

**VIDYA JYOTHI INSTITUTE OF TECHNOLOGY**  
**Department of Humanities & Sciences (EEE)**  
**I Year I Semester – R18**  
**Course outcomes**

<b>Mathematics-I /A21002</b>	
<b>After completing this course the student must demonstrate the knowledge and ability to</b>	
<b>CO1</b>	Write the matrix representation of system of linear equations and identify the consistency of the system of equations.
<b>CO2</b>	Find the Eigen values and Eigen vectors of the matrix and discuss the nature of the quadratic form.
<b>CO3</b>	Analyze the convergence of sequence and series.
<b>CO4</b>	Discuss the applications of mean value theorems to the mathematical problems, Evaluation of improper integrals using Beta and Gamma functions.
<b>CO5</b>	Examine the extreme of functions of two variables with/ without constraints.

<b>Chemistry/ A21004</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/ A21083</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.
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<b>English/ A21001</b>	
<b>After completing this course the student must demonstrate the knowledge and ability to</b>	
<b>CO1</b>	Infer the importance of scientific discoveries in promoting social responsibilities.
<b>CO2</b>	Comprehend the given texts and respond appropriately for technical and professional purposes.
<b>CO3</b>	Communicate confidently and transfer information into various forms of writing.
<b>CO4</b>	Understand the importance of health and nutrition for a better society.
<b>CO5</b>	Present various forms of business writing skills for successful careers.

<b>English Language Skills Lab (ELSL)/ A21081</b>	
<b>After completing this course the student must demonstrate the knowledge and ability to</b>	
<b>CO1</b>	Reproduce speech sounds and improve fluency in language.
<b>CO2</b>	Understand syllables and consonant clusters for appropriate pronunciation.
<b>CO3</b>	Exhibit effective professional skills with rhetoric eloquence.
<b>CO4</b>	Deliver enthusiastic and well-practiced presentation.
<b>CO5</b>	Learn Task-Based Language Learning (TBLL) through various language learning activities effectively.

<b>Programming For Problem Solving-I/ A21501</b>	
<b>After completing this course the student must demonstrate the knowledge and ability to</b>	
<b>CO1</b>	Design Algorithms and Flowcharts for real world applications using 'C'.
<b>CO2</b>	Know the usage of various operators in Program development.

<b>CO3</b>	Design programs involving decision and iteration structures.
<b>CO4</b>	Apply the concepts code reusability using Functions.
<b>CO5</b>	Analyze various searching and sorting techniques using Arrays.

<b>Programming For Problem Solving Lab-I/ A21581</b>	
<b>After completing this course the student must demonstrate the knowledge and ability to</b>	
<b>CO1</b>	Apply the specification of syntax rules for numerical constants and variables, data types.
<b>CO2</b>	Know the Usage of various operators and other C constructs.
<b>CO3</b>	Design programs on decision and control constructs.
<b>CO4</b>	Develop programs on code reusability using functions.
<b>CO5</b>	Implement various searching and sorting techniques using arrays.

<b>Engineering Workshop/ A21381</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

