INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

DEPARTMENT: DEPARTMENT OF EARTHQUAKE ENGINEERING

PROGRAM CODE: M.TECH. STRUCTURAL DYNAMICS

MODEL: MODEL-2

FIRST YEAR - 1ST SEM (AUTUMN)

MODE OF IN-TAKE: OPTIONB

S.No.	COURSE CODE	COURSE TITLE	COURSE AREA	SUB-AREA	CREDIT	L	T	P	THEORY	PRACTICAL	CWS	PRS	MTE	ETE	PRE
1	SSC_110_526_PHipq	To be decided from pool	SSC		2	-	-	-							
2	PCC_110_526_fZvsJ	Finite Element Method	PCC		4	3	0	2	3	0	15	10	25	50	0
3	PCC_110_526_3Kk7z	Structural Dynamics	PCC		4	3	0	2	3	0	15	10	25	50	0
4	PCC_110_526_NjWPl	Continuum Mechanics of Solids	PCC		3	2	1	0	3	0	25	0	25	50	0
5	PCC_110_526_mch4v	Earthquake Resistant Design of Structures	PCC		4	3	0	2	3	0	15	10	25	50	0
6	PCC_110_526_VA3D7	Elective-1	PCC		4/3										
		TOTAL			**21/20**										

FIRST YEAR - 2ND SEM (SPRING)

S.No.	COURSE CODE	COURSE TITLE	COURSE AREA	SUB-AREA	CREDIT	L	T	P	THEORY	PRACTICAL	CWS	PRS	MTE	ETE	PRE
1	STAR_111_526_S4ige	To be decided from pool	STAR		3	-	-	-							
2	SEMINAR_111_526_tVz8T	Topic to be chosen by the student	SEMINAR		2	-	-	-							
3	PEC_111_526_dtS0J	Elective-2	PEC		4										
4	PEC_111_526_wIaco	Elective-3	PEC		4										
5	PEC_111_526_g1Jat	Elective-4	PEC		4										
		TOTAL			**17**										

SECOND YEAR -1ST SEM (AUTUMN)

S.No.	COURSE CODE	COURSE TITLE	COURSE AREA	SUB-AREA	CREDIT	L	T	P	THEORY	PRACTICAL	CWS	PRS	MTE	ETE	PRE
1	THESIS-I_120_526_RDp72	Topic to be chosen by the student	THESIS-I		10	-	-	-							
2	ISA_120_526_O6b59	Internship	ISA		2	-	-	28							
3	ISA_120_526_IHaJB	Industry-Academia Interaction Seminars	ISA		1	-	-	14							
		TOTAL			**13**										

SECOND YEAR -2ND SEM (SPRING)

S.No.	COURSE CODE	COURSE TITLE	COURSE AREA	SUB-AREA	CREDIT	L	T	P	THEORY	PRACTICAL	CWS	PRS	MTE	ETE	PRE
1	THESIS-II_121_526_OjjLR	Topic to be chosen by the student	THESIS-II		14	-	-	-							
		TOTAL			**14**										

OFFERED COURSES LIST

S.No.	COURSE CODE	COURSE TITLE	COURSE AREA	CREDIT	L	T	P	THEORY	PRACTICAL	CWS	PRS	MTE	ETE	PRE
1	PEC_526_FyUAJ	Numerical Methods for Dynamic Systems	PEC	4	3	1		3		20-30		20-30	40-50	
2	PEC_526_Y2qS4	Advanced Earthquake resistant design of structures	PEC	4	3	1		3		20-30		20-30	40-50	
3	PEC_526_Ta0HH	Earthquake Resistant Design of Masonry Structures	PEC	4	3	1		3		20-30		20-30	40-50	
4	PEC_526_vHamp	Seismic Evaluation and Retrofitting of Structures	PEC	4	3	1		3		20-30		20-30	40-50	
5	PEC_526_1VE36	Earthquake Resistant Design of Bridges	PEC	4	3	1		3		20-30		20-30	40-50	
6	PEC_526_2BoTZ	Earthquake Resistant Design of Steel Structures	PEC	4	3	1		3		20-30		20-30	40-50	
7	PEC_526_s7RnE	Structural Response Control for Seismic Protection	PEC	4	3	1		3		20-30		20-30	40-50	
8	PEC_526_w7ROe	Random Vibration	PEC	4	3	1		3		20-30		20-30	40-50	
9	PEC_526_Mu4RY	Reliability Based Design	PEC	4	23	1		3		20-30		20-30	40-50	
10	PEC_526_UTOlZ	Earthquake Resistant Design of Special Structures	PEC	4	3	1		3		20-30		20-30	40-50	
11	STAR_526_jxix2	High Performance Scientific Computing	STAR	3	2	1	0	3		20-30		20-30	40-50	
12	PEC_526_RPRRS	Experimental Techniques in Earthquake Engineering	PEC	4	3	0	2	3		10	15	25	50	