Program Structure

M.Tech in Mechanical Engineering

Production and Industrial Engineering

Semester-I

S No	Course Code	Course Title	L	T	P	C	Pre-requisite
1	Will be provided by ERP	Adv, Numerical and Statistical method	3	1	0	3	-
2	Will be provided by ERP	Production and Operations Management	3	0	0	3	-
3	Will be provided by ERP	Statistical Quality Control	3	0	0	3	-
4	Will be provided by ERP	Advance Manufacturing Processes	3	0	0	3	-
5	Will be provided by ERP	Advanced Materials Processing	3	0	0	3	-
6	Will be provided by ERP	Rapid Prototyping	3	0	0	3	-
7	Will be provided by ERP	Rapid Prototyping Lab	0	0	2	1	
	Total credits					19	

Semester-II

S No	Course Code	Course Title	L	T	P	C	Pre-requisite
1	Will be provided by ERP	Professional and Communication Skills	0	0	4	2	-
2	Will be provided by ERP	Industrial Robotics	2	1	0	3	-
3	Will be provided by ERP	Precision Engineering	3	0	0	3	-
4	Will be provided by ERP	Industrial Automation and Artificial Intelligence	3	0	0	3	-
5	Will be provided by ERP	Optimization Techniques and Applications	2	0	0	2	-
6	Will be provided by ERP	Elective 1	3	0	0	3	-
7	Will be provided by ERP	Elective 2	3	0	0	3	
	Total credits					19	

Semester-III

S No	Course Code	Course Title	L	T	P	C	Pre-requisite
1	Will be provided by ERP	Modelling, Simulation and Analysis Lab	0	0	4	2	-
2	Will be provided by ERP	Dessertation-1	-	-	-	5	-

			L	T	P	C	
3	Will be provided by ERP	Elective 3	3	0	0	3	-
4	Will be provided by ERP	Elective 4	3	0	0	3	-
5	Will be provided by ERP	Elective 5	3	0	0	3	-
	Will be provided by ERP	Total Credits				16	

Semester-IV

S No	Course Code	Course Title	L	T	P	C	Pre-requisite
1	Will be provided by ERP	Dissertation-2	-	-	-	15	
		Total credits				15	

Elective 1	
Code	Subject
Will be provided by ERP	Supply Chain Management
Will be provided by ERP	Advanced Metal Cutting
Will be provided by ERP	Production planning and control
Will be provided by ERP	Electronics and Microcontrollers

Elective 2	
Code	Subject
Will be provided by ERP	Mechanical Automation and Mechatronics
Will be provided by ERP	Non Destructive Testing
Will be provided by ERP	Unconventional Manufacturing Methods
Will be provided by ERP	Mechanical Metallurgy

Elective 3	
Code	Subject
Will be provided by ERP	Reliability Engineering
Will be provided by ERP	Product Design and Manufacturing
Will be provided by ERP	Material Selection in Engineering
Will be provided by ERP	Green & Lean Manufacturing
Will be provided by ERP	Advanced casting

Elective 4	
Code	Subject

Will be provided by ERP	Design for Manufacturing and Assembly
Will be provided by ERP	Industrial Economics
Will be provided by ERP	Industrial Corrosion and Tribology
Will be provided by ERP	Finite Element Techniques in Design
Will be provided by ERP	Micro-Electro Mechanical System (MEMS)

Elective 5	
Code	Subject
Will be provided by ERP	Facility Planning & Plant Engineering
Will be provided by ERP	Advanced Welding Technology
Will be provided by ERP	Advanced Machining Processes
Will be provided by ERP	Industrial Waste Management
Will be provided by ERP	Ergonomics and Human Factor Engineering