

VIDYA JYOTHI INSTITUTE OF TECHNOLOGY
Department of Humanities & Sciences (ECE)
I Year I Semester – R15
Course outcomes

English-I/A11001	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Demonstrate real life skills in the light of literature.
CO2	Understand influential personalities, and practice human and professional values
CO3	Explain new versions of technology for effective usage of human resources towards development and to avoid risks
CO4	Identify principles and values to build collaborative knowledge and to cultivate social responsibility
CO5	Enhance communication skills through grammar, vocabulary with emphasis on LSRW skills.

Mathematics-I/A11002	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Understand the term rank and Elementary Transformations of a Matrix, System of Equations.
CO2	Compute Eigen values and corresponding Eigen vectors of a square matrix, finding Inverse and method of Diagonalization
CO3	Evaluate the Mean value theorems and maxima and minima of functions of two variables
CO4	Evaluate of improper integrals by using beta gamma functions and evaluation of double and triple integrals by tracing the region of integration
CO5	Apply Laplace transform of various functions and solve the initial value problems by using Laplace transforms.

Engineering Physics-I/A11003	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Analyze the crystal structures and identify defects in crystals
CO2	Explain the diffraction, interference and polarization phenomenon of light
CO3	Understand the basics of statistical mechanics and applications of LASERS in various fields

CO4	Interpret the significance of Magnetic materials
CO5	Explain fundamentals of Dielectrics and their applications

C Programming-I /A11502	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Explain the basics of computers and its Generations
CO2	Solve problems using flowcharts, algorithms and programs
CO3	Develop programs on control structures.
CO4	Develop programs using Arrays, Strings and derived data types
CO5	Design programs on functions

Electrical Circuits-I/A11201	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Understand fundamentals of the basic circuit components & their characteristics
CO2	Analyze A.C circuits for different excitations
CO3	Understand the concepts of locus diagrams, resonance.
CO4	Understand the concepts of magnetic circuits
CO5	Analyze D.C and A.C circuits using theorems.

Engineering Chemistry -I/A11004	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Explain the various processes of treatment of water for both industrial and domestic purpose
CO2	Identify the operating principles and the reaction mechanisms of batteries and fuel cells
CO3	Apply the knowledge for protection of different metals from corrosion

CO4	Identify engineering applications of polymers
CO5	Understand the various applications of advanced engineering materials

C Programming Lab/A11581	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Understand basic commands in Linux.
CO2	Explain the process of execution of programs written in C language
CO3	Develop programs in C language
CO4	Analyze and design C program for a particular problem
CO5	Solve computing problems using control structures and arrays

English Language Communication Skills Lab-I/A11081	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Facilitate computer-aided multimedia instruction enabling individualized and independent language learning.
CO2	Improve accent and intelligibility in pronunciation of English through Ice breaking and JAM sessions
CO3	Use vocabulary, glosses and pronunciation for appropriate usage of the target language.
CO4	Develop learners' communicative ability through frequent exchange of ideas and discussions.
CO5	Explain the concepts of verbal and non-verbal skills of communication useful in day-to- day life

Engineering Physics/Engineering Chemistry Lab-I/A11083	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Understand practical concept of stationary waves using Melde's apparatus and Study the mechanical properties of material using Torsional pendulum
CO2	Visualize the fundamental optical phenomenon like Interference, diffraction and Dispersion

CO3	Identify the basic Electrical characteristics of LED, RC circuits
CO4	Apply Titrimetric analysis for estimating the quantity of the compound accurately.
CO5	Handle instruments like conductometer and potentiometer for measuring conductance & emf value.
CO6	Evaluate and record the physical properties like Viscosity and Surface tension

IT & Engineering Workshop/A11084	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Understand the process of assembly/disassembly of computer parts.
CO2	Work on advanced concepts of Microsoft word software.
CO3	Appreciate the usage of advanced options in MS Excel and PowerPoint.
CO4	Apply basic electrical engineering knowledge for house wiring practice.
CO5	Fabricate components using tin smithy and fitting.