

BIRLA INSTITUTE OF TECHNOLOGY- MESRA, RANCHI

REVISED COURSE STRUCTURE - To be effective from academic session 2021-22

Based on CBCS & OBE Model

Recommended scheme of study for M.Tech Structural Engineering

SEMESTER / Session of Study (Recommended)	Course Level	Category of Course	Course Code	Courses	Mode of delivery & credits <i>L-Lecture; T-Tutorial;P-Practicals</i>			Total Credits <i>C- Credits</i>	
					L <i>(Periods/week)</i>	T <i>(Periods/week)</i>	P <i>(Periods/week)</i>	C	
THEORY									
FIRST / Monsoon	Fifth	Programme Core (PC)	CE 501	Advanced Solid Mechanics	3	0	0	3	
			CE 502	Advanced Structural Analysis	3	0	0	3	
			CE 503	Structural Dynamics	3	0	0	3	
			CE511	Advanced Concrete Technology	3	0	0	3	
		Programme Elective (PE)		PE 1	3	0	0	3	
	LABORATORIES								
		Fifth	Programme Core (PC)	CE504	Structural Design Laboratory – I	0	0	4	2
				CE505	Numerical Analysis Laboratory	0	0	4	2
	TOTAL								19
	SECOND/ Spring	Fifth	Programme Core (PC)	CE506	Finite Element Method	3	0	0	3
CE507				Theory of Plates and Shells	3	0	0	3	
CE508				Earthquake Engineering	3	0	0	3	
			Programme Elective (PE)		PE II	3	0	0	3
					PE III	3	0	0	3
LABORATORIES									
		Fifth	Programme Core (PC)	CE509	Structural Design Laboratory – II	0	0	4	2
				CE510	CAD in Structural Engineering	0	0	4	2
TOTAL								19	
THIRD / Monsoon		Sixth	Programme Core (PC)		Thesis (Part I)				8
	Open Elective (OE)			OE I / MOOC				3	
				OE II / MOOC				3	
	TOTAL								14
FOURTH/ Spring	Sixth	Programme Core (PC)		Thesis (Part II)				16	
	TOTAL								16
GRAND TOTAL FOR M.TECH PROGRAMME (38 + 30)								68	