CIVIL ENGINEERING (B.Tech.)

	Semester I						Semester – II				
Course code	Course Name	Credit Structure		Course Course Name			Credit Structure				
		L	Т	P	C	MA 106	Linear Algebra and	L	Т	P	C
CH 103+	Chemistry	2	1	0	6	MA 108	Ordinary Differential Equations I	3	1	0	8
CS 101	Computer Programming	2	0	2	6	CH 103+	Chemistry	2	1	0	6
HS 101	Economics	3	0	0	6	PH 103*	Electricity and Magnetism	2	1	0	6
MA 105	Calculus	3	1	0	8	PH 105*	Modern Physics	3	1	0	8
PH 103*	Electricity and Magnetism	2	1	0	6	CE 102	Engineering Mechanics	2	1	0	6
PH 105*	Modern Physics	2	1	0	6	IC 102	Data Analysis and Interpretations	2	1	0	6
CH 117+	Chemistry Lab	0	0	3	3	CH 117*	Chemistry Lab.	0	0	3	3
ME 113*	Workshop Practice	0.5	0	3	4	ME 113+	Workshop Practice	0.5	0	3	4
ME 119*	Engineering Graphics and Drawing	1	0	3	5	ME 119+	Engineering Graphics and Drawing	0	1	3	5
PH 117+	Physics Lab	0	0	3	3	PH 117*	Physics Lab.	0	0	3	3
NC 101#	National Cadet Corps (NCC)	0	0	0	P/NP	NC 102#	National Cadet Corps (NCC)	0	0	0	P/NP
NO 101#	National Sports Organization (NSS)	0	0	0	P/NP	NO 102#	National Sports Organization (NSS)	0	0	0	P/NP
NS 101#	National Service Scheme (NSO)	0	0	0	P/NP	NS 102#	National Service Scheme (NSO)	0	0	0	P/NP
+ Only fo	of these two courses and any one of these Lab cor D1 D2 e of these three P/NP courses	ourses or	nly for I	D3 D4		+ Only for	these two courses and any one of these Lab courses D3 D4 of these three P/NP courses	rses only	for D1	D2	

CIVIL ENGG. DEPT. (B.Tech) COURSE CURRICULUM FOR THE NEW PROGRAMME w.e.f. 2007 BATCH

	Semester III					Semester –IV						
Course code	Course Name	C			Course Course Name			Credit Structure				
		L	T	P	C			L	T	P	C	
MA 207	Differential Equations II (half Semester course)	3	1	0	4	ES 200 And HS 200	Environmental Studies: Science and Engg And Environmental Studies	3	0	0	3	
EE 101	Introduction to Electrical and Electronics Circuits	3	1	0	8	CE 222	Structural Mechanics I	2	1	0	6	
IC 211	Experimental and Measurement Lab	0	0.5	3	4	CE 206	Hydraulic Engineering	2	1	0	6	
CE 201	Solid Mechanics	3	1	0	8	CE 204	Geodesy	2	1	0	6	
CE 211	Solid Mechanics Lab	0	0	3	3	CE 218	Hydraulic Design Lab	0	1	3	5	
CE 205	Fluid Mechanics	2	1	0	6	CE 216	Geodesy Lab	0	0	3	3	
CE 213	Fluid Mechanics Lab	0	0	3	3							
	Total	11	4.5	9	36		Total	9	4	6	32	
COURSE	FOR HONOURS REQUIREMENT					COURSE	FOR HONOURS REQUIREMENT					
CE 463 Or	Probabilistic and Statistical Methods	2	1	0	6	CE 469 or	Advanced Solid Mechanics	2	1	0	6	
CE 465	Numerical Methods in Civil Engg	2	1	0	6	CE 408	Water Quality Modeling and Management	2	1	0	6	
COURSE	FOR MINOR REQUIREMENT		•		•	COURSE	FOR MINOR REQUIREMENT			•		
CE 102	Engineering Mechanics	2	1	0	6	CE 201 Or	Solid Mechanics	2	1	0	6	

COURSE CURR		. DEPT. (B NEW PROC	.Tech) GRAMME w.e.f. 2007 BATCH				
		CE 205	Fluid Mechanics	2	1	0	6

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	Semester V					Semester –VI						
Course code	Course Name	Cı			Course Code			Credit Structure				
		L	T	P	C			L	T	P	C	
HS 301/ HS 303/ HS 305/ HS 307	Philosophy/ Psychology/ Literature/ Sociology	3	0	0	6	CE 304	Soil Mechanics II	2	1	0	6	
CE 303	Soil Mechanics I	2	1	0	6	CE 310	Transportation Engineering I	2	1	0	6	
CE 317	Structural Mechanics II	2	1	0	6	CE 308	Design of Structures II	2	1	0	6	
CE 307	Design of Structures I	3	0	0	6		Institute Elective I (from any dept./centre/school/IDP)	2	1	0	6	
CE 319	Soil Mechanics Lab I	0	0	3	3	CE 314	Soil Mechanics Lab II	0	0	3	3	
CE 315	Design Lab I	0	0	3	3	CE 328	Transportation Engineering Lab I	0	0	3	3	
CE 321	Materials and Structures Lab	0	0	3	3	CE 318	Design Lab II	0	0	3	3	
	Total	10	2	9	33		Total	8	4	9	33	
COURSE	ES FOR HONOURS REQUIREMENT					COURSES	S FOR HONOURS REQUIREMENT					
CE 401 or	Water Resources Engg.	2	1	0	6	CE 462 Or	Structural Dynamics	2	1	0	6	
CE 426	Hydraulic Structures	2	1	0	6	CE 434	Traffic Analysis and Design	2	1	0	6	
COURSE	ES FOR MINOR REQUIREMENT					COURSES	S FOR MINOR REQUIREMENT					
CE 310	Transportation Engg. I	2	1	0	6	CE 201	Solid Mechanics	2	1	0	6	
						CE 205	Fluid Mechanics	2	1	0	6	
						CE 303	Soil Mechanics I	2	1	0	6	

