

Curriculum

SCHEME OF INSTRUCTION & EXAMINATION
B.E. (All Branches) I - Semester
(Group B – CSE, CE, EEE, EIE)

S. No.	Course Code	Course Title	Scheme of Instructions				Scheme of Examination			Credits
			L	T	P/ D	Contact Hours/Week	CIE	SEE	Duration in Hours	
MC : Three Week Induction Programme										
Theory Course										
1	MC112CE	Environmental Science	2	-	-	2	30	70	3	-
2	MC113PY	Essence of Indian Traditional Knowledge	2	-	-	2	30	70	3	-
3	BS102MT	Mathematics-I	3	1	-	4	30	70	3	4
4	BS105CH	Chemistry	3	1	-	4	30	70	3	4
5	ES107CS	Programming for Problem Solving	3	-	-	3	30	70	3	3
Practical/ Laboratory Course										
6	BS153CH	Chemistry Lab	-	-	3	3	25	50	3	1.5
7	ES155CS	Programming for Problem Solving Lab	-	-	4	4	25	50	3	2
8	ES157ME	Workshop/ Manufacturing Process	1	-	4	5	50	50	3	3
Total			14	02	11	27	250	500		17.5

SCHEME OF INSTRUCTION & EXAMINATION
B.E. (All Branches) II - Semester
(Group B – CSE, CE, EEE, EIE)

S. No.	Course Code	Course Title	Scheme of Instructions				Scheme of Examination			Credits
			L	T	P/D	Contact Hours/Week	CIE	SEE	Duration in Hours	
Theory Course										
1	MC111PO	Indian Constitution	2	-	-	2	30	70	3	-
2	HS101EG	English	2	-	-	2	30	70	3	2
3	BS103MT	Mathematics-II	3	1	-	4	30	70	3	4
4	BS104PH	Physics	3	1	-	4	30	70	3	4
5	ES106EE	Basic Electrical Engineering	3	1	-	4	30	70	3	4
Practical/ Laboratory Course										
6	HS151EG	English Lab	-	-	2	2	25	50	3	1
7	BS152PH	Physics Lab	-	-	3	3	25	50	3	1.5
8	ES154EE	Basic Electrical Engineering Lab	-	-	2	2	25	50	3	1
9	ES156CE	Engineering Graphics & Design	1	-	4	5	50	50	3	3
		Total	14	03	11	28	275	550		20.5

SCHEME OF INSTRUCTION & EXAMINATION

B.E. (Civil Engineering) III – SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction			Scheme of Examination		Credits
			L	T	Pr/Drg	CIE	SEE	
Theory Courses								
1	BS 205 MT	Mathematics – III	3	1	-	30	70	4
2	ES 301 EE	Basic Electrical Engineering	3	-	-	30	70	3
3	PC 401 CE	Building Materials and Construction	3	-	-	30	70	3
4	PC 402 CE	Solid Mechanics	3	-	-	30	70	3
5	PC 403 CE	Fluid Mechanics	3	-	-	30	70	3
6	PC 404 CE	Surveying and Geomatics	3	-	-	30	70	3
Practical/ Laboratory Courses								
7	PC 451CE	Fluid Mechanics Laboratory	-	-	2	25	50	1
8	PC 452CE	Surveying Laboratory	-	-	2	25	50	1
9	ES 354CE	Building Drawing & Drafting Laboratory	-	-	2 x 3 hrs	25	50	3
		Total	20	1	10			24

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B.E. (Civil Engineering) IV– SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction			Scheme of Examination		Credits
			L	T	Pr/Dr g	CIE	SEE	
Theory Courses								
1	HS 103CM	Finance and Accounting	3	-	-	30	70	3
2	HS102 EG	Effective Technical Communication in English	2	-	-	30	70	2
3	ES 304 CE	Engineering Geology	3	-	-	30	70	3
4	PC 405CE	Mechanics of Materials	3	-	-	30	70	3
5	PC 406CE	Hydraulic Engineering	3	-	-	30	70	3
6	PC 407 CE	Design of Reinforced Concrete Structures	3	-	-	30	70	3
7	PC408 CE	Hydrology	3	-	-	30	70	3
Practical/ Laboratory Courses								
8	ES 355 CE	Engineering Geology Laboratory	-	-	2	25	50	1
9	PC 453 CE	Mechanics of Materials Laboratory	-	-	2	25	50	1
10	PC 454 CE	Hydraulic Engineering Laboratory	-	-	2	25	50	1
		Survey Camp *						
			20	-	6			23

* Survey Camp is to be conducted after the IV Semester in the Summer Vacation. To be evaluated in V Sem

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B.E. (Civil Engineering) V– SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction			Scheme of Examination		Credits
			L	T	Pr/Dr g	CIE	SEE	
Theory Courses								
1	PC 409 CE	Theory of Structures	3	-	-	30	70	3
2	PC 410 CE	Soil Mechanics	3	-	-	30	70	3
3	PC 411 CE	Concrete Technology	3	-	-	30	70	3
4	PC 412 CE	Water Resources Engineering	3	-	-	30	70	3
5	PC 413 CE	Environmental Engineering	3	-	-	30	70	3
6	PC 414 CE	Construction Engineering & Management	3	-	-	30	70	3
Practical/ Laboratory Courses								
7	PC 455 CE	Soil Mechanics Laboratory	-	-	2	25	50	1
8	PC 456 CE	Concrete Technology Laboratory	-	-	2	25	50	1
9	PC 457 CE	Environmental Engineering Laboratory	-	-	2	25	50	1
10	PW701 CE	Survey Camp	-	-	-			1
			18	-	6			22

