

BIRLA INSTITUTE OF TECHNOLOGY- MESRA, RANCHI
NEWCOURSE STRUCTURE - To be effective from academic session 2018- 19
Based on CBCS system & OBE model
M.Tech. (Soil Mechanics and Foundation Engineering)

SEMESTER / Session of Study (Recommended)	Course Level	Category of course	Course Code		Mode of delivery & credits <i>L-Lecture, T-Tutorial, P-Practical</i>			Total Credits <i>C-Credits</i>	
					L (Periods/week)	T (Periods/week)	P (Periods/week)		
FIRST / Monsoon	FIFTH	PC	CE501	Advanced Solid Mechanics	3	0	0	3	
			CE515	Advanced Soil Mechanics	3	0	0	3	
			CE516	Advanced Foundation Engineering	3	0	0	3	
		PE	Programme Elective - I	3	0	0	3		
		OE	Open Elective - I	3	0	0	3		
		LABORATORY							
	FIFTH	PC	CE517	Soil Mechanics Laboratory - I	0	0	4	2	
	CE505		Numerical Analysis Laboratory	0	0	4	2		
		TOTAL							19
	SECOND/ Spring	FIFTH	PC	CE518	Dynamics of Soils and Foundations	3	0	0	3
CE519				Sub-surface Investigation	3	0	0	3	
CE520				Earth & Earth Retaining Structures	3	0	0	3	
PE			Programme Elective - II	3	0	0	3		
OE			Open Elective - II	3	0	0	3		
		LABORATORY							
FIFTH		PC	CE521	Soil Mechanics Laboratory - II	0	0	4	2	
CE522			Advanced Instrumentation Laboratory	0	0	4	2		
		TOTAL							19
TOTAL FOR FIRST YEAR								38	
THIRD/ Monsoon	FIFTH	PE	CE523	Rock Mechanics & Tunneling	3	0	0	3	
				Programme Elective - III	3	0	0	3	
		LABORATORY							
	FIFTH	PC	CE524	Remote Sensing & GIS Laboratory	0	0	4	2	
	CE525		Thesis Part 1				1		
	TOTAL							16	
FOURTH/ Spring	FIFTH	PC	CE526	Thesis Part 2				14	
	TOTAL							16	
TOTAL FOR SECOND YEAR								32	
GRAND TOTAL FOR M.TECH PROGRAMME (38 + 32)								70	

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23.5.2019

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING PROGRAMME ELECTIVES (PE) OFFERED FOR M.Tech. (Soil Mechanics and Foundation Engineering)							
PE / LEVEL	Code no.	Name of the PE subjects	Prerequisites Subjects with code	L	T	P	C
5	CE553	Earth & Rock-fill Dam		3	0	0	3
5	CE554	Environmental Geotechnics		3	0	0	3
5	CE555	Environmental Impact Assessment & Sustainability Development		3	0	0	3
5	CE506	Finite Element Method	CE501 Advanced Solid Mechanics	3	0	0	3
5	CE556	Flows through Porous Media		3	0	0	3
5	CE557	Geotechnical Earthquake Engineering		3	0	0	3
5	CE558	Ground Improvement		3	0	0	3
5	CE559	Mining Engineering		3	0	0	3
5	CE560	Remote Sensing, GIS & GPS		3	0	0	3
5	CE561	Sediment Transport		3	0	0	3
5	CE548	Soil Structure Interaction	CE518 Dynamics of Soils & Foundations	3	0	0	3
5	CE562	Stability Analysis of Slopes		3	0	0	3

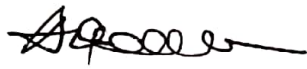
*** PROGRAMME ELECTIVES TO BE OPTED ONLY BY THE DEPARTMENT STUDENTS**

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DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING
OPEN ELECTIVES (OE)*
OFFERED FOR LEVEL 5-6

OE / LEVEL	Code no.	Name of the OE subjects	Prerequisites Subjects with code	L	T	P	C
5	CE575	Environmental and Natural Resource Management		3	0	0	3
5	CE576	Environmental Science and Management		3	0	0	3
5	CE577	Industrial Pollution Control		3	0	0	3
5	CE578	Waste Management		3	0	0	3

* OPEN ELECTIVES TO BE OPTED ONLY BY OTHER DEPARTMENT STUDENTS


23.5.2019