0
<b>B. Tech. (Civil. Engg.) SEMESTER - II</b>								
CE	2	HS 1202	Organizational Behaviour and Industrial Psychology	3	0	0	3	
CE	2	CH 1201	Engineering Chemistry	3	0	3	5	
CE	2	MA 1202	Mathematics - II	3	1	0	4	
CE	2	CE 1201	Engineering Mechanics	3	0	3	5	
CE	2	ME 1201	Elements of Mechanical Engineering	3	0	3	5	
CE	2	ME 1203	Workshop	2	0	3	4	
CE	2	GE 1202	EAA- II - NSS					26.0
<b>B. Tech. (Civil. Engg.) SEMESTER - III</b>								
CE	3	CE 1303	Building Science	3	0	3	5	
CE	3	GE 1303	EAA III - NSS					
CE	3	CE 1305	Engineering Geology	3	0	2	4	
CE	3	CE 1302	Environmental Science	3	0	3	5	
CE	3	CE 1304	Field Measurement	3	0	3	5	
CE	3	MA 1303	Mathematics - III	3	1	0	4	
CE	3	CS 1301	Object Oriented Programming	3	0	3	5	27.0
<b>B. Tech. (Civil. Engg.) SEMESTER - VI</b>								
CE	4	CE 1408	Advanced Surveying	3	0	3	5	
CE	4	GE 1404	EAA IV - NSS					
CE	4	CE 1407	Fluid Mechanics	3	1	2	5	
CE	4	HS 1403	Industrial Economics and Accountancy	3	0	0	3	
CE	4	CE 1406	Mechanics of Solid - I	3	1	2	5	
CE	4	MA 1404	Numerical Methods and Computational Techniques	3	0	3	5	
CE	4	ME 1407	Thermodynamics	3	1	0	4	27.0
<b>B. Tech. (Civil. Engg.) SEMESTER - V</b>								
CE	5	CE 1514	Civil Engg. Drawing Sessional	0	0	3	2	

CE	5	CE 1512	Engineering Hydrology	3	0	2	4	
CE	5	ME 1511	Fluid Machinery	3	0	3	5	
CE	5	CE 1510	Hydraulics & Open Channel Flow	3	0	0	3	
CE	5	CE 1513	Mechanics of Solid – II	3	0	0	3	
CE	5	CE 1509	Soil Mechanics	3	0	3	5	
CE	5	CE-1511	Structural Analysis I	3	1	0	4	26.0
<b>B. Tech. (Civil. Engg.) SEMESTER - VI</b>								
CE	6	CE 1617	Design of Concrete Structure - I	3	0	3	5	
CE	6	CE 1620	Design of Steel Structures	2	0	3	4	
CE	6	CE 1618	Environmental Engineering - I	3	0	3	5	
CE	6	CE 1615	Soil and Rock Mechanics	3	0	3	5	
CE	6	CE 1616	Structural Analysis-II	3	0	0	3	
CE	6	CE 1619	Transportation Engineering – I	3	0	3	5	27.0
<b>B. Tech. (Civil. Engg.) SEMESTER - VII</b>								
CE	7	CE 1726	Design of Concrete Structure-II	3	0	3	5	
CE	7	CE 1725	Design of Hydraulic Structures	3	0	3	5	
CE	7	CE 17xx	Elective-I	3	0	0	3	
CE	7	CE 17xx	Elective-II	3	0	0	3	
CE	7	CE 1723	Environmental Engineering - II	3	0	0	3	
CE	7	CE 1722	Foundation Engineering.	3	0	0	3	
CE	7	CE 1724	Transportation Engineering - II	3	0	0	3	
CE	7	CE 1721	Vocational Training for 6 Weeks*				2	27.0
<b>B. Tech. (Civil. Engg.) SEMESTER - VIII</b>								
CE	8	CE 1827	Construction Planning and Management	3	0	0	3	
CE	8	CE 1828	Contract, Specification & Estimation	0	0	3	2	
CE	8	CE 18xx	Elective –III	3	0	0	3	
CE	8	CE 18xx	Elective-IV	3	0	0	3	
CE	8	HS 1804	Personnel Management & Industrial Relation	3	0	0	3	
CE	8	CE 1829	Project Work	0	0	20	13	27.0
<b>B. Tech. (Civil. Engg.) ELECTIVE I and II:</b>								
CE	EL 1-2	CE 1755	Air Pollution Engineering	3	0	0	3	
CE	EL 1-2	CE 1756	Airport Planning and Design	3	0	0	3	
CE	EL 1-2	CE 1758	Civil Engineering Drawing using AutoCAD	3	0	0	3	
CE	EL 1-2	CE 1753	Computer Aided Design	3	0	0	3	
CE	EL 1-2	CE 1751	Finite Element Methods	3	0	0	3	
CE	EL 1-2	CE 1752	Geographical Information System and Remote Sensing	3	0	0	3	
CE	EL 1-2	CE 1757	River Hydraulics and Sediment Transport	3	0	0	3	
CE	EL 1-2	CE 1760	Solid Waste Management	3	0	0	3	
CE	EL 1-2	CE 1759	Structural Dynamics	3	0	0	3	
CE	EL 1-2	CE 1761	Traffic Engineering	3	0	0	3	
CE	EL 1-2	CE 1754	Water and Land Management	3	0	0	3	
<b>B. Tech. (Civil. Engg.) ELECTIVE III and IV:</b>								
CE	EL 3-4	CE 1876	Advanced Foundation Engineering	3	0	0	3	
CE	EL 3-4	CE 1878	Bridge Engineering	3	0	0	3	
CE	EL 3-4	CE 1882	Design of Dams	3	0	0	3	
CE	EL 3-4	CE 1871	Design of Water Retaining, Plate and Shell Structures	3	0	0	3	

