

Course outcome statements

GRADUATES WILL BE ABLE TO--

C-101	ENGINEERING MATHEMATICS-I
C101.1	Identify Eigen values and describe Eigen vectors, analyze system of linear equations and describe solution of system of linear equations.
C101.2	To solve Algebraic Equations using Complex Numbers and to define logarithm of complex number, to operate hyperbolic functions.
C101.3	Test the convergence and divergence of infinite series
C101.4	Apply Taylor's and Maclaurin's series for expansion of function of various types.
C101.5	To solve problems on partial derivatives of function of several variables
C101.6	Solve Jacobean, describe Error and Approximation, and calculate Maxima and Minima of functions of two variables.
C102	ENGINEERING CHEMISTRY
C102.1	Demonstrate various techniques of water softening and refer green chemistry principles
C102.2	Use sophisticated electro analytical instruments
C102.3	Illustrate engineering application of various polymers with reference to their chemical structure and properties
C102.4	Demonstrate knowledge of fuel with reference to properties, application and future scope
C102.5	Use carbon nanomaterial for various engineering application and hydrogen as future fuel
C102.6	Demonstrate chemical reaction of corrosion and its prevention
C103	ENGINEERING PHYSICS
C103.1	Explain various applications of optics.
C103.2	Demonstrate various applications of sound & ultrasound.
C103.3	apply the theories of semiconductors & superconductors.
C103.4	Distinguish between classical & Quantum approach.
C103.5	Discriminate changes in different properties observable at nanoscale.
C103.6	Explain and recognize working principles used in recent trends in technological development.
C104	FUNDAMENTALS OF PROGRAMMING LANGUAGES-I
C104.1	Discuss the principle and concepts of computer system.
C104.2	Describe the knowledge of C programming language.

C104.3	Demonstrate the concept of Control Structure and Pointers in C programming language.
C104.4	Demonstrate the knowledge of Array, Function and String in C programming language.
C105	BASIC ELECTRICAL ENGINEERING
C105.1	Understand the concept of current, potential difference, power, energy, resistance and its behavior with temperature.
C105.2	Understand and demonstrate the fundamentals of electromagnetism and to differentiate between electric and magnetic circuits.
C105.3	Understand the working of transformer and fundamentals of electrostatics.
C105.4	Understand the concept of AC supply system, time equation and related terms, circuit elements and their combinations.
C105.5	Demonstrate; analyze the complex circuits by applying various theorems.
C106	BASIC ELECTRONICS ENGINEERING
C106.1	Examine, interpret & classify the various basic electronic components and circuits.
C106.2	Examine & interpret the transistor and its application.
C106.3	Examine & interpret the various IC based circuits.
C106.4	Identify, describe, & analyze the different digital gates and their usage in digital circuits.
C106.5	Illustrate and interpret working of power electronic devices and their applications.
C106.6	Explain and interpret the basic concept of electronics communication system.
C107	BASIC CIVIL AND ENVIRONMENTAL ENGINEERING
C107.1	Interpret and Explain relation between different disciplines of Engineering involved in construction of various projects.
C107.2	Describe different construction materials required for various projects.
C107.3	Identify uses of Modern Surveying Instruments and calculate reduced level of different points.
C107.4	Draw plan of different buildings by considering various principles and bye laws of building planning.
C107.5	Create awareness of environmental issues.
C108	ENGINEERING GRAPHICS-I
C108.1	Draw the Projection of Line problems
C108.2	Draw the Projection of Plane problems
C108.3	Draw the Projections of Solids Problems
C108.4	Draw the Engineering Curves and Development of Solids problems

C108.5	Draw the orthographic Projections problems
C108.6	Draw the Isometric Projections Problems
C109	WORKSHOP PRACTICES
C109.1	Apply and follow safety rules in workshop.
C109.2	Apply knowledge of engineering materials and their properties while selecting the products materials.
C109.3	Apply the knowledge of hands and power tools while manufacturing a job.
C109.4	Apply knowledge of machine tools process while working on machines.
C109.5	Demonstrate and apply the knowledge of manufacturing process of forging.
C109.6	Demonstrate and apply the knowledge of manufacturing process of moulding.
C110	ENGINEERING MATHEMATICS-II
C110.1	To solve differential equations using various methods and relate to applications such as orthogonal trajectories, Newton's law of cooling, rectilinear motion, Fourier's law of heat conduction, Electrical circuits etc.
C110.2	Formulate expansion of periodic functions using Fourier series and application to Partial Differential Equations.
C110.3	To illustrate Reduction Formulae, Beta, Gamma, and Error functions, DUIS Rules etc through various examples.
C110.4	To describe 3-dimensional surfaces viz. Sphere, Cone, Cylinder and illustrate multiple integrals and relate to Area, Volume, MI, CG.
C111	FUNDAMENTALS OF PROGRAMMING LANGUAGES-II
C111.1	Develop programs using object oriented concepts
C111.2	Design and develop web pages
C111.3	Design and develop mobile application
C111.4	Design and develop simple application using Embedded Programming
C112	ENGINEERING MECHANICS
C112.1	Understand the vectorial and scalar representation of forces and moments.
C112.2	Illustrate the laws of motion, kinematics of particle and their interrelationship.
C112.3	Analyze kinetics of particle.

C112.4	Describe static equilibrium of particles in two dimensions and also in three dimensions.
C112.5	Comprehend the effect of Friction.
C113	BASIC MECHANICAL ENGINEERING
C113.1	Define, identify, apply knowledge of machine elements and power transmitting devices.
C113.2	Describe, design, and Classify the Engineering materials with their applications effectively.
C113.3	Visualize and explain different manufacturing processes.
C113.4	Demonstrate and to interpret the different machine tools with their operations.
C113.5	Formulate and to solve the various thermodynamics processes and system problems.
C113.6	Demonstrate and describe various power plants, power producing devices and power absorbing devices.
C114	ENGINEERING GRAPHICS-II
C114.1	Draw the problems of the projections of solid using Drafting Software
C114.2	Construct & draw the problems of engineering curves using Drafting Software
C114.3	Draw the problems of development of lateral surfaces using Drafting Software
C114.4	Construct and Draw the different orthographic projections views using Drafting Software
C114.5	Draw the isometric projections