PERI
INSTITUTE OF TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
REGULATION-2017

COURSE OUTCOMES

SEM I	**Course Name: Communicative English: HS8151**	
	Students will be able to :	
	HS8151.1	Read articles of a general kind in magazines and newspapers.
	HS8151.2	Participate effectively in informal conversations; introduce themselves and their friends and express opinions in English.
	HS8151.3	Comprehend conversations and short talks delivered in English.
	HS8151.4	Write short essays of a general kind and personal letters and emails in English.
	HS8151.4	Demonstrate the role of a variety of technologies/media in accessing, retrieving, managing, and communicating information

SEM I	**Course Name: Engineering Mathematics-I: MA8151**	
	Students will be able to :	
	MA8151.1	Use both the limit definition and rules of differentiation to differentiate functions.
	MA8151.2	Apply differentiation to solve maxima and minima problems.
	MA8151.3	Evaluate integrals both by using Riemann sums and by using the Fundamental Theorem of Calculus.
	MA8151.4	Apply integration to compute multiple integrals, area, volume, integrals in polar coordinates, in addition to change of order and change of variables.
	MA8151.5	Evaluate integrals using techniques of integration, such as substitution, partial fractions and integration by parts.
	MA8151.6	Determine convergence/divergence of improper integrals and evaluate convergent improper integrals.
	MA8151.7	Apply various techniques in solving differential equations.

SEM I	**Course Name: Engineering Physics: PH8151**	
	Students will be able to :	
	PH8151.1	The students will gain knowledge on the basics of properties of matter and its applications.
	PH8151.2	The students will acquire knowledge on the concepts of waves and optical devices and their applications in fiber optics.
	PH8151.3	Comprehend conversations and short talks delivered in English. The students will have adequate knowledge on the concepts of thermal properties of materials and their applications in expansion joints and heat exchangers.
	PH8151.4	The students will get knowledge on advanced physics concepts of quantum theory and its applications in tunneling microscopes.
	PH8151.5	The students will understand the basics of crystals, their structures and different crystal growth techniques.

SEM I	**Course Name: Engineering Chemistry: CY8151**	
	Students will be able to :	
	CY8151.1	Classify the polymers and their utility in the industries and describe the techniques of polymerization and properties of polymers.
	CY8151.2	Relate various thermodynamic functions such as enthalpy, entropy, free energy and their importance and equilibrium constants and its significance.
	CY8151.3	Explain the photophysical processes such as fluorescence and phosphorescence and various components of UV and IR spectrophotometer.
	CY8151.4	Illustrate the phase transitions of one component and two component systems and the types of alloys and their applications in industries.
	CY8151.5	Outline the synthesis, characteristics and the applications of nano materials.

SEM I	**Course Name: Problem Solving & Python Programming: GE8151**	
	Students will be able to :	
	GE8151.1	Develop algorithmic solutions to simple computational problems
	GE8151.2	Read, write, execute by hand simple Python programs.
	GE8151.3	Structure simple Python programs for solving problems.
	GE8151.4	Decompose a Python program into functions.
	GE8151.5	Represent compound data using Python lists, tuples, and dictionaries.
	GE8151.6	Read and write data from/to files in Python Programs.

SEM I	**Course Name: Engineering Graphics: GE8152**	
	Students will be able to :	
	GE8152.1	Familiarize with the fundamentals and standards of Engineering graphics.
	GE8152.2	Perform freehand sketching of basic geometrical constructions and multiple views of objects.
	GE8152.3	Project orthographic projections of lines and plane surfaces.
	GE8152.4	Draw projections and solids and development of surfaces.
	GE8152.5	Visualize and to project isometric and perspective sections of simple solids.

SEM	**Course Name: Problem Solving & Python Programming Lab: GE8161**

	Students will be able to :	
	GE8151.1	Write, test, and debug simple Python programs.
	GE8151.2	Implement Python programs with conditionals and loops.
	GE8151.3	Develop Python programs step-wise by defining functions and calling them.
	GE8151.4	Use Python lists, tuples, dictionaries for representing compound data.
	GE8151.5	Read and write data from/to files in Python.

SEM I	**Course Name: Physics and Chemistry Laboratory Lab: BS8162**	
	Students will be able to :	
	BS8151.1	Classify the Bravais lattices, and different types of crystal structures & growth techniques.
	BS8151.2	Demonstrate the properties of elasticity and heat transfer of objects.
	BS8151.3	Explain Black body Radiation and properties of matter waves and Schrodinger wave equations.
	BS8151.4	Illustrate the phase transitions of one component and two component systems and the types of alloys and their applications in industries.
	BS8151.5	Outline the synthesis, characteristics and the applications of nano materials.