COURSE CATEGORIES- CIVIL ENGINEERING

S. No.	Category	Description
1	CB – Chemistry and Biology	Courses in Chemistry and Biology.
2	CE – Civil Engineering	Courses related to Civil Engineering
3	CS – Computer Science	Courses in Computer Science and Technology
4	EE – Electrical Engineering	Courses of Electrical Engineering
6	ME – Mechanical Engineering	Courses in Mechanical Engineering
7	HS – Humanities and Social Sciences	Courses in Language, Culture, Philosophy, etc.
8	SE – Society & Enterprise	Includes projects and courses in Media, Industrial Engineering, Management, Finance, etc.

CURRICULUM-CIVIL ENGINEERING

		Semester 1	L	T	P	Credits
	Code	Course	L	T	P	Credits
1	CE-111	Engineering Mathematics - I	3	1	0	3
2	CE-112	Physics for Civil Engineering	3	1	0	3
3	CE-113	Communication Skills	3	1	0	3
4	CE-114	Building Materials	3	1	0	3
5	CE-115	Engineering Graphics	1	0	3	3
6	CE-116	Physics Lab	0	0	3	1
7	CE-117	Communications Lab	0	0	3	1
8	CE-118	Building Materials Lab	0	0	3	1
9	CE-119	Media Project	1	0	3	2
10	HS 102	French Language & Culture I	0	2	0	0
		Hours =	33			20

		Semester 2	L	T	P	Credits
	Code	Course	L	T	P	Credits
1	CE-121	Engineering Mathematics - II	3	1	0	3
2	CE-122	Chemistry for Civil Engineering	3	1	0	3
3	CE-123	Basic Electrical and Electronics Engineering	3	1	0	3
4	CE-124	Basics of Computer Science	2	0	2	3
5	CE-125	Strength of Materials	3	1	0	3
6	CE-126	Chemistry Lab	0	0	3	1
7	CE-127	Electrical & Electronics Lab	0	0	3	1
8	CE-128	Workshop Practice - I	1	0	3	2
9	HS 104	French Language & Culture II	0	2	0	0
		Hours =	30			19

Prabhakar Singh

Dr. Prabhakar Singh
Coordinator - Civil Engineering

Semester 3

	Code	Course	L	T	P	Credits
1	CE-211	Engineering Mathematics - III	3	1	0	3
2	CE-212	Structural Analysis - I	3	1	0	3
3	CE-213	Surveying - I	3	1	0	3
4	CE-214	Engineering Geology	3	1	0	3
5	CE-215	Hydraulics	3	1	0	3
6	CE-216	Transportation Engineering - I (Highway Engineering)	3	1	0	3
7	CE-217	Structural Analysis Lab	0	0	3	1
8	CE-218	Surveying - I Lab	0	0	3	2
9	CE-219	Engineering Geology Lab	0	0	3	1
10	CE-210	Hydraulics Lab	0	0	3	2
11	HS 206	French Language & Culture III	0	2	0	0
		Hours = 36				24

Semester 4

	Code	Course	L	T	P	Credits
1	CE-221	Structural Analysis - II	3	1	0	3
2	CE-222	Surveying - II	3	1	0	3
3	CE-223	Environmental Engineering - I	3	1	0	3
4	CE-224	Design Thinking	1	0	3	2
5	CE-225	Transportation Engineering - II	3	1	0	3
6	CE-226	Geotechnical Engineering - I (Soil Mechanics)	3	1	0	3
7	CE-227	Surveying - II Lab	0	0	3	2
8	CE-228	Environmental Engineering - I Lab	0	0	3	2
9	CE-229	Transportation Engineering Lab	0	0	3	1
10	CE-220	Geotechnical Engineering - I Lab	0	0	3	1
11	HS 208	French Language & Culture IV	0	2	0	0
		Hours = 36				23

Prabhakar Singh

Dr. Prabhakar Singh
Coordinator - Civil Engineering

Semester 5						
	Code	Course	L	T	P	Credits
1	MA 305	Mathematics V	3	2	0	4
2	CE 301	Earth and Environmental Sciences	2	0	0	2
3	ME 305	Multiphysics	3	2	0	4
4	CE 307	Computer Aided Engineering Design	2	2	0	3
5	CE 309	Structural Analysis	3	2	0	4
6	E1	Elective	X	X	X	3
7	SE 306	Year-3 Project Phase I	0	2	2	2
8	HS 310	French Language & Culture V	0	2	0	0
						22

