

**VIDYA JYOTHI INSTITUTE OF TECHNOLOGY**  
**Department of Humanities & Sciences (ECE&EEE)**  
**I Year II Semester – R20**  
**Course outcomes**

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

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

<b>Chemistry Lab/ A42086</b>	
<b>After completing this course the student must demonstrate the knowledge and ability to</b>	
<b>CO1</b>	Determination of parameters like hardness, alkalinity and chloride content in water.
<b>CO2</b>	Estimation of rate constant of a reaction from concentration-time relationships.
<b>CO3</b>	Determination of physical properties like adsorption, surface tension and viscosity.
<b>CO4</b>	Synthesize a small drug molecule and analyze a salt sample.
<b>CO5</b>	Calculation of strength of compound using instrumentation techniques.

<b>Basic Electrical Engineering/ A42202</b>	
<b>After completing this course the student must demonstrate the knowledge and ability to</b>	
<b>CO1</b>	Understand the fundamentals of basic circuit components and their characteristics.
<b>CO2</b>	Analyze basic electrical circuits with A.C excitation.
<b>CO3</b>	Understand the concepts of magnetic circuits and transformers.
<b>CO4</b>	Acquire the basic concepts of electrical motors.
<b>CO5</b>	Understand the concept of A.C generator and low voltage electrical installations.

<b>Basic Electrical Engineering Lab/ A42282</b>	
<b>After completing this course the student must demonstrate the knowledge and ability to</b>	
<b>CO1</b>	Get an exposure to basic electrical laws.
<b>CO2</b>	Understand the response of different types of electrical circuits to different excitations.
<b>CO3</b>	Understand the measurement, calculation and relation between the basic electrical parameters.
<b>CO4</b>	Understand the performance characteristics of D.C electrical machines.
<b>CO5</b>	Understand the performance characteristics of A.C electrical machines.

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

<b>English Communication Skills Lab/ A42084</b>	
<b>After completing this course the student must demonstrate the knowledge and ability to</b>	

<b>CO1</b>	Understand the variants in pronunciation.
<b>CO2</b>	Identify the diverse purposes of listening and speaking.
<b>CO3</b>	Discuss ideas in diverse communicative settings.
<b>CO4</b>	Exhibit increased confidence in public speaking.
<b>CO5</b>	Display critical thinking, problem solving and decision making skills through GD's

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

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