



MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

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

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

B.Tech – Mechanical Engineering COURSE STRUCTURE (MLRS-BT25) Applicable From 2025-26 Admitted Batch

I SEMESTER

S. No.	Course Code	Course Title	Course Area	Hours Per Week			Credits	Scheme of Examination Maximum Marks		
				L	T	P		Internal (CIA)	External (SEE)	Total
		Theory								
1.	2510001	Matrices and Calculus	BS	3	1	0	4	40	60	100
2.	2510008	Advanced Engineering Physics	BS	3	0	0	3	40	60	100
3.	2510502	C Programming and Data Structures	ES	3	0	0	3	40	60	100
4.	2510301	Engineering Drawing and Computer Aided Drafting	ES	2	0	2	3	40	60	100
5.	2510010	English for Skill Enhancement	HS	3	0	0	3	40	60	100
		Labs								
6.	2510071	Advanced Engineering Physics Lab	BS	0	0	2	1	40	60	100
7.	2510572	C Programming and Data Structures Lab	ES	0	0	2	1	40	60	100
8.	2510371	Engineering Workshop	ES	0	0	2	1	40	60	100
9.	2510073	English Language and Communication Skills Lab	HS	0	0	2	1	40	60	100
		Value Added Course								
10.		Foreign Language	*VAC	0	0	0	0	-	-	-
		Induction Programme	-	-	-	-	-	-	-	-
Total Credits				14	1	10	20	320	540	900

*VAC - Satisfied/Unsatisfied

Students can choose any one of the foreign language from the given list

- i) **25X0FL1** French
- ii) **25X0FL2** German
- iii) **25X0FL3** Spanish
- iv) **25X0FL4** Korean

II SEMESTER

S. No.	Course Code	Course Title	Course Area	Hours Per Week			Credits	Scheme of Examination Maximum Marks		
				L	T	P		Internal (CIA)	External (SEE)	Total
		Theory								
1.	2520002	Ordinary Differential Equations and Vector Calculus	BS	3	0	0	3	40	60	100
2.	2520009	Engineering Chemistry	BS	3	0	0	3	40	60	100
3.	2520503	Python Programming	ES	3	0	0	3	40	60	100
4.	2520202	Elements of Electrical and Electronics Engineering	ES	3	0	0	3	40	60	100
5.	2520302	Engineering Mechanics	ES	3	0	0	3	40	60	100
6.	2520316	Material Science and Metallurgy	PC	3	0	0	3	40	60	100
		Labs								
7.	2520072	Engineering Chemistry Lab	BS	0	0	2	1	40	60	100
8.	2520575	Python Programming Lab	ES	0	0	2	1	40	60	100
9.	2520272	Elements of Electrical and Electronics Engineering Lab	ES	0	0	2	1	40	60	100
		Value Added Course								
10.	2520026	Yoga & Inner Engineering	*VAC	0	0	0	0	-	-	-
Total Credits				18	0	6	21	360	540	900

***VAC - Satisfied/Unsatisfied**

III SEMESTER

S. No.	Course Code	Course Title	Course Area	Hours Per Week			Credits	Scheme of Examination Maximum Marks		
				L	T	P		Internal (CIA)	External (SEE)	Total
		Theory								
1.	2530007	Probability, Statistics and Complex Variables	BS	3	0	0	3	40	60	100
2.	2530303	Thermodynamics	ES	3	0	0	3	40	60	100
3.	2530317	Mechanics of Solids	PC	3	0	0	3	40	60	100
4.	2530318	Production Technology	PC	3	0	0	3	40	60	100
5.	2530319	Fluid Mechanics and Hydraulic Machines	PC	3	0	0	3	40	60	100
6.	2530EXL1	Design Thinking and Ideation	PS	0	0	2	1	40	60	100
		Labs								
7.	2530075	Computational Mathematics Lab	PC	0	0	2	1	40	60	100
8.	2530375	Production Technology Lab	PC	0	0	2	1	40	60	100
9.	2530376	Material Science and Mechanics of Solids Lab	PC	0	0	2	1	40	60	100
10.	2530377	Fluid Mechanics and Hydraulic Machines Lab	PC	0	0	2	1	40	60	100
Total Credits				15	0	10	20	400	600	1000

IV SEMESTER

S. No.	Course Code	Course Title	Course Area	Hours Per Week			Credits	Scheme of Examination Maximum Marks		
				L	T	P		Internal (CIA)	External (SEE)	Total
		Theory								
1.	2540320	Kinematics of Machinery	PC	3	0	0	3	40	60	100
2.	2540321	Thermal Engineering - I	PC	3	0	0	3	40	60	100
3.	2540322	Design of Machine Elements	PC	3	0	0	3	40	60	100
4.	2540323	Instrumentation and Control Systems	PC	3	0	0	3	40	60	100
5.	2540EXL3	Innovation and Entrepreneurship	ES	2	0	0	2	40	60	100
		Labs								
6.	2540378	Conventional and Computer Aided Machine Drawing	PC	0	0	2	1	40	60	100
7.	2540379	Instrumentation and Control Systems Lab	PC	0	0	2	1	40	60	100
8.	2540380	Thermal Engineering-I Lab	PC	0	0	2	1	40	60	100
9.	2540577	Java Programming Lab	ES	1	0	2	2	40	60	100
		Skill Development								
10.	2546779	Data Analytics and Python for Engineers	SD	0	0	2	1	40	60	100
11.	2540028	Indian Knowledge System	HS	1	0	0	1	40	60	100
Total Credits				17	0	8	21	440	660	1100