SWARNANDHRA COLLEGE OF ENGINEERING & TECHNOLOGY

AUTONOMOUS

BASIC SCIENCES AND HUMANITIES

I SEM COURSE OUTCOMES (R20)

SUBJECT NAME	COURSE OUT COMES
Linear Alzebra	CO1 test the consistency and solve system of linear equations by using the matrix algebra techniques that is needed by engineers for practical applications. (K1,K2,K3) CO2. verify Cayley - Hamilton theorem and its applications as well as finding the Eigen values and eigen vectors. (K1,K2,K3) CO3. frame the Quadratic Forms and to reduce it to the canonical form. (K2,K3) CO4. familiarize with functions of several variables. (K1,K2,K3) CO5 familiarize double and triple integrals. (K1,K2,K3)
Engineering Physics	**CO1**: Describe basic crystal systems and determination of crystal structures. (K2) **CO2**: Explain Magnetic and Dielectric Materials properties. (K2) **CO3**: Describe concept of Magnetic Induction and Super Conducting properties. (K2) **CO4**: Explain pure and doped semi conductor devices for better utility . (K2) **CO5:**Describe optical fibers and optical properties of materials and their applications. (K2)
Engineering Chemistry	CO1:Explain the impurities present in raw water,problems associated and how to avoid them(K2) CO2:Explain the advantages of Polymers in daily life. (K2) CO3:Explain the theory and construction of battery and fuel cells and theories of corrosion and prevention methods.(K2) CO4:Differentiate conventional and non conventional energy sources and their advantages and disadvantages. (K2) CO5:Identify the usage of the advanced material in day to day life. (K2)
English	CO1:Identify the parts of speech, root words and apply relative writing formats to prepare notes.(K2, K3) CO2:Express ideas coherently in day to day life.(K2) CO3:Identify the importance of correct usage of grammar.(K2) CO4:Illustrate ideas effectively on various topics.(K3) CO5:Prepare the reports and essays by using the appropriate sentences.(K2)
Problem Solving Using C Programming	**CO1:** llustrate the Fundamental concepts of Computers and basics of computer programming. **(K2)** **CO2:** Use Control Structures and Arrays in solving complex problems **(K3)** **CO3:**Develop modular program aspects and Strings fundamentals **(K3).**

	CO4: Demonstrate the ideas of pointers usage **(K3)** **CO5:** Solve real world problems using the concept of Structures, Unions and File operations **(K3)**
Basic Electrical &Electronics Engineering	CO1. Solve simple DC circuit using KVL, KCL and Network Theorems. [K3] CO2. Understand the fundamental concepts of single-phase and three phase systems analysis for simple AC circuit. [K2] CO3. Demonstrate the construction, working principles and operating characteristics of DC machines, transformer and AC rotating machines. [K2] CO4. Understand the construction details, operation and characteristics of various semiconductor devices. [K2] CO5. Understanding the digital and logic operations using Boolean Algebra. [K2]
Engineering Drawing	CO1:Construct polygons, conics, cycloids, involutes. (K3) CO2:Draw the orthographic projections of points, lines in different positions. (K2) CO3:Draw the orthographic projections of plane surfaces in different positions.(K2) CO4:Draw the orthographic projections of solids like prisms, cylinder, pyramids and cone(K2) CO5:Convert Isometric views to orthographic views and vice-versa and also visualize 2D &3D Objects using Auto CAD. (K3)
Building Material And Construction	CO1: Reproduce knowledge towards civil engineering materials like stones, bricks , tiles in building construction.(K1) CO2: Explain about stone masonry, wood in building construction (K2) CO3: Interpret the application of lime, cement and their importance in nconstruction field.(K2) CO4: Prepare building components like lintels, archels, vaults,stair cases(K3) CO5: Discuss various finishings in building construction (K3)
Engineering Graphics	CO1:Construct polygons, conics, cycloids, involutes. (K3) CO2:Draw the orthographic projections of points, lines in different positions. (K2) CO3:Draw the orthographic projections of plane surfaces in different positions.(K2) CO4:Draw the orthographic projections of solids like prisms, cylinder, pyramids and cone(K2) CO5:Convert Isometric views to orthographic views and vice-versa and also visualize 2D &3D Objects using Auto CAD. (K3)