MAULANA AZAD NATIONAL INSTITUTE OF TECHNOLOGY,
BHOPAL - 462003
M.Tech (Structural Engineering)
PROPOSEDSCHEMEAND SYLLABUS (w.e.f.July2024)

FirstSemester:

CourseNo.	Subject	Schemes of studiesperiodsperweek			TotalCredits
		L	T	P	
CE ST 1101	Finite Element Method	3	-	-	3
CE ST 1102	Advanced Design of Structure	3	-	-	3
CE ST 1103	Theory of Elasticity	3	-	-	3
	DepartmentElective -1	3	-	-	3
	DepartmentElective -2	3	-	-	3
CE ST 1105	Lab-I(Computational Lab – I)	-	-	2	1
CE ST 1106	Lab-II (Advanced Concrete Technology	-	-	2	1
CE ST 1107	Seminar-I	-	-	2	1
CE ST 1108	MinorProject-1(SelfLearning)	-	-	-	2
HS PG	Communication Skills	-	-	-	-
TotalHours:21 TotalCredits:20		**TotalSemesterCredits**			**20**

SecondSemester:

Course No.	Subject	Schemesofstudiesperiodsperweek			TotalCredits
		L	T	P	
CE ST 1201	Theory of Plates and Shells	3	-	-	3
CE ST 1202	Structural Dynamics	3	-	-	3
	DepartmentElective –3	3	-	-	3
	DepartmentElective –4	3	-	-	3
	OpenElective	3	-	-	3
CE ST 1205	Lab-III (Computational Lab - II)	-	-	2	1
CE ST 1206	Lab-IV (Dynamics Lab)	-	-	2	1
CE ST 1207	Seminar-II	-	-	2	1
CE ST 1208	MinorProject-2(SelfLearning)	-	-	-	2
TotalHours: 21 TotalCredits:40		**TotalSemesterCredits**			**20**

ThirdSemester:

CourseNo.	Subject	Schemesofstudiesperiodsperweek			TotalCredits
		L	T	P	
CE ST 2101	DissertationPhase-I	-	-	40	20
TotalHours: 40 TotalCredits:60		**TotalSemesterCredits**			**20**

FourthSemester:

CourseNo.	Subject	Schemesofstudiesperiodsperweek			TotalCredits
		L	T	P	
CE ST 2201	DissertationPhase-II	-	-	40	20
TotalHours: 40 TotalCredits:80		**TotalSemesterCredits**			**20**

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Codes of Open Elective will be provided by respective department

ListofDepartmentElectives		**List ofOpenElectives**	
CE ST 1151 / CE ST 1251	SoilStructureInteraction		IntroductiontoUrbanPlanning
CE ST 1152 / CE ST 1252	DesignofSteelConcreteComposite		BioprocessEngineering
CE ST 1153 / CE ST 1253	ExperimentalStressAnalysis		BiophysicsToolsand Techniques
CE ST 1154 / CE ST 1254	BridgeDesign		AnalyticalTechniques
CE ST 1155 / CE ST 1255	Pre-Stressed Concrete		GreenTechnology&Processes
CE ST 1156 / CE ST 1256	EarthquakeAnalysisandDesign of Structures		MachineLearning
CE ST 1157 / CE ST 1257	DesignofFoundationSystems		AdvancedDataStructuresandAlgorithms
CE ST 1158 / CE ST 1258	MechanicsofCompositeMaterials		NanotechnologyandNanoscience
CE ST 1159 / CE ST 1259	Advanced Structural Analysis		ElectricMachines& Applications
CE ST 1160 / CE ST 1260	Structure Health Monitoring		ControlandInstrumentation
CE ST 1161 / CE ST 1261	Modern Construction Equipment and Construction		IntroductiontoFuzzyLogic
CE ST 1174 / CE ST 1274	Computational Methods in Civil Engineering		NeuralNetworksanditsApplications
CE ST 1175 / CE ST 1275	ResearchMethodology		EnergyResourceTechnologies
			IntellectualPropertyRightsforEngineers
			AppliedPsychology:HumanCentered DesignandEngineering
			AdvancedOperationsResearch
			ComputingTechnologies
			Value Engineering
			DesignThinking
			MechatronicsandNDTinEngineering
			AdvancedInstrumentationMethodsfor Material Analysis
			SmartMaterialsandtheir Application
			EngineeringStartupManagement