

National Institute of Technology Meghalaya
Department of Civil Engineering
Curriculum Structure
Programme: Master of Technology in Structural Engineering

SEMESTER – I						
Course Code	Course Name	L	T	P	C	Pre-requisite (if any)
CE501	Core Course-I Advanced Solid Mechanics	3	0	0	3	
CE 503	Core Course-II Matrix Methods of Structural Analysis	3	0	0	3	
MA 701	Core Course-III (Math course) Advanced Engineering Mathematics	3	0	0	3	
CE 541	Elective Course-I Dynamic of Structures	3	0	0	3	
CE 542	Elective Course-II Advanced Concrete Technology	3	0	0	3	
CE 551	Core course Lab Structural Engineering Lab-1	0	0	2	1	
CE 561	Elective course Lab Structural Engineering Lab-2	0	0	2	1	
CE 555	Computing Lab -1	0	0	2	1	
CE 505	Seminar & Technical report writing	0	0	2	1	
		23			19	

List of Elective Courses for 1st Semester						
Course No.	Course Title	Contact Hour			Credit	Prerequisite
		L	T	P		
CE511	Dynamic of Structures	3	0	0	3	
CE513	Advanced Concrete Technology	3	0	0	3	
CE515	Earthquake Engineering	3	0	0	3	
CE517	Analysis and Design of Bridges	3	0	0	3	
CE519	Advanced Foundation Design	3	0	0	3	
CE521	Numerical Analysis	3	0	0	3	
CE523	Prefabricated structures	3	0	0	3	
CE525	Theory of Elastic Stability	3	0	0	3	
		24			24	

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SEMESTER – II						
Course No.	Course Title	Course Type	L	T	P	C
CE 502	Advance Structural Design (Discipline core-IV)	DC	3	0	0	3
CE 504	Finite Element Method (Discipline core-V)	DC	3	0	0	3
CE 512	Advance Steel and Concrete composite structure (Discipline Elective-III)	DE	3	0	0	3
CE 519	Advance Foundation Design (Discipline Elective-IV)	DE	3	0	0	3
CE 552	Advance Structural Design lab (Core Lab course-II)	DC	0	0	2	1
CE 562	Structural Engineering Lab IV (Elective Lab course-II)	DE	0	0	2	1
CE 556	Computational Lab (Computing Lab-II)	DE	0	0	2	1
CE 506	Seminar & Technical Report writing	PW	0	0	2	1
CE 508	Project Review	PW	0	0	4	2
			12	0	12	
		Total		24		18
Non-credit compulsory course: Internship/Mini Project						

Note: Sc. Core (SC); Sc. Elective (SE); Engg. Sc. Core (ESC); HSS Core (HSC); HSS Elective (HSE); Discipline Core (DC); Discipline Elective (DE); Open Elective (OE); Project Work (PW)

List of Elective Courses for 2nd Semester						
Course No.	Course Title	Contact Hour			Credit	Prerequisite
		L	T	P		
CE510	Earthquake Resistant Design of Structures	3	0	0	3	
CE512	Advanced Steel Concrete Composites Structures	3	0	0	3	
CE514	Analysis and Design of Tall Structures	3	0	0	3	
CE516	Soil Structures Interaction	3	0	0	3	
CE518	Theory of Plates and Shells	3	0	0	3	
CE520	Rehabilitation and Retrofitting of Concrete Structures	3	0	0	3	
CE522	Engineering Fracture and Fatigue Mechanics	3	0	0	3	

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Semester-III						
CE603	Technical Report and presentation on mini project/internship work	0	0	4	2	
CE601	Project-I	0	0	22	11	
		0	0	26	13	
			26		13	
Semester-IV						
CE602	Project-II	0	0	28	14	
			28		14	