

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. Tech. (Civil. Engg.) SEMESTER - I								
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. Tech. (Civil. Engg.) SEMESTER - II								
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. Tech. (Civil. Engg.) SEMESTER - III								
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. Tech. (Civil. Engg.) SEMESTER - VI								
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. Tech. (Civil. Engg.) SEMESTER - V								
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. Tech. (Civil. Engg.) SEMESTER - VI								
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. Tech. (Civil. Engg.) SEMESTER - VII								
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. Tech. (Civil. Engg.) SEMESTER - VIII								
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. Tech. (Civil. Engg.) ELECTIVE I and II:								
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. Tech. (Civil. Engg.) ELECTIVE III and IV:								
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 1st year of Annual System of B.Sc. Engg. (Civil) of Patna University (Admission Session 2006-07) and will be moving to the 3rd and 4th semester in the subsequent session:

Transitory Course for B. Tech. (Civil Engg.) 3rd Semester:

Deptt.	Semester	Course Code	Course Title	L	T	P	Credits	Total Credit / Sem
B. Tech. (Civil. Engg.) SEMESTER – III (2006-07 Batch)								
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 4th Semester onwards.

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

Transitory Course for B. Tech. (Civil Engg.) 5th Semester:

Deptt.	Semester	Course Code	Course Title	L	T	P	Credits	Total Credit / Sem
B. Tech. (Civil. Engg.) SEMESTER – V (2005-06 Batch)								
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 6th Semester onwards.

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

Transitory Course for B. Tech. (Civil Engg.) 7th Semester:

Deptt.	Semester	Course Code	Course Title	L	T	P	Credits	Total Credit / Sem
B. Tech. (Civil. Engg.) SEMESTER – VII (2004-05 Batch)								
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. Tech. (Civil. Engg.) SEMESTER – VIII (2004-05 Batch)								
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.