

## **B –TECH COMPUTER SCIENCE ENGINEERING**

### **I YEAR –I SEM**

#### **COURSE COUT COMES**

#### **MATHEMATICS-I**

**CO 1:-** write the matrix representation of a set of linear equations and to analyze the solution of the system of equations

**CO 2:-** find the Eigen values and Eigen vectors which come across under linear transformations

**CO 3:-** find the extreme values of functions of two variables with/ without constraints.

**CO 4:-** Identify whether the given first order DE is exact or not

**CO 5:-** solve higher order DE's and apply them for solving some real world problems

#### **ENGINEERING CHEMISTRY**

**CO 1:-** Students will gain the basic knowledge of electrochemical procedures related to corrosion and its control

**CO 2:-** They can understand the basic properties of water and its usage in domestic and industrial purposes

**CO 3:-** They learn the use of fundamental principles to make predictions about the general properties of materials.

**CO 4:-** They can predict potential applications of chemistry and practical utility in order to become good engineers and entrepreneurs.

### **ENGINEERING PHYSICS - I**

**CO 1:-** Learn principle, working of various laser systems and light propagation

**CO 2:-** Learn principle, working of various laser systems and light propagation through optical fibers.

**CO 3:-** Distinguish various crystal systems and understand atomic packing factor.

**CO 4:-** Know the various defects in crystals.

## **PROFESSIONAL COMMUNICATION IN ENGLISH**

**CO 1:-** Use English Language effectively in spoken and written forms.

**CO 2:-** Comprehend the given texts and respond appropriately.

**CO 3:-** Communicate confidently in formal and informal contexts.

## **ENGINEERING MECHANICS**

**CO 1:-** To understand the resolving forces and moments for a given force system

**CO 2:-** To analyze the types of friction for moving bodies and problems related to friction.

**CO 3:-** To determine the centroid and second moment of area

### **BEEE**

**CO 1:-** To analyze and solve problems of electrical circuits using network laws and theorems.

**CO 2:-** To identify and characterize diodes and various types of transistors

### **ENGLISH LANGUAGE COMMUNICATION SKILLS (ELCS) LAB**

**CO 1:-** Better understanding of nuances of English language through audio- visual experience and group activities

**CO 2:-** Neutralization of accent for intelligibility

**CO 3:-** Speaking skills with clarity and confidence which in turn enhances their employability skills.

### **ENGINEERING WORKSHOP**

**CO 1:-** Study and practice on machine tools and their operations

**CO 2:-** Practice on manufacturing of components using workshop trades including plumbing, fitting, carpentry, foundry, house wiring and welding

**CO 3:-** Identify and apply suitable tools for different trades of Engineering processes including drilling, material removing, measuring, chiseling.

**CO 4:-** Apply basic electrical engineering knowledge for house wiring practice.