

NEW HORIZON COLLEGE OF ENGINEERING, BANGALORE

Autonomous college affiliated to VTU, Accredited by NAAC with 'A' grade & NBA

DEPARTMENT OF CIVIL ENGINEERING

Scheme of III Semester B.E Program

Sl. No	Course Code	Course	BOS	Credit Distribution				Overall Credits	Contact Hours	Marks		
				L	T	P	S			CIE	SEE	Total
1	20CIV31A	Applied Mathematics-III	BS	2	1	0	0	3	4	50	50	100
2	20HSS321A	Economics for Engineers	HSS	2	0	0	0	2	2	25	25	50
3	20HSS324/ 20HSS325	Aadalitha Kannada / Vyavaharika Kannada	HSS	1	0	0	0	1	1	25	25	50
4	19CIV33	Building Materials & Construction	CIV	3	0	0	0	3	3	50	50	100
5	19CIV34	Strength of Materials	CIV	2	1	0	0	3	4	50	50	100
6	19CIV35	Plane Surveying	CIV	3	0	0	0	3	3	50	50	100
7	19CIV36	Mechanics of Fluids	CIV	2	1	0	0	3	4	50	50	100
8	19CIV37	Material testing Lab	CIV	0	0	2	0	2	4	25	25	50
9	19CIV38	Plane Surveying Lab	CIV	0	0	1.5	0	1.5	3	25	25	50
10	19CIV39	Mechanics of Fluids Lab	CIV	0	0	1.5	0	1.5	3	25	25	50
** The following courses are exclusively for Lateral Entry Students												
1	<i>20DMAT31A</i>	<i>Basic Applied Mathematics - I</i>	BS	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>25</i>	<i>25</i>	<i>50</i>
2	<i>19HSS171</i>	<i>Essential English</i>	HSS	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>25</i>	<i>25</i>	<i>50</i>
Total								23	31	375	375	750

Scheme of IV Semester B.E Program

Sl. No	Course Code	Course	BOS	Credit Distribution				Overall Credits	Contact Hours	Marks		
				L	T	P	S			CIE	SEE	Total
1	20CIV41A	Applied Mathematics-IV	BS	2	1	0	0	3	4	50	50	100
2	20HSS422A	Life Skills for Engineers	HSS	3	0	0	0	3	3	50	50	100
3	20HSS423A	Environmental Science and Awareness	HSS	0	0	0	0	0	1	25	25	50
4	19CIV43	Concrete Technology	CIV	3	0	0	0	3	3	50	50	100
5	19CIV44	Analysis of Determinate Structures	CIV	2	1	0	0	3	4	50	50	100
6	19CIV45	Higher Surveying	CIV	3	0	0	0	3	3	50	50	100
7	19CIV46	Applied Hydraulics and Machinery	CIV	2	1	0	0	3	4	50	50	100
8	19CIV47	Higher Surveying Lab	CIV	0	0	1.5	0	1.5	3	25	25	50
9	19CIV48	Applied Hydraulics and Machinery Lab	CIV	0	0	1.5	0	1.5	3	25	25	50
10	19CIV49	Mini Project - I	CIV	0	0	2	0	2	4	25	25	50
<i>** The following courses are exclusively for Lateral Entry Students</i>												
11	<i>20DMAT41A</i>	<i>Basic Applied Mathematics - II</i>	BS	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>25</i>	<i>25</i>	<i>50</i>
12	<i>18HSS272</i>	<i>Constitution of India & Professional Ethics</i>	HSS	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>25</i>	<i>25</i>	<i>50</i>
Total								23	32	400	400	800

Scheme of V Semester B.E Program

Sl. No	Course Code	Course	BOS	Credit Distribution				Overall Credits	Contact Hours	Marks		
				L	T	P	S			CIE	SEE	Total
1	20CIV51	Hydrology & Irrigation Engineering	CIV	3	0	0	0	3	3	50	50	100
2	20CIV52	Design of RC Structural Elements	CIV	2	1	0	0	3	4	50	50	100
3	20CIV53	Analysis of Indeterminate Structures	CIV	2	1	0	0	3	4	50	50	100
4	20CIV54	Basics of Geotechnical Engineering	CIV	2	1	0	0	3	4	50	50	100
5	20CIV55	Highway Engineering	CIV	3	0	0	0	3	3	50	50	100
6	20CIV56*	Professional Elective-I	CIV	3	0	0	0	3	3	50	50	100
7	20CIV57	Concrete Technology Lab	CIV	0	0	1.5	0	1.5	3	25	25	50
8	20CIV58	Basics of Geotechnical Engineering Lab	CIV	0	0	1.5	0	1.5	3	25	25	50
9	20CIV59	Mini Project - II	CIV	0	0	2	0	2	4	25	25	50
Total								23	31	375	375	750

Professional Elective -I	
Course Code	Course
20CIV561	Advanced Surveying
20CIV562	Urban Transport Planning
20CIV563	Open Channel Hydraulics
20CIV564	Advanced Concrete Technology

Scheme of VI Semester B.E Program

Sl. No	Course Code	Course	BOS	Credit Distribution				Overall Credits	Contact Hours	Marks		
				L	T	P	S			CIE	SEE	Total
1	20CIV61	Environmental Engineering	CIV	3	0	0	0	3	3	50	50	100
2	20CIV62	Design and Detailing of RC Structural Element	CIV	2	1	0	0	3	4	50	50	100
3	20CIV63	Applied Geotechnical Engineering	CIV	2	1	0	0	3	4	50	50	100
4	20CIV64*	Professional Elective-II	CIV	3	0	0	0	3	3	50	50	100
5	20CIV65*	Professional Elective-III	CIV	3	0	0	0	3	3	50	50	100
6	20NHOPXX	Open Elective-I		3	0	0	0	3	3	50	50	100
7	20CIV66	Environmental Engineering-Lab	CIV	0	0	1.5	0	1.5	3	25	25	50
8	20CIV67	Mini project – III	CIV	0	0	1.5	0	1.5	3	25	25	50
9	20CIV68	Mini project - IV	CIV	0	0	2	0	2	4	25	25	50
Total								23	30	375	375	750

