DNR COLLEGE OF ENGINEERING & TECHNOLOGY BHIMAVARAM
DEPARTMENT OF MECHANICAL ENGINEERING
COURSEOUTCOMES

Program Name:	I B.TECH-ME	**Class / Sem**	I/II
Regulation	R20		

CO Statement -Linear Algebra & Numerical methods- M-II
Describe the basic properties on elementary row and column operations
Find the characteristics equation, Eigen values and Eigen vectors.
Solve ortho globalization of the given matrix.
Evaluate the root of algebraic and transcendental equation
Determine interpolating polynomial for the given data.
Calculate the numerical solution of ordinary differentiation.

CO Statement-Engineering Chemistry- EC
Interpret the knowledge on the different types of composite plastic materials
Outline the theory of construction of electrodes, batteries and fuel cells in redesigning new engineering products
learn various synthetic methods of nano materials for modern advances of engineering technology.
Differentiate petroleum, petrol, synthetic petrol and their production.
Predict the suitable methods for purification and treatment of hard water and brackish water.
Integrate the need and importance of engineering chemistry for industrial and domestic use.

CO Statement-Engineering Mechanics- EM
Determine the equilibrium of a particle in space using principle of law of mechanics.
Solve the problems of simple systems with friction.
Explain the equilibrium of rigid bodies in two dimensions and three dimensions.
Calculate principle moment of inertia and mass moment of inertia of plane areas and volumetric objects.
Solve the problem using equations of motion in rectilinear motion.
Calculate the equilibrium of system using work-Energy method.

CO Statement-Basic Electrical & Electronics Engineering-BEEE
Explain the Principle 0f operation of a DC machine
Develop the expression for the induced emf of a DC machine
Identify the performance tests carried out on single phase transformer
Discuss the construction details of synchronous machines
Explain different starting methods of induction motor
Design and the operation of various special machines

CO Statement – THERMO DYNAMICS
Describe an algorithms and to draw flowcharts for solving problems
Translate flowcharts/algorithms to C Programs, compile and debug programs
Use of Operators, Two-way/ and Multi-way selection in programs.
Classify use of Arrays and Strings in C program.
Evaluate the concept of Pointers and their different applications.
Illustrate the concept of Functions and File I/O operations and to develop modular reusable code.

CO Statement –Computer Aided Engineering Drawing-CAED
Explain the Basic concepts of variables and data types
Use of Operators and Expressions, Demonstrate the usage of Conditional and Unconditional statements
Classify the functions and relate functions with respect to arrays and strings
Describe the concept of pointers and structures
Demonstrate the usage of files and Command Line Arguments
Explain the Basic concepts of variables and data types
Use of Operators and Expressions

CO Statement –Work practice Lab-WP LAB
Explain the Basic concepts of variables and data types
Use of Operators and Expressions, Demonstrate the usage of Conditional and Unconditional statements
Classify the functions and relate functions with respect to arrays and strings
Describe the concept of pointers and structures
Demonstrate the usage of files and Command Line Arguments

CO Statement –Engineering Chemistry Lab-EC LAB
Illustrate volumetric titrations acquires some volumetric skills.
Analyze hard and soft water
Analyze volumetric skills of red-ox titrations with different indicators.
Estimate amount of vitamin c in given sample
Understand the synthesis of nylon & Bakelite
Experiment the instruments like conducometer , potentiometer ,colorimeter & p^H meter

CO Statement –Basic Electrical & Electronics Engineering Lab-BEEE LAB
Demonstrate different types of scales, lines, dimensioning patterns, abbreviations and symbols as per IS codes
Illustrate line plan and preparing working drawings for residential buildings
Illustrate line plan and preparing working drawings for Public buildings
Prepare different elevation drawings for aesthetic and sectional details
Study and draw perspective drawing of various objects
Provide scope and provisions for building components and services

CO Statement –Constitution of India
Understand historical background of the constitution making and its importance for building democratic India.
Understand the functioning of three wings of the government ie., executive, legislative and judiciary
Understand the value of the fundamental rights and duties for becoming good citizen of India.
Analyze the decentralization of power between central, state and local self-government.
Apply the knowledge in strengthening of the constitutional institutions like CAG, Election Commission and UPSC for sustaining democracy
Understand Electoral Process, Emergency provisions and Amendment procedure.