

### **DEPARTMENT OF CIVIL ENGINEERING**

#### Diploma in Civil Engineering-2023

#### Mandatory Induction Program (Duration: 1 week)

- Physical activity
- Creative Arts
- Universal Human Values
- Literary
- Proficiency Modules
- Lectures by Eminent People
- Visits to local Areas
- Familiarization to Dept./Branch & Innovations

Different components of Mandatory Induction Program will be implemented as per the guidelines of Regulatory Bodies.

#### SEMESTER - I

Course Code	Course Name	Course		urs pe week	r	Credits	Total Marks
		Туре	L	Т	Р		
HS101	Communication Skills in English	HS	2	0	0	2	50
BS101	Applied Chemistry	BS	3	0	0	3	100
BS102	Mathematics-I	BS	3	0	0	3	100
ES101	Introduction to IT Systems	ES	3	0	0	3	100
ES102	Engineering Mechanics	ES	3	0	0	3	100
HS191	Communication Skills in English Lab	HS	0	0	2	1	50
BS191	Applied Chemistry lab	BS	0	0	3	1.5	100
ES191	Introduction to IT Systems	ES	0	0	2	1	50
ES192	Engineering Mechanics Lab	ES	0	0	2	1	50
ES193	Engineering Workshop Practice	ES	0	0	3	1.5	100
	Total						800
AU-1	Yoga and Sport	MC	0	0	1	0	0
	Total						800

**Total Hours: 27** 

#### SEMESTER – II

Course Code	Course Name	Course Type	Hours per week			Credits	Total
	333	,,	L	Т	Р	2 20.000	Marks
BS201	Applied Physics	BS	3	0	0	3	100
BS202	Mathematics-II	BS	3	1	0	4	100
ES201	Fundamentals of Electrical & Electronics	ES	3	0	0	3	100
	Engineering						
ES202	Computer Programming	ES	3	0	0	3	100
BS291	Applied Physics Lab	BS	0	0	3	1.5	100
ES291	Fundamentals of Electrical & Electronics	ES	0	0	2	1	50
	Engineering Lab						
ES292	Computer Programming Lab	ES	0	0	2	1	50
ES293	Engineering Graphics	ES	0	0	3	1.5	100
	Total				18	700	
AU-2	Environmental Science	AU	2	0	0	0	0

**Total Hours: 25** 



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#### SEMESTER-III

Course Code	Course Name	Course Type	Н	ours p		Credits	Total Marks
			L	Т	Р		
DCEPC301	Building Material and Construction	PC	3	0	0	3	100
DCEPC391	Construction Material Lab	PC	0	0	2	1	50
DCEPC302	Surveying	PC	3	0	0	3	100
DCEPC392	Surveying Lab - I	PC	0	0	2	1	50
DCEPC303	Mechanics of Materials	PC	3	0	0	3	100
DCEPC393	Mechanics of Materials Lab	PC	0	0	2	1	50
DCEPC304	Concrete Technology	PC	3	0	0	3	100
DCEPC394	Concrete Technology Lab	PC	0	0	3	1.5	100
DCEPC305	Geotechnical Engineering	PC	3	0	0	3	100
DCEPC395	Geotechnical Engineering Lab	PC	0	0	2	1	50
DCEPROJ381	Internship-I / Industrial Training-I	PR	0	0	0	2	50
	Total						850

Total Hours: 26

#### SEMESTER-IV

Course Code	Course Name	Course Type	Hours per week			Credits	Total
			L	T	P		Marks
DCEPC401	Hydraulics	PC	3	0	0	3	100
DCEPC491	Hydraulics Lab	PC	0	0	2	1	50
DCEPC492	Surveying Lab – II	PC	0	0	2	1	50
DCEPC402	Theory of Structure	PC	3	0	0	3	100
DCEPC403	Building Planning and Drawing	PC	1	0	0	1	50
DCEPC493	Building Planning and Drawing Lab	PC	0	0	3	1.5	100
DCEPC404	Transportation Engineering	PC	3	0	0	3	100
DCEPC494	Transportation Engineering Lab	PC	0	0	2	1	50
DCEPE401A/B/C	Program Elective – I  A. Precast and Prestressed Concrete  B. Construction Management C. Rural Construction Technology	PE	3	0	0	3	100
DCEPROJ481	Minor Project	PR	0	0	4	2	100
	Total	1				19.5	800
AU-3	Essence of Indian Knowledge and Tradition	MC	1	0	0	0	0

Total Hours: 28



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#### SEMESTER-V

Course Code	Course Name	Course Type	ı	lours   weel		Credits	Total
	Course Name		L	Т	Р	G. G	Marks
DCEPC501	Design of Steel and RCC structure	PC	3	0	0	3	100
DCEPC591	Design of Steel and RCC structure Lab	PC	0	0	2	1	50
DCEPC502	Estimating, Costing and valuation	PC	3	0	0	3	100
DCEPC503	Water Resource Engineering	PC	3	0	0	3	100
	Program Elective – II						
DCEPE501A/B/C/D	<ul> <li>A. Traffic Engineering</li> <li>B. Solid Waste Management</li> <li>C. Advanced Construction         Technology</li> <li>D. Advanced Geotechnical         Engineering</li> </ul>	PE	3	0	0	3	100
DCEPE502A/B/C	A. Pavement Design & maintenance B. Green Building and Energy Conservation C. Building Services and Maintenance	PE	3	0	0	3	100
DCEOE501A/B/C/D	A. Disaster Management B. Internet of Things C. Professional Orientation D. Fundamentals and application of GIS and Remote sensing	OE	3	0	0	3	100
DCEPROJ581	Internship-II/ Industrial Training-II	PR	0	0	0	3	100
DCEPROJ582	Major Project-I	PR	0	0	2	1	50
Total					23	800	
AU-4	Technical Grooming	MC	1	0	0		

Total Hours: 23



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#### SEMESTER-VI

Course Code	Course Name	Course Type	Hours per week		-		Total Marks
			L T	Р		iviarks	
DCEPE601A/B/C	Program Elective –IV  A. Repairs and Maintenance of Structures  B. Advanced Design of Structures  C. Tendering and Accounts	PE	3	0	0	3	100
HS601	Entrepreneurship and Startups	HS	3	1	0	4	100
DCEOE601A/B/C	Open Elective-II  A. Environment & Sustainable Development for Human Survival  B. Web Designing and Multimedia Technology  C. Renewable Energy Technologies	OE	3	0	0	3	100
DCEOE602A/B/C	Open Elective-I  A. Artificial Intelligence  B. Cyber Security Laws, Standards and IPR  C. Robotics	OE PR	3	0	0	3	100
DCEPROJ681	Major Project-II	PK	U	U	6	3	100
DCEPROJ682	Seminar	PR	0	0	0	1	50
DCEPROJ683	Grand Viva		0	0	0	1	50
Total						18	650
AU-5	Constitution of India	MC	1	0	0	0	0

Total Hours: 20

Total Credit -121

Total Marks -4600