Semester 6						
	Code	Course	L	T	P	Credits
1	MA 306	Mathematics VI	2	0	0	2
2	CE 308	Civil Engineering Labs	1	0	4	3
3	CE 312	Soil and rock Mechanics	3	0	2	4
4	CE 310	Fluid Mechanics	3	2	0	4
5	CE314	Design of steel structures	2	2	0	3
6	SE 308	Year-3 Project Phase II	0	3	3	3
7	SE 309	Corporate Management and Finance	3	0	0	3
8	HS 312	French Language & Culture VI	0	2	0	0
						22

Prabhakar Singh

Dr. Prabhakar Singh
Coordinator - Civil Engineering

Semester 7						
	Code	Course	L	T	P	Credits
1	CE411	Reinforced and pre-stressed Concrete Design	3	0	0	3
2	CE413	Construction technology	3	0	0	3
3	CE415	Building materials	3	0	0	3
4	CE416	Transportation Engineering	3	0	0	3
5	CE419	Environmental Engineering	3	0	0	3
6	E3	Elective	X	X	X	3
7	CE 421	Year-4 Project Phase I	0	1	1	1
8	HS 420	Communication Skills and Personality Development	1	2	0	2
9	HS 414	French Language & Culture VII	0	2	0	0
						21

Semester 8						
	Code	Course	L	T	P	Credits
1	CE417	Construction project management	3	0	0	3
2	E4	Elective	X	X	X	3
3	E5	Elective	X	X	X	3
4	CE 422	Year-4 Project Phase II	0	9	9	9
5	SE 410	Entrepreneurship, IPR, Legal	3	0	0	3
6	HS 416	French Language & Culture VIII	0	2	0	0
						21

Dr. Prabhakar Singh
Coordinator - Civil Engineering

R-2017

ELECTIVES LIST (for semesters 5, 6, 7 and 8) – Civil Engineering

S.No.	Code	Course	L	T	P	Credits
1	CE 351	Water resources Engineering	3	0	0	3
2	CE 352	Engineering Hydrology	3	0	0	3
3	CE 453	Foundation Engineering	3	0	0	3
4	CE 454	Earthquake Engineering	3	0	0	3
5	CE 455	Hydraulics and Hydraulic Machinery	3	0	0	3
6	CE 456	Industrial Waste Treatment and Disposal	3	0	0	3
7	CE 457	Renewable and Hydropower Energy	3	0	0	3
8	CE 458	Water Resources Systems Analysis	3	0	0	3
9	CE 459	Air and Noise Pollution	3	0	0	3
10	CE 460	Bridge Engineering	3	0	0	3
11	CE 461	Traffic Engineering & Management	3	0	0	3
12	CE 462	Architecture and Town Planning	3	0	0	3
13	CE 463	Economics and Design of Dams	3	0	0	3
14	CE 464	Advance Concrete Design	3	0	0	3
15	CE 465	Groundwater Engineering	3	0	0	3
16	CE 466	River Engineering	3	0	0	3
17	CE 467	Advance Steel Structures	3	0	0	3
18	CE 468	Dynamics of Structures	3	0	0	3
19	CE 469	Advance Structural Design	3	0	0	3
20	CE 470	Application of Soil Mechanics	3	0	0	3
21	CS 460	Introduction to database management systems	3	0	0	3
22	ME 350	Refrigeration & Air Conditioning	3	0	0	3
23	ME 452	Introduction to Operations Research	3	0	0	3
24	ME 455	Turbomachinery	3	0	0	3
25	ME 457	Mechanics of Materials	3	0	0	3

Dr. Prabhakar Singh
Coordinator - Civil Engineering

27	ME 458	Introduction to IC Engines	3	0	0	3	
28	ME 459	Power Plant Engineering	3	0	0	3	
29	ME 460	Alternative Energy Sources	3	0	0	3	
30	ME 468	Introduction to Combustion	3	0	0	3	
31	ME469	Computational Fluid Dynamics	3	0	0	3	
32	PH304	Physics IV	3	0	0	3	
33	PH451	Lasers: Principles and Applications	3	0	0	3	
34	HS411	Introduction to Social Sciences	3	0	0	3	
35	CB 304	Chemical & Bio Engineering	3	0	0	3	
36	CS 457	Machine Learning	3	0	0	3	
37	CS 452	Data mining	3	0	0	3	
38	CS 304	Object Oriented Programme Development and Languages	2	0	2	3	
39	EE 454	Image Processing and Computer Vision	3	0	0	3	

Prabhakar Singh

Dr. Prabhakar Singh

Coordinator - Civil Engineering