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B.E. (Civil Engineering) VI- SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction			Scheme of Examination		Credits
			L	T	Pr/Drg	CIE	SEE	
Theory Courses								
1	HS 104 BM	Professional Practice & Ethics	2	-	-	30	70	2
2	PC 415 CE	Design of Steel Structures	3	-	-	30	70	3
3	PC 416 CE	Transportation Engineering	3	-	-	30	70	3
4	PE-1	Professional Elective – I	3	-	-	30	70	3
5	PE-2	Professional Elective - II	3	-	-	30	70	3
6	PE-3	Professional Elective - III	3	-	-	30	70	3
7	OE-I	Open Elective – I	3	-	-	30	70	3
Practical/ Laboratory Courses								
8	PC 458 CE	Transportation Engineering Laboratory	-	-	2	25	50	1
9	PC 459 CE	Computer Applications Laboratory	-	-	2	25	50	1
		Summer Internship*						
			18	-	6			22

* To be conducted after the VI Semester in the Summer Vacation and to be evaluated in VII Sem

Professional Elective – 1		
S. No.	Course Code	Course Title
1	PE 501 CE	Structural Analysis
2	PE 502 CE	Geotechnical Design
3	PE 503 CE	Open Channel Flows
4	PE 504 CE	Construction Equipment and Automation

Professional Elective – 2		
S. No.	Course Code	Course Title
1	PE 505 CE	Earthquake Resistant Design of Structures
2	PE 506 CE	Foundation Engineering
3	PE 507 CE	Ground Water Engineering
4	PE 508 CE	Sustainable Construction Methods

Professional Elective – 3		
S. No.	Course Code	Course Title
1	PE 509 CE	Advanced Concrete Technology
2	PE 510 CE	Road Safety Engineering
3	PE 511 CE	Design of Irrigation Structures
4	PE 512 CE	Infrastructure Engineering

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B.E. (Civil Engineering) VII- SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction			Scheme of Examination		Credits
			L	T	Pr/ Drg	CIE	SEE	
Theory Courses								
1	PC426CE	Estimation and Specification	2	-	-	30	70	2
2	ES310 CE	Disaster Preparedness & Planning	3	-	-	30	70	3
3	PE	Professional Elective -4	3	-	-	30	70	3
4	PE	Professional Elective -5	3	-	-	30	70	3
5	PE	Professional Elective -6	3	-	-	30	70	3
6	OE	Open Elective -2	3	-	-	30	70	3
7	MC 802 HS	Essence of Indian Traditional Knowledge	2	-	-	30	70	-
Practical/ Laboratory Courses								
8	PC427CE	Estimation and Specification Laboratory	-	-	2	25	50	1
9	PW 702CE	Summer Internship Evaluation	-	-	-	50		3
10	PW 703CE	Project Work - I			6	50		3
			18	-	6			23

*Technical Report and Seminar / based on summer industrial Internship/Mini Project

Professional Elective - 4		
S.No.	Course Code	Course Title
1	PE 513 CE	Prestressed Concrete
2	PE 514 CE	Highway Construction and Management
3	PE 515 CE	Environmental Impact Assessment of Civil Engineering Projects
4	PE 516 CE	Instrumentation & Sensor Technologies for Civil Engineering Applications

Professional Elective - 5			Professional Elective - 6		
S.No.	Course Code	Course Title	S.No.	Course Code	Course Title
1	PE 517 CE	Structural Engineering Design & Detailing	1	PE 521 CE	Finite Element Method
2	PE 518 CE	Intelligent Transportation Systems	2	PE 522 CE	Urban Transportation Planning
3	PE 519 CE	Water and Air Quality Modelling	3	PE 523 CE	Surface Hydrology
4	PE 520 CE	Principles of Green Buildings	4	PE 524 CE	GIS and Remote Sensing

SCHEME OF INSTRUCTION & EXAMINATION

B.E. (Civil Engineering) VIII- SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction			Scheme of Examination		Credits
			L	T	Pr/ Drg	CIE	SEE	
Theory Courses								
1	MC 803 HS	Constitution of India	2	-	-	30	-	-
2	PE	Professional Elective – 7	3	-	-	30	70	3
3	OE	Open Elective -3	3	-	-	30	70	3
Practical/ Laboratory Courses								
4	PW 704 CE	Project Work - II	-	-	10	50	100	5
			8	-	10			11

Professional Elective – 7		
S.No.	Course Code	Course Title
1	PE 525 CE	Advanced Reinforced Concrete Design
2	PE 526 CE	Ground Improvement Techniques
3	PE 527 CE	Principles of Climate Change
4	PE 528 CE	Repair and Rehabilitation Techniques