CE	EL 3-4	CE 1880	Environmental Impact Assessment	3	0	0	3	
CE	EL 3-4	CE 1872	Industrial Waste Treatment	3	0	0	3	
CE	EL 3-4	CE 1881	Pre-Stressed Concrete Design	3	0	0	3	
CE	EL 3-4	CE 1875	Soil Dynamics	3	0	0	3	
CE	EL 3-4	CE 1879	System Engineering	3	0	0	3	
CE	EL 3-4	CE 1873	Transportation Systems and Planning	3	0	0	3	
CE	EL 3-4	CE 1877	Water Power Engineering	3	0	0	3	
CE	EL 3-4	CE 1874	Water Resources Planning and Management	3	0	0	3	

**Transitory Course Curriculum of B.Tech. in Civil Engineering for Students Studying in Annual System of B.Sc. Engg. (Civil Engg.) under Patna University.**

A. For Students who have passed 1<sup>st</sup> year of Annual System of B.Sc. Engg. (Civil) of Patna University (Admission Session 2006-07) and will be moving to the 3<sup>rd</sup> and 4<sup>th</sup> semester in the subsequent session:

**Transitory Course for B. Tech. (Civil Engg.) 3<sup>rd</sup> Semester:**

Deptt.	Semester	Course Code	Course Title	L	T	P	Credits	Total Credit / Sem
<b>B. Tech. (Civil. Engg.) SEMESTER – III (2006-07 Batch)</b>								
CE- T6	3	MA 1303	Mathematics - III	3	1	0	4	
CE- T6	3	CE 1303	Building Science	3	0	3	5	
CE- T6	3	CE 1305	Engineering Geology	3	0	2	4	
CE- T6	3	CE 1302	Environmental Science	3	0	3	5	
CE- T6	3	CE 1304	Field Measurement	3	0	3	5	
CE- T6	3	IT 1301	Fundamentals of Information Technology	3	0	3	5	
CE- T6	3	GE 1303	EAA III -NSS					28.0

**Note: Regular Course Structure will be followed from 4<sup>th</sup> Semester onwards.**

B. For Students who have passed 1<sup>st</sup> and 2<sup>nd</sup> year of Annual System of B.Sc. Engg. (Civil) of Patna University (Admission Session 2005-06) and will be moving to the 5<sup>th</sup> and 6<sup>th</sup> semester in the subsequent session:

**Transitory Course for B. Tech. (Civil Engg.) 5<sup>th</sup> Semester:**

Deptt.	Semester	Course Code	Course Title	L	T	P	Credits	Total Credit / Sem
<b>B. Tech. (Civil. Engg.) SEMESTER – V (2005-06 Batch)</b>								
CE- T5	5	CE 1508	Advanced Surveying	3	0	3	5	
CE- T5	5	CE 1512	Engineering Hydrology	3	0	2	4	
CE- T5	5	ME 1511	Fluid Machinery	3	0	3	5	
CE- T5	5	CE 1510	Hydraulics & Open Channel Flow	3	0	0	3	
CE- T5	5	CE 1513	Mechanics of Solid – II	3	0	0	3	
CE- T5	5	CE 1509	Soil Mechanics	3	0	3	5	
CE- T5	5	CE 1511	Structural Analysis I	3	1	0	4	29.0

**Note: Regular Course Structure will be followed from 6<sup>th</sup> Semester onwards.**

C. For Students who have passed 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year of Annual System of B.Sc. Engg. (Civil) of Patna University (Admission Session 2004-05) and will be moving to the 7<sup>th</sup> and 8<sup>th</sup> semester in the subsequent session:

**Transitory Course for B. Tech. (Civil Engg.) 7<sup>th</sup> Semester:**

Deptt.	Semester	Course Code	Course Title	L	T	P	Credits	Total Credit / Sem
<b>B. Tech. (Civil. Engg.) SEMESTER – VII (2004-05 Batch)</b>								
CE- T4	7	CE 1726	Design of Concrete Structure-II	3	0	3	5	
CE- T4	7	CE 1725	Design of Hydraulic Structures	3	0	3	5	
CE- T4	7	CE 17xx	Elective-I	3	0	0	3	
CE- T4	7	CE 17xx	Elective-II	3	0	0	3	
CE- T4	7	CE 1722	Foundation Engineering	3	0	0	3	
CE- T4	7	CE 1716	Structural Analysis-II	3	0	0	3	
CE- T4	7	CE 1719	Transportation Engineering – I	3	0	3	5	
CE- T4	7	CE 1721	Vocational Training for 6 Weeks*				2	29.0
<b>B. Tech. (Civil. Engg.) SEMESTER – VIII (2004-05 Batch)</b>								
CE- T4	8	CE 1827	Construction Planning and Management	3	0	0	3	
CE- T4	8	CE 1828	Contract, Specification & Estimation	0	0	3	2	
CE- T4	8	CE 18xx	Elective –III	3	0	0	3	
CE- T4	8	CE 18xx	Elective-IV	3	0	0	3	
CE- T4	8	HS 1804	Personnel Management & Industrial Relationship	3	0	0	3	
CE- T4	8	CE-1829	Project Work	0	0	20	13	
CE- T4	8	CE 1824	Transportation Engineering – II	3	0	0	3	30.0

**Note: Elective subjects are same as for the regular semester course structure.**