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Semester VII					Semester –VIII					
Course Name	Cı	Credit Structure		Course Name Code		Credit Structure				
	L	T	P	C			L	T	P	C
Transportation Engineering II	2	1	0	6		Elective III	2	1	0	6
Elective I	2	1	0	6		Elective IV	2	1	0	6
Elective II	2	1	0	6		Elective V	2	1	0	6
Institute Elective II (from any dept./centre/school/IDP)	2	1	0	6		Elective VI	2	1	0	6
Transportation Engineering Lab II	0	0	3	3						
Total	8	4	3	27		Total	8	4	0	24
ES FOR HONOURS REQUIREMENT					COURSES	S FOR HONOURS REQUIREMEN	T			
One course from List "A"	2	1	0	6		One course from list "A"	2	1	0	6
ES FOR MINOR REQUIREMENT					COURSES	S FOR MINOR REQUIREMENT				
Transportation Engineering I	2	1	0	6	CE 303	Soil Mechanics I	2	1	0	6
	Course Name Transportation Engineering II Elective I Elective II Institute Elective II (from any dept./centre/school/IDP) Transportation Engineering Lab II Total S FOR HONOURS REQUIREMENT One course from List "A"	Course Name L Transportation Engineering II Elective I Elective II Institute Elective II (from any dept./centre/school/IDP) Transportation Engineering Lab II Total ES FOR HONOURS REQUIREMENT One course from List "A" 2 ES FOR MINOR REQUIREMENT	Course Name L T Transportation Engineering II 2 1 Elective I 2 1 Elective II 2 1 Institute Elective II (from any dept./centre/school/IDP) Transportation Engineering Lab II 0 0 Total 8 4 ES FOR HONOURS REQUIREMENT One course from List "A" 2 1	Course Name L T P Transportation Engineering II 2 1 0 Elective I 2 1 0 Elective II 2 1 0 Institute Elective II (from any dept./centre/school/IDP) Transportation Engineering Lab II 0 0 3 Total 8 4 3 ES FOR HONOURS REQUIREMENT One course from List "A" 2 1 0	Course Name Credit Structure L T P C Transportation Engineering II 2 1 0 6 Elective I 2 1 0 6 Elective II 2 1 0 6 Institute Elective II (from any dept./centre/school/IDP) 2 1 0 6 Transportation Engineering Lab II 0 0 3 3 Total 8 4 3 27 S FOR HONOURS REQUIREMENT One course from List "A" 2 1 0 6 ES FOR MINOR REQUIREMENT	Course Name	Course Name Credit Structure Course Code	Course Name	Course Name	Course Name

Electives 'A'

CE 482	Construction Management
CE 324	Engineering Law
CE 465	Numerical Methods in Civil Engineering
CE 414	Water Resources and Waste Water Engineering
CE 641	Environmental Geomechanics
CE 402	Introduction to Geotechnical Earthquake Engineering
CE 416	Pavement Analysis and Design
CE 418	Introduction to Finite Elements Methods
CE 419	Physical Modelling in Geotechnics
CE 403	Advanced Design of Structures
CE 407	Foundation Engineering
CE 410	Introduction to Offshore Engineering
CE 422	Hydraulic Structures
CE 424	Ground Water Hydrology
CE 442	Machine Foundations
CE 444	Advanced Geotechnical Analysis
CE 448	Prestressed Concrete Design
CE 463	Probabilistic and Statistical Methods in Civil Engineering
CE 472	Transportation Planning and Management
CE 478	Plastic Analysis and Design
CE 480	Computer Aided Design of Civil Engineering Systems
CE 484	Concrete Technology
CE 486	Rock Mechanics & Tunnelling Technology
CE 488	Environmental Geotechnics
CE 490	Elements of Remote Sensing
CE 492	Reinforced Earth
CE 610	Earthquake Engineering
CE 620	Advanced Finite Element Methods
CE 645	Geotechnical Centrifuge Modelling
CE 676	Water Resources System
CE 740	Traffic Engineering

CE 748	Materials, Construction and Design of Pavements
CE 746	Reinforced Earth and Geotextiles
CE 754	Economic Evaluation and Analysis of Transportation Projects
CE 632	Ground Improvement