VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

Department of Humanities & Sciences (ME&CE) <u>I Year II Semester – R20</u> Course outcomes

Mathematics-II/ A42007	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Classify the various types of differential equations of first order and first degree and apply the concepts of differential equations to the real world problems.
CO2	Solve higher order differential equations and apply the concepts of differential equations to the real world problems.
CO3	Find the Laplace Transform of various functions and apply to find the solutions of differential equations.
CO4	Evaluate the multiple integrals and identify the vector differential operators physically in engineering problems.
CO5	Evaluate the line, surface and volume integrals and converting them from one to another by using vector integral
	theorems.

Chemistry/ A42009	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Acquire knowledge of atomic, molecular and electronic changes related to conductivity.
CO2	Apply the various processes of treatment of water for both domestic and industrial purpose.
CO3	Apply the knowledge of electrode potentials for the protection of metals from corrosion.
CO4	Analyze the major chemical reactions that are used in the synthesis of compounds.
CO5	Apply the knowledge of polymers in every day's life.

Chemistry Lab/ A42086	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Determination of parameters like hardness, alkalinity and chloride content in water.
CO2	Estimation of rate constant of a reaction from concentration-time relationships.
CO3	Determination of physical properties like adsorption, surface tension and viscosity.
CO4	Synthesize a small drug molecule and analyze a salt sample.

CO5 Calculation of strength of compound using instrumentation techniques.

Engineering Mechanics / A42303	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Understand the concepts of engineering mechanics
CO2	Apply the laws of mechanics for various engineering applications
CO3	Analyse the motion of body
CO4	Evaluate performance of various engineering components in terms of their energy capacities

Engineering Workshop/ A42382	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Understanding the tools and methods of using to fabricate engineering components
CO2	Applying the measuring techniques to verify the dimensional accuracy
CO3	Evaluating various methods and trades of workshop in the component building

English Communication Skills Lab/ A42084	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Understand the variants in pronunciation.
CO2	Identify the diverse purposes of listening and speaking.
CO3	Discuss ideas in diverse communicative settings.
CO4	Exhibit increased confidence in public speaking.
CO5	Display critical thinking, problem solving and decision making skills through GD's

Programming for Problem Solving-II /A42502		
After comp	After completing this course the student must demonstrate the knowledge and ability to	
CO1	Identify various string handling functions in 'C'.	
CO2	Develop programs with user defined data types.	
CO3	Use Dynamic memory allocation functions with pointers.	
CO4	Distinguish between Stacks and Queues.	
CO5	Analyze various Dynamic Data Structures.	

Programming for Problem Solving Lab -II /A42582	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Build programs on various string handling functions.
CO2	Develop applications on user defined data types.
CO3	Apply dynamic memory allocation through pointers.
CO4	Implement linear data structures through stacks and queues.
CO5	Create linked list dynamically through stacks and queues.