JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.TECH. (INDUSTRIAL ENGINEERING AND MANAGEMENT)
EFFECTIVE FROM ACADEMIC YEAR 2022-23 ADMITTED BATCH

R22 COURSE STRUCTURE AND SYLLABUS

I Year I Semester

Course Code	Course Title	L	T	P	Credits
Professional Core-I	Industrial Engineering & Management	3	0	0	3
Professional Core-II	Statistical Quality Control	3	0	0	3
Professional Elective - I	1. Optimization Techniques & Applications 2. Materials Management	3	0	0	3
Professional Elective - II	1. Plant Maintenance and Reliability Engineering 2. Industrial Robotics	3	0	0	3
	Research Methodology & IPR	2	0	0	2
Lab - I	Industrial Engineering Practices Lab	0	0	4	2
Lab - II	Statistical Quality Control System Lab	0	0	4	2
Audit - I	Audit Course- I	2	0	0	0
	Total	**16**	**0**	**8**	**18**

I Year II Semester

Course Code	Course Title	L	T	P	Credits
Professional Core - III	Manufacturing Systems: Simulation Modelling and Analysis	3	0	0	3
Professional Core - IV	Supply Chain Management	3	0	0	3
Professional Elective - III	1. Total Quality Management 2. Enterprise Resource Planning 3. Artificial Intelligence in Manufacturing	3	0	0	3
Professional Elective - IV	1. Marketing Management 2. Energy Management 3. IoT & Industry 4.0	3	0	0	3
	Mini Project with Seminar	0	0	4	2
Lab - III	Simulation of Manufacturing Systems Lab	0	0	4	2
Lab - IV	Supply Chain Management Lab	0	0	4	2
Audit - II	Audit Course - II	2	0	0	0
	Total	**14**	**0**	**12**	**18**

II Year I Semester

Course Code	Course Title	L	T	P	Credits
Professional Elective - V	1. Product data Management 2. Financial Management	3	0	0	3
Open Elective	Open Elective	3	0	0	3
Dissertation	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
Dissertation	Dissertation Work Review - III	0	0	12	6
Dissertation	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