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

Mathematics-I/A41002	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Write the matrix representation of system of linear equations and identify the consistency of the system of equations.
CO2	Find the Eigen values and Eigen vectors of the matrix and discuss the nature of the quadratic form.
CO3	Analyze the convergence of sequence and series.
CO4	Discuss the applications of mean value theorems to the mathematical problems, Evaluation of improper integrals using Beta and Gamma functions.
CO5	Examine the extrima of functions of two variables with/ without constraints.

Applied Physics/A41004	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Identify various optical phenomena of light
CO2	Discuss the basic principles of quantum mechanics
CO3	Classify solids based on the band theory
CO4	Elucidate the characteristics of semiconductors and semiconductor devices
CO5	Explain the working principle of optical fibers and lasers

Physics Lab/ A41082	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Apply optical phenomena to characterize optical sources and components.
CO2	Characterize semiconductors and semiconductor devices.
CO3	Study transient response of RC circuit.
CO4	Study the properties and resonance mechanisms in mechanical and electrical systems.

CO5	Evaluate the magnetic Induction along the axis of current carrying coil.

English/ A41001	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Infer the importance of scientific discoveries in promoting social responsibilities.
CO2	Comprehend the given texts and respond appropriately for technical and professional purposes.
CO3	Communicate confidently and transfer information into various forms of writing.
CO4	Understand the importance of health and nutrition for a better society.
CO5	Present various forms of business writing skills for successful careers.

English Language Skills Lab / A41081	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Reproduce speech sounds and improve fluency in language.
CO2	Understand syllables and consonant clusters for appropriate pronunciation.
CO3	Exhibit effective professional skills with rhetoric eloquence.
CO4	Deliver enthusiastic and well-practiced presentation.
CO5	Learn Task-Based Language Learning (TBLL) through various language learning activities effectively.

Programming for Problem Solving-I/ A41501	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Design Algorithms and Flowcharts for real world applications using ‘C’.
CO2	Know the usage of various operators in Program development.
CO3	Design programs involving decision and iteration structures.
CO4	Apply the concepts code reusability using Functions.
CO5	Analyze various searching and sorting techniques using Arrays.

Programming for Problem Solving Lab-I/ A41581	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Apply the specification of syntax rules for numerical constants and variables, data types.
CO2	Know the Usage of various operators and other C constructs.
CO3	Design programs on decision and control constructs.
CO4	Develop programs on code reusability using functions.
CO5	Implement various searching and sorting techniques using arrays.

Engineering Graphics & Modeling/ A41301	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Understand the concepts of engineering drawing of planes, solids and the CAD drawing software.
CO2	Applying the principles of engineering graphics while drawing the engineering components.
CO3	Analyse the sectional views for their configurations.
CO4	Evaluate the surfaces of solids developed for further processing in the engineering applications.