

Curriculum

Mechanical Engineering

Semester	Subjects	Credits
1	Linear Algebra and Calculus	4
	Applied Physics for ME Stream	4
	Elements of Mechanical Engineering	3
	Introduction to C programming (Integrated)	4
	Electromechanical systems & Measurements	3
	Communicative English	1
	Sanskrutika Kannada / Balake Kannada	1
	Innovation & Design Thinking	1
2	Integral calculus and differential equation	4
	Applied Chemistry for ME Stream	4
	Computer-Aided Engineering Drawing	3
	Engineering Mechanics	3
	Introduction to Python Programming	3
	Professional Writing Skills in English	1
	Indian Constitution	1
	Scientific Foundations for Health	1
3	Complex Variables and Probability	3
	Material Science and Engineering	3
	Manufacturing Process	3
	Mechanics of Materials	3
	Computer Aided Modelling	3
	Social Connect and Responsibility	1
	Fundamentals of Additive Manufacturing	2
	Material Testing Lab	1
	Foundry & Forging Lab	1
4	Transforms Calculus and Numerical Techniques	3
	Mechanical Measurements & Metrology	3
	Thermodynamics	3
	Theory of Machines	3
	Mechatronics	3
	Universal human values course	1
	Geometric Dimensioning & Tolerancing	2
	Machine Shop	1
	Measurements and Metrology Lab	1
5	Industrial Management & Economics	3
	Fluid Mechanics Machinery	3
	Machine Design	4
	CNC Programming lab	1
	Fluid Mechanics Lab	1
	Professional Elective - I	3
	Mini Project	2
	Research Methodology and IPR	3
	Environmental Studies	2
6	Finite Element Methods	4
	Heat Transfer	4
	Professional Elective - II	3
	Open Elective -I	3
	Major Project Phase - 1	2
	Open Elective 1	3
	Heat Transfer Lab	1
	Analysis and Simulation Lab	1
	Ability Enhancement Course	2
7	Industrial Robotics	3
	Hydraulics and Pneumatics	4
	Control Engineering	4
	Professional Elective-III	3
	Open Elective- II	3
	Major Project Phase-II	6
	Design Lab	1
8	Professional Elective -IV	3
	Open Elective - III	3
	Internship (Industry/Research)	10

Electives
Advanced Python Programming
Fundamentals of Additive Manufacturing
Spreadsheet for Engineers
Tools in Scientific ComputingInternet of Things
Waste handling and Management
Non-Traditional Machining
Environmental Studies
Micro Electromechanical Systems
Introduction to AI & ML
Digital Marketing
Introduction in Programming in C++
Mechanical Vibrations
Product Life Cycle
Management
Supply chain management & Introduction to SAP
Energy Engineering
Design of Transmission Elements
Refrigeration and Air Conditioning
Project and Operations Management
Renewable Energy Technologies
Basics of MATLAB
Fundamental of Virtual Reality ARP Development
Introduction Augmented Reality
Design for Manufacturing and Assembly
Thermal Management of Electronic Equipment
Total Quality Management
Automotive Engineering & Hybrid Vehicle Technology
Quality Design & Control
Product Design and Manufacturing
Machinery Fault Diagnosis and Signal ProcessingComputer
Integrated Manufacturing