COURSE STRUCTURE OF M.TECH

STRUCTURAL DYNAMICS AND EARTHQUAKE ENGINEERING

DEPARMENT OF CIVIL ENGINEERING

NIT SILCHAR

COURSE STRUCTURE

Semester-I

Code	**Subject**	**L**	**T**	**P**	**C**
CE 526	Numerical Methods for Dynamical Systems	3	0	0	6
CE 527	Theory of Vibration	3	0	0	6
CE 528	Engineering Seismology	3	0	0	6
CE-529	Minor Laboratory(Experimental/Computational)	0	0	2	2
CE 5**	Elective I (CE 530-533)	3	0	0	6
CE 5**	Elective II (CE 534-538)	3	0	0	6
	Total	15	0	2	32

Semester-II

Code	**Subject**	**L**	**T**	**P**	**C**
CE 539	Computer Aided analysis & Computer Applications	3	0	0	6
CE 540	Finite Element Method for Static and Dynamic problems	3	0	0	6
CE 541	Earthquake Resistant Design of Structures (Major)	3	0	0	6
CE 5**	Elective I (CE 542-547)	3	0	0	6
CE 5**	Elective II (CE 548-553)	3	0	0	6
	Total	15	0	2	30

Semester-I and Semester II (Elective Subjects)				
Elective-I			**Elective- II**	
CE-530	Advanced Structural Analysis		CE-534	Geotechnical Earthquake Engineering
CE-531	Theory of Elasticity and Plasticity		CE-535	Soil Dynamics and Foundation Engineering
CE-532	Advanced Concrete Technology		CE-536	Soil Structure interaction
			CE-537	Microzonation

Semester-I and Semester II (Elective Subject)				
Elective-III(OPEN)			**Elective- IV**	
CE-542	Advanced Structural Analysis		CE-548	Earthquake resistant design special structures.
CE-543	Theory of Elasticity and Plasticity		CE-549	Earthquake resistant design Buildings
CE-544	Advanced Concrete Technology		CE-550	Design of Masonry Structures
CE-545	Evolutionary Algorithms in Search & Optimization		CE-551	Repair, Restoration and Strengthening and Retrofitting of Structures
CE-546	Artificial Neural Networks in Engineering		CE-552	Structural Response Control for Seismic protection
CE-547	Performance based Seismic Design of Structures			

Semester- III and IV

Code	**Subject**	**L**	**T**	**P**	**C**
CE-622	Dissertation	0	0	0	20
	Total	0	0	0	20

Note : L, T and P stands for number of lecture, tutorial and practice hours respectively per week in a course. The symbol C means credit to the course.