SUBJECT	COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
3ME1A: MECHANICS OF SOLIDS	To analyze structural members subject to tension, compression, torsion, bending and combined stress using fundamental concepts of stress, strain and elastic.	H	H	H	H	M	H	H				H	H
	The students will be able to understand different types of beams and loads and also able to calculate SF & BM and draw the SFD & BMD for various applications. Solve problems for deflection of beams.	H	H	H	H	M	H	H				H	H
	The students will be able to derive the torsion equation and solve problems on torsion of mechanical components, understand the stability and buckling phenomena and design the columns using Elder & Rankin‟s formula, Solve problems on thin and thick cylinders	H	H	H	H	M	H	H				H	H
3ME2A: MATERIAL SCIENCE AND ENGINEERING	To compute atomic packing factor and linear and planer density of material	H	H	H	H	M	M	M		M	H	H	H
	To evaluate various processes annealing ,normalizing ,case hardening	H	M	M	H	H	H	M	M	M	H	H	H
	To compute the solubility of iron and different form of iron at different carbon percentage	H	H	M	H	M	M	M	M	H	M	M	M
	To evaluate the properties like hardness, toughness through testing process.	H	H	H	H	H	M	M	M	M	M	H	M
3ME3A: ENGINEERING THERMODYNAMICS	To understand the Basic concepts and laws of thermodynamics and concept of entropy generation.	H	H	M	M		H						H
	To understand the fluids behaviour of pure substance and change of steam characteristics with P ,V and T variables	H	H	M	M	M	H	L		L			H
	To understand thermodynamic variables as depend and independent, and derive mathematical relation for them.	H	M	L	L		M						M
	To understand the power cycle and how to increase its efficiency.	H	H	H	H	H	H	H		H		M	H
3ME4A: MANUFACTURING PROCESSES	Student will be able to analyze manufacturing processes techniques in current applications of Engineering Research and Technology.	H					H		H		M		H
	Student will be able to apply creativity in the design of manufacturing and mechanical systems, components or processes.	H		H	H		M			M	H	H	L
	Student will able to identify, analyze and solve technical problems.	H	M		H	H				H	H		M
	Student will able to apply the technologies of engineering materials in manufacturing and mechanical problems in Industry.	H	H	M					H		M		H

SUBJECT	COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
3ME5A: OBJECT ORIENTED PROGRAMMING IN C ++	To implement the paradigms of object oriented programming in comparison of procedural oriented programming.	L	L	L	M	H	M	M	M	H	L	H	M
	To implement the concept of dynamic memory allocation in the class structure as fundamental building block for computational programming.	L	L	L	H	H	M	M	M	H	H	M	H
	To identify variety of programming language constructs by applying the concepts of abstraction inheritance, polymorphism, dynamic binding, templates and various types of files in building reusable code.	H	H	H	H	M	L	M	H	H	M	H	H
	To apply the concepts of data structures such as stacks, Linked List, queues, to solve various computing problems.	H	H	H	M	H	L	H	L	L	H	L	H
3ME6A: ADVANCED ENGINEERING MATHEMATICS	Using the method of Laplace transform to find the solution of ordinary and partial differential equation with boundary value problem and utilized in field of engineering.	H	H	H	L	M	L	L	L	M	M	M	M
	Using the method of Fourier Transform to find the solution of ordinary and partial differential equation with boundary value problem and utilized in field of engineering.	H	H	H	L	M	L	L	L	M	M	M	M
	Understand the concept of probability distribution for discrete and continuous random variable.	H	H	M	L	M	L	L	L	M	M	M	M
	Understand the concept of numerical method to interpolate the data, Numerical Differentiation, Integration and finding the solution of algebraic and ODE.	H	H	M	H	M	L	L	L	M	M	M	M
3ME7A: MATERIAL SCIENCE AND TESTING LAB	To determine strength, hardness of various materials by testing	H	H	H	M	L	L	M	L	M	L	M	H
	To identify crystal structure of various materials, examine microstructures and improve material properties by using appropriate heat treatment process	H	H	H	H	M	L	M	L	M	M	L	H
3ME8A: BASIC MECHANICAL ENGINEERING LAB	To analyze the mechanism of bicycle, sewing machine	H	H	H	H	M	H	M	L	H	L	L	M
	To analyze the working of pump, engine and air conditioners	H	H	H	M	M	L	M	L	M	L	M	H
3ME9A: PRODUCTION PRACTICE-I	To have hands on experienced of production processes	H		H	H			H	H			H	H
	To meet the gap between the theory and practical challenges in production processes	H	H	H		M	H	H		H	M	H	H
3ME10A: COMPUTER PROGRAMMING LAB	To implement the concepts of class and objects by applying the techniques of abstraction, inheritance, polymorphism, dynamic binding, templates and various types of files in building reusable code.	H	H	H	H	M	L	M	H	H	M	H	H
	Apply the concepts of data structures such as stacks, Linked List, queues, to solve various computing problems.	H	H	H	M	H	L	H	L	L	H	L	H

SUBJECT	COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
3ME11A: MECHANICAL ENGINEERING DRAWING	Be able to practice and sketch the various connections of machine parts manually and using AutoCAD.	H	M	H	M	H	L	M	L	M	L	M	M
	Be able to join and draw the assemblies of various machine parts.	H	L	H	M	H	L	L	L	M	L	L	M