## (Approved by AICTE, Affiliated by Anna University Chennai)

**Department** 

Of

**Science and Humanities** 

**Regulation-2021** 

**Course Outcomes** 

Professional English – I		
Course code and Name	After completion of the course, the students will be able to	
HS3151- Professional English – I	CO1- Enhance competence in the four modes of skills: writing, speaking, reading & listening.  CO2- Review the grammatical forms of English and use these forms in specific communicative contexts, which include: class activities, homework assignments, reading of texts and writing.  CO3- Infer their reading speed, comprehension of skills through extensive reading of academic articles  CO4- Enlarge their vocabulary by keeping a vocabulary journal  CO5- Develop abilities as critical thinkers, readers and writers  CO6 -Strengthen their ability to write academic papers, essays and summaries using the process approach.	

Matrices & Calculus		
Course code and Name	After completion of the course, the students will be able to	
MA3151- Matrices & Calculus	CO1: Develop the diagonal matrix for solving higher level mathematics	
	CO2: Apply their knowledge in partial differentiation to solving problems	
	CO3: Apply first order variable in their integral calculus.	
	CO4: Analyse the different methods to solving integration problems	
	CO5: Explain multiple integrals idea in their area & volume	

Engineering Physics		
Course code& Name	After the completion of course the students will be able to	
PH3151 Engineering Physics	CO1:- Understand the basic concepts of mechanics and moment of inertia of various bodies	
	CO2:- Gain knowledge about electromagnetic waves and its applications.	
	CO3:-Understand the basic knowledge in oscillations, lights and lasers	
	CO4:- Analyze the dual nature of matters	
	CO5:- Apply the quantum mechanical concept in energy bands	

Engineering Chemistry		
Course code and Name	After completion of the course, the students will be able to	
CY3151- Engineering Chemistry	CO1-Analyse the problems of hard water using in boilers and able to remove the hardness in water	
	CO2- Develop new techniques to prepare Nano-materials for industrial purpose	
	CO3-Apply their knowledge on choosing composites for making various parts in the automobile purpose	
	CO4-Explain the types and quality of fuels based on a their calorific value	
	CO5-Use resources in a sustainable way after getting the knowledge on available resources and its types	

Physics & Chemistry laboratory		
Course code and Name	After completion of the course, the students will be able to	
BS3171 Physics & Chemistry laboratory	CO1:-Examine the elastic nature of wooden bar using bending methods and gained the knowledge of elastic properties of various materials.	
	CO2:-Know the thermal properties of various materials.	
	CO3- Calculate amount of hardness in water sample using EDTA and alkalinity in water sample using Hcl	
	CO4- prepare nanoparticle using sol-gel method	
	CO5-Estimate the strength of acid present in solution using pH and conductivity meter	

Problem Solving and Python Programming	
Course code and Name	After completion of the course, the students will be able to
	CO1- Develop algorithmic solutions to simple computational problems.
GE3151- Problem Solving and Python Programming	CO2- Develop and execute simple Python programs.  CO3- Write simple Python programs using conditionals and loops for solving problems.
	CO4- Decompose a Python program into functions.
	CO5- Represent compound data using Python lists, tuples, dictionaries etc.
	CO6 - Read and write data from/to files in Python programs.