

# ACADEMIC REGULATIONS FOR FOUR-YEAR UNDERGRADUATE DEGREE PROGRAMS

(Applicable to students from the Academic Year 2014-15 and onwards)

Branch: CIVIL

Semester 1						
	Code	Course	L	T	P	Credits
1	MA 101	Math I: Calculus & Ordinary Differential Equations	4	2	0	5
2	PH 101	Physics I: Mechanics & Thermodynamics	4	2	2	6
3	EE 101	Basic Electrical Engineering	2	1	2	3.5
4	ME 101	Introduction to Engineering Design	2	0	2	3
5	SE 101	Introduction to Society & Technology	1	1	0	1.5
6	HS 101	Literature & Philosophy	1	2	0	2
7	HS 102	French language & Culture	0	2	0	
						21

Semester 2						
	Code	Course	L	T	P	Credits
1	MA 102	Math II - Linear Algebra & Applied Analysis	4	2	0	5
2	CB 101	Chemistry	4	2	2	6
3	EE 102	Electronics	2	1	2	3.5
4	CS 101	Introduction to Computer Sciences	2	0	2	3
5	SE 102	Media Project	1	1	0	1.5
6	HS 103	Cinema & Philosophy	1	2	0	2
7	HS 104	French language & Culture	0	2	0	
						21

Semester 3						
	Code	Course	L	T	P	Credits
1	MA 203	Math III – Real Analysis & Algebra	4	2	0	5
2	PH 202	Physics II: Electromagnetism & Optics	4	2	2	6
3	ME 202	Solid Mechanics & Fluid Mechanics	2	2	0	3
4	EE 203	Signals & Systems	2	1	1	3
5	SE 203	Design Thinking	1	0	2	2
6	SE 205	Introduction to Enterprises & Economy	1	1	0	1.5
7	HS 205	Indian English Literature	1	1	0	1.5
8	HS 206	French language & Culture	0	2	0	
						22

Semester 4						
	Code	Course	L	T	P	Credits
1	MA 204	Math IV -Computational Methods & Scientific Computing	3	2	2	5
2	CB 202	Biology	2	0	0	2
3	PH 203	Physics III: Introduction to Modern Physics	2	1	0	2.5
4	ME 203	Material Science	2	1	1	3
5	CS 202	Data Structures and Algorithms	2	0	2	3
6	CE 204	Engineering Surveying	2	0	2	3
7	SE 204	Design Project	0	1	3	2
8	HS 207	Modern Culture & Philosophy	1	1	0	1.5
9	HS 208	French Language & Culture	0	2	0	0
						22

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

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

## ELECTIVES LIST (for semesters 6, 7 and 8)

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 du 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
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