



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

R19 - COURSE STRUCTURE

I YEAR I – SEMESTER

Course Code	Course Title	L	T	P	Credits
1912011	Theory of Elasticity	3	0	0	3
1912012	Advanced Structural Analysis	3	0	0	3
	Professional Elective I				
1912041	1. Theory of Plates and Shells	3	0	0	3
1912042	2. Theory and Applications of Cement Composites				
1912043	3. Theory of Structural Stability				
	Professional Elective II				
1912044	1. Advanced Reinforced Concrete Design	3	0	0	3
1912045	2. Advanced foundation Design of reinforced concrete				
1912046	3. Numerical Methods in Structural Engineering				
1912071	Numerical Analysis Lab	0	0	4	2
1912072	Advanced Concrete Technology Lab	0	0	4	2
	Research Methodology and IPR	2	0	0	2
Audit - I	Audit Course - I	2	0	0	0
	Total Credits	16	0	8	18

I YEAR II – SEMESTER

Course Code	Course Title	L	T	P	Credits
1922013	FEM in Structural Engineering	3	0	0	3
1922014	Structural Dynamics	3	0	0	3
	Professional Elective III				
1922047	1. Advanced Steel Design	3	0	0	3
1922048	2. Design of High-Rise Buildings				
1922049	3. Design of Masonry Structures				
	Professional Elective IV				
1922050	1. Soil Structure Interaction.	3	0	0	3
1922051	2. Design of Prestressed concrete Structures				
1922052	3. Structural Optimization				
1922073	Advanced Structural Engineering Lab	0	0	4	2
1922074	Structural Design Lab	0	0	4	2
1922015	Mini Project with Seminar	0	0	4	2
Audit - II	Audit Course- II	2	0	0	0
	Total Credits	14	0	12	18



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II YEAR I – SEMESTER

Course Code	Course Title	L	T	P	Credits
	Professional Elective V				
1932053	1. Earthquake Resistance Design of Buildings	3	0	0	3
1932054	2. Industrial structures				
1932055	3. Bridge Engineering				
	Open Elective - I				
1932001	1. Numerical methods	3	0	0	3
1932002	2. Construction Management				
1932003	3. Finite Element Methods				
1932004	4. Artificial Intelligence: Techniques				
1932005	5. Operation Research				
1932006	6. Industrial Safety				
1932016	Dissertation Work Review - II	0	0	12	6
	Total	6	0	12	12

II YEAR II – SEMESTER

Course Code	Course Title	L	T	P	Credits
1942017	Dissertation Work Review - III	0	0	12	6
1942018	Dissertation Viva-Voce	0	0	28	14
	Total	0	0	40	20

Audit Course I & II:

1. English for Research Paper Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge
4. Value Education
5. Constitution of India
6. Pedagogy Studies
7. Stress Management by yoga
8. Personality Development Through Life Enlightenment Skills