

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

English-II/A12005	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Acquire the real life skills in the light of literature.
CO2	Develop managerial skills for successful careers. By making critical decisions
CO3	Demonstrate physical and mental fitness with true sportsman spirit.
CO4	Build collaborative knowledge and cultivate social responsibility.
CO5	Enhance communication skills through grammar, vocabulary with emphasis on LSRW skills.

Mathematics-II/A12006	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Solve first order differential equations and their applications.
CO2	Identify different types of higher order differential equations and their applications in engineering problems
CO3	Apply Fourier series and defining it for various types of functions
CO4	Evaluating the Fourier transforms of functions of single variable
CO5	Justify integrals of functions or vector-related quantities over curves, surfaces, and domains in two- and three-dimensional space.

Engineering Physics-II/A12007	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Understand the principles of Quantum mechanics & free electron theory.
CO2	Differentiate the types of solids based on band theory of solids and to understand the applications of optical fibers in various fields.
CO3	Explain the basics of semiconductors and semiconductor devices
CO4	Explain superconductivity and their applications in modern technology
CO5	Identify the importance of Nanomaterials in various fields

Applied Chemistry/A12008	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Understand the operating principles and the reaction mechanisms of batteries and fuel cells.
CO2	Apply their knowledge for the protection of different metals from corrosion.
CO3	Apply the concept of adsorption in various industries
CO4	Apply the knowledge of fuels and lubricants in industry.
CO5	Understand the various applications of advanced engineering materials.

Engineering Mechanics-II/A12304	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Analyze given system and find reaction forces in each member of Trusses.
CO2	Identify the rigid body motion to compute velocity and acceleration.
CO3	Understand the kinetics of rigid body in translation and rotation.
CO4	Analyze the motion of bodies with and without considering cause of motion. Appreciate and apply the concept of Work-Energy method.
CO5	Analyze the free vibration concepts from the fundamentals of Simple Harmonic Motion.

Engineering Graphics-II/A12305	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Analyze given solids and represent sectional views, developments and their intersections.
CO2	Represent and differentiate Isometric and Orthographic projections
CO3	Generate isometric and corresponding orthographic views of any given component.
CO4	Visualize and draw the perspective view of a given solid.
CO5	Appreciate the concepts of Computer Aided Drafting.

English Language Communication Skills Lab-II/A12085	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Build the language proficiency in English with emphasis on LSRW skills.
CO2	Develop communication skills through various language learning activities.
CO3	Summarize the nuances of English speech sounds, stress, rhythm, intonation and syllable division.
CO4	Acquire and exhibit acceptable etiquette essential in social & professional settings.
CO5	Improve the fluency in spoken English and neutralize mother tongue influence.

Engineering Physics /Applied Chemistry Lab/A12086	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Experiment on Melde's and Torsional pendulum with knowledge in waves and mechanics
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/A12087**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.