VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

Department of Humanities & Sciences (ME&CE) <u>I Year I Semester – R15</u>

Course outcomes

English-l	/A11001
After com	oleting 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.

Mathema	Mathematics-I/A11002	
After comp	pleting 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.	

Engineeri	ngineering Physics-I/A11003	
After comp	leting 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 Prograi	Programming/A11501	
After comp	oleting 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	Graphics-I/A11301
After comp	leting 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.

Engineeri	Engineering Mechanics -I/A11302	
After comp	leting this course the student must demonstrate the knowledge and ability to	
CO1	Understand and apply the concepts of force, moment and their resolutions.	
CO2	Develop free body diagrams in system of forces.	
CO3	Analyze and apply the concepts of friction.	
CO4	Identify centroid for plane figures and centre of gravity for any given topology.	
CO5	Calculate area and mass Moment of Inertia for given cross-sections.	

C Prograi	mming Lab/A11581
After comp	leting 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 L	English Language Communication Skills Lab-I/A11081	
After comp	oleting 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	

Engineeri	Engineering Physics Lab/A11082	
After comp	leting this course the student must demonstrate the knowledge and ability to	
CO1	Understand the practical concept of stationary waves using Melde's apparatus	
CO2	Study the mechanical properties of material using Torsional pendulum	
CO3	Visualize the fundamental optical phenomenon like Interference, diffraction and Dispersion	
CO4	Study the basic Electrical characteristics of LED, RC circuits	
CO5	Identify the variation of magnetic field by Stewart and Gee's apparatus experimentally	

Engineering Workshop/A11381	
After completing this course the student must demonstrate the knowledge and ability to	
CO1	Study and practice on workshop tools and their operations.
CO2	Manufacture wooden and metallic components using carpentry and foundry respectively.
CO3	Join two or materials using welding equipment.
CO4	Fabricate ferrous components using blacksmithy technique
CO5	Demonstrate skills on plumbing and machine shops trades.