



MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

M. Tech – Structural Engineering

Course Structure (R22)

Applicable From 2022-23 Admitted Batch

I YEAR I SEMESTER

S. No.	Course Code	Course Title	Course Area	Hours Per Week			Credits	Scheme of Examination Maximum Marks		
				L	T	P		Internal (CIE)	External (SEE)	Total
1	2212011	Advanced Structural Mechanics	PC	3	0	0	3	40	60	100
2	2212012	Theory of Elasticity and Plasticity	PC	3	0	0	3	40	60	100
3	-	Professional Elective - I	PE	3	0	0	3	40	60	100
4	-	Professional Elective - II	PE	3	0	0	3	40	60	100
5	2212071	Computer Aided Design Laboratory	PC	0	1	2	2	40	60	100
6	2212072	Structural Engineering Laboratory	PC	0	1	2	2	40	60	100
7	2212021	Research Methodology & IPR	PC	2	0	0	2	40	60	100
8	-	Audit Course - I	AC	2	0	0	0	100	-	100
Total Credits				16	2	4	18	380	420	800

I YEAR II SEMESTER

S. No.	Course Code	Course Title	Course Area	Hours Per Week			Credits	Scheme of Examination Maximum Marks		
				L	T	P		Internal (CIE)	External (SEE)	Total
1	2222013	Finite Element Analysis	PC	3	0	0	3	40	60	100
2	2222014	Structural Dynamics	PC	3	0	0	3	40	60	100
3	-	Professional Elective - III	PE	3	0	0	3	40	60	100
4	-	Professional Elective - IV	PE	3	0	0	3	40	60	100
5	2222073	Numerical Analysis Laboratory	PC	0	1	2	2	40	60	100
6	2222074	Advanced Structural Analysis and Design Laboratory	PC	0	1	2	2	40	60	100
7	2222075	Mini Project with Seminar	PS	0	0	4	2	100	-	100
8		Audit Course- II	AC	2	0	0	0	100	-	100
Total Credits				14	2	8	18	380	420	800

II YEAR I SEMESTER

S. No.	Course Code	Course Title	Course Area	Hours Per Week			Credits	Scheme of Examination Maximum Marks		
				L	T	P		Internal (CIE)	External (SEE)	Total
1	-	Professional Elective - V	PE	3	0	0	3	40	60	100
2	-	Open Elective	OE	3	0	0	3	40	60	100
3	2232076	Dissertation Work Review – II	PS	0	0	12	6	100	0	100
Total Credits				6	0	12	12	180	120	300

II YEAR II SEMESTER

S. No.	Course Code	Course Title	Course Area	Hours Per Week			Credits	Scheme of Examination Maximum Marks		
				L	T	P		Internal (CIE)	External (SEE)	Total
1	2242077	Dissertation Work Review – III	PS	0	0	12	6	100	0	100
2	2242078	Dissertation Viva - Voce	PS	0	0	28	14	0	100	100
Total Credits				0	0	40	20	100	100	200

Total Credits = 18+18+12+20 = 68

Professional Elective - I

S. No	Course Code	Course Title
1	2212041	Theory of Plates and Shells
2	2212042	Computer Oriented Numerical Methods
3	2212043	Structural Stability

Professional Elective - II

S. No	Course Code	Course Title
1	2212044	Advanced Reinforced Concrete Design
2	2212045	Structural Health Monitoring
3	2212046	Structural Optimization

Professional Elective - III

S. No	Course Code	Course Title
1	2222047	Advanced Structural Steel Design
2	2222048	Structural Reliability
3	2222049	Design of High-Rise Buildings

Professional Elective - IV

S. No	Course Code	Course Title
1	2222050	Advanced Prestressed Concrete Design
2	2222051	Structural Health Monitoring
3	2222052	Design of Bridges

Professional Elective - V

S. No	Course Code	Course Title
1	2232053	Earthquake Resistance Design of Structures
2	2232054	Pre-Engineered Buildings
3	2232055	Rehabilitation and Retrofitting of Structures

Audit Course - I

S. No	Course Code	Course Title
1	2210001	English for Research Paper Writing
2	2210002	Disaster Management
3	2210003	Sanskrit for Technical Knowledge
4	2210004	Value Education

Audit Course - II

S. No	Course Code	Course Title
1	2220005	Constitution of India
2	2220006	Pedagogy Studies
3	2220007	Stress Management by Yoga
4	2220008	Personality Development through Life Enlightenment Skills

Open Electives

S. No	Course Code	Course Title
1	2232001	Green Building
2	2232002	Construction Project Management
3	2232003	Safety and Construction Practice Regulations

***Open Elective** – Students should take Open Electives from List of Open Electives offered by other Departments/Branches Only.