Professional Elective -II		Professional Elective -III	
Course code	Course	Course code	Course
20CIV641	Traffic Engineering	20CIV651	Structural Dynamics
20CIV642	Alternate Building Material & technology	20CIV652	Pre-Fabricated Structures
20CIV643	Ground Improvement Technique	20CIV653	Design of Pre Stressed Concrete Structures
20CIV644	Mechanization in Construction	20CIV654	Pavement Material & Construction

Open Elective -I	
Course Code	Course
20NHOP601	Big Data Analytics using HP Vertica-1
20NHOP602	VM Ware Virtualization Essentials-1
20NHOP604	Big Data Analytics using HP Vertica-2
20NHOP605	VM Ware Virtualization Essentials-2
20NHOP607	SAP
20NHOP608	Schneider-Industrial Automation
20NHOP609	CISCO-Routing and Switching-1
20NHOP610	Data Analytics
20NHOP611	Machine Learning
20NHOP612	CISCO-Routing and switching - 2
20NHOP613	IIOT – Embedded System
20NHOP614	Block Chain
20NHOP615	Product Life Cycle Management
20NHOP617A	Network security and Cryptography
20NHOP618A	Physical Design
20NHOP619A	AI Data Analysis with Python

Scheme of VII Semester B.E Program

Sl. No	Course Code	Course	BOS	Credit Distribution				Overall Credits	Contact Hours	Marks		
				L	T	P	S			CIE	SEE	Total
1	20CIV71A	Construction Management & Engineering Economics	CIV	3	0	0	0	3	3	50	50	100
2	20CIV72A	Design and drawing of Steel structural elements	CIV	2	1	0	0	3	4	50	50	100
3	20CIV73A	Estimation & Valuation	CIV	2	1	0	0	3	4	50	50	100
4	20CIV74*A	Professional Elective-IV	CIV	3	0	0	0	3	3	50	50	100
5	20CIV75*A	Professional Elective-V	CIV	3	0	0	0	3	3	50	50	100
6	20NHOPXX	Open Elective-II		3	0	0	0	3	3	50	50	100
7	20CIV76A	Drawing of Steel structural elements Lab	CIV	0	0	1.5	0	1.5	3	25	25	50
8	20CIV77A	Highway Materials Lab	CIV	0	0	1.5	0	1.5	3	25	25	50
9	20CIV78A	Project Work phase-I	CIV	0	0	2	0	2	-	25	25	50
Total								23	26	375	375	750

Professional Elective-IV		Professional Elective-V	
Course Code	Course	Course Code	Course
20CIV741A	Matrix Method of Structural Analysis	20CIV751A	Retrofitting and Rehabilitation of structures
20CIV742A	Theory of Elasticity	20CIV752A	Construction Quality and Safety
20CIV743A	Solid Waste Management	20CIV753A	Design of Masonry Structures
20CIV744A	Design & Drawing of Hydraulic Structures	20CIV754A	Water Resources Engineering
20CIV745A	Transportation systems	20CIV755A	Recycling of Waste water

Open Elective - II	
Course Code	Course
20NHOP701	Big Data Analytics using HP Vertica-1
20NHOP702	VM Ware Virtualization Essentials-1
20NHOP704	Big Data Analytics using HP Vertica-2
20NHOP705	VM Ware Virtualization Essentials-2
20NHOP707	SAP
20NHOP708	Schneider-Industrial Automation
20NHOP709	CISCO-Routing and Switching-1
20NHOP710	Data Analytics
20NHOP711	Machine Learning
20NHOP712	CISCO-Routing and switching - 2
20NHOP713	IIOT – Embedded System
20NHOP714	Block Chain
20NHOP715	Product Life Cycle Management
20NHOP717A	Network security and Cryptography
20NHOP718A	Physical Design
20NHOP719A	AI Data Analysis with Python

Scheme of VIII Semester B.E Program

Sl. No	Course Code	Course	BOS	Credit Distribution				Overall Credits	Contact Hours weekly	Marks		
				L	T	P	S			CIE	SEE	Total
1	20CIV81*A	Professional Elective-VI	CIV	3	0	0	0	3	3	50	50	100
2	20CIV82*A	Professional Elective-VII	CIV	3	0	0	0	3	3	50	50	100
3	20CIV83A	Internship	CIV	0	0	4	0	4	-	50	50	100
4	20CIV84A	Project Work phase-II	CIV	0	0	10	0	10	-	150	150	300
Total								20	6	300	300	600

Professional Elective-VI		Professional Elective-VII	
Course Code	Course	Course Code	Course
20CIV811A	Industrial waste water treatment	20CIV821A	Pavement Design
20CIV812A	Numerical Method of Civil Engineering	20CIV822A	Rural water Supply & Sanitation
20CIV813A	Earth and Earth Retaining Structures	20CIV823A	Advanced R.C Structures
20CIV814A	Bridge Engineering	20CIV824A	Ground Water Hydrology
20CIV815A	Air pollution	20CIV825A	Advanced Pre-stressed Concrete Structures