

## SREE VENKATESWARA COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi and Affiliated to JNTU, Anantapur) Northrajupalem (Vi), Kodavaluru(M), S.P.S.R Nellore (Dt)-524316

## **DEPARTMENT OF HUMANITIES & SCIENCES**

## COURSE OUTCOMES

I/I (ME)			
S.No	Subject Name	Subject	Course Outcomes
		Code	
Functional English	C111	C111.1	Describe the communication and writing skills in general communication. (BL-2)
		C111.2	Develop the writing and life skills in structural manner of real time scenarios. (BL-3)
		C111.3	Apply the knowledge of writing and speaking skills to enhance the career opportunities. (BL-3)
		C111.4	Illustrate the concepts of writing and speaking skills to develop the skills in job opportunities.(BL - 2)
		C111.5	Analyze the concepts of various real time scenarios to represent in an effective model. (BL - 4)
Mathematics - I	C112	C112.1	Analyze the ordinary differential equations to provide solutions of various engineering applications.(BL-4)
		C112.2	Apply the mathematical knowledge of higher order differential equations to solve various engineering problems.(BL-3)

		C112.3	Describe the knowledge of Mean Value theorems, functions of several variables and Radius of
		C112.4	Evaluate the Multiple integrals to determine areas and volumes of engineering applications. (BL-5)
		C112.5	Applythe techniques of vector calculus to solve various engineering problems.(BL-3)
Computer Programming	C113	C113.1	Describe computer programming concepts to solve a problem. (BL -2)
		C113.2	Choose appropriate control structure to solve the real world problems.(BL-3)
		C113.3	Apply the knowledge of pointers for dynamic memory management of an application.(BL-3)
		C113.4	Apply the concepts of Arrays, pointers and structures to develop programs.(BL-3)
		C113.5	Demonstrate the knowledge of Files to organize the data in a disk.(BL- 2)
Engineering Chemistry	C114	C114.1	Describe the various water treatment techniques used for the softening and purification of water in industrial applications.(BL-2)
		C114.2	Demonstrate the various preparation mechanisms of different polymers in engineering applications.(BL-2)
		C114.3	Applythe concepts of electro chemistry and knowledge of protection of metalsin engineering and scientific applications.(BL-3)
		C114.4	Analyzethe fuels and their synthesis to understand working of InternalCombustion and Diesel engines.(BL-4)
		C114.5	Demonstrate concepts of cement, refractories, lubricants &carbon clusters in various engineering applications.(BL-3)

		C115.1	To comprehend the concepts of environment and its
	C115		importance in our daily life and develop and apply
			various water conservation methods and conservation of
			other natural resources also.
		C115.2	To identify the importance of environmental education
			for protection of life cycles of various bio systems
			which are essential for bio sphere.
Environmental studies		C115.3	To develop new innovative methods for controlling of
			environmental pollution which may affecte the human
			health.
		C115.4	To analyze environmental issues related to society and
			find solutions for environmental problems.
		C115.5	To analyze the effects of increasing human population
			as well as health associated problems and develop
			measures to be taken to protect human health.
	C116	C116.1	Apply knowledge in seeking right pronunciation with
ELCS -LAB			better accent through stress, intonation and rhythm.(BL-
			3)
		C116.2	Develop speaking skills and active participation in the
			learning process and become expertise lifelong learning
			Skills.(BL-3)
		C116.3	Demonstrate the learning skills through participate in
			Group Discussions, Debates, placemnet Interviews and
			in Public Speaking. (BL-3)
Engineering chemistry lab	C117	C117.1	Develop skills in determining the effects of hard water
			and also importance of knowing effects of presence of
			excess oxygen, acids and bases in water.(BL-3)
		C117.2	Demonstrste the practical knowledge about flow of
			lubricant with varying temperatures.(BL-2)
		C117.3	Analyze the amount of iron & manganese through
			different techniques and applying the knowledge in
			control of corrosion. (BL-4)

Computer Programming Lab	C118	C118.1 C118.2 C118.3	Design and develop programs by selecting the right identifiers, data types & operators, control statements, arrays and strings for effective Computation. (BL-3) Develop the the solution of a given problem by applying functions, pointers, structures & unions.(BL-3) develop the solution of a given problem through files
			(BL-3) and Debug erroneous programs related to the problem.
		I/II (ME)	
S.No	Subject Name	Subject	Course Outcomes
		Code	
EPC	C121	C121.1	Demonstrate listening, reading and writing skills of communication in general and obtain general awareness in science( BL-2)
		C121.2	Develop the oral communication skills in real life scenarios. (BL-3)
		C121.3	Illustrate the life and presentational skills for competitive opportunities. (BL-2)
		C121.4	Apply the life skills to deliver presentation effectively in placements.(BL - 3)
		C121.5	Develop employability skills to enhance career opportunities. (BL - 2)
Mathematics – II	C122	C122.1	Analyze the techniques of Laplace transforms and determine the solutions of ODE in engineering problems.(BL-4)
		C122.2	Describe the mathematical knowledge of Fourier Series to solve various engineering problems.(BL-2)
		C122.3	Illustrate the concepts of Fourier transforms to solve various engineering problems. (BL-2)

		C122.4	Apply the Partial differential equations to generate mathematical models for engineering applications. (BL- 3)
		C122.5	Apply the techniques of Z-Transforms to solve difference equations in engineering applications. (BL-3)
MSE	C123	C123.1	Describe the concepts of structure of metals and to find the constitution of alloys (BL-2)
		C123.2	Demonstrate the concepts of construction of equillibrium diagrams and solid state transformations(BL-2)
		C123.3	illustrate the structure and properties of Cast Iron and Steels and non ferrous metals and alloys(BL-2)
		C123.4	Analyze the behaviour of metals under various heat treatment processes. (BL-3)
		C123.5	Describe the properties of ceramic materials and composite materials (BL2)
Engineering physics	C124	C124.1	Describe the concepts of physical optics, lasers and fibre optics in various engineering applications. (BL-2)
		C124.2	Illustrate the X-Ray diffraction techniques for determination of crystal structures & production and detection of ultrasonic waves for non destructive testing of materials. (BL-2)
		C124.3	Analyze the knowledge of basic quantum mechanics and free electron theory of metals to describe the properties of metals. (BL-4)
		C124.4	Demonstrate the physics of semiconductors for electronic devices & properties of various magnetic materials for engineering applications. (BL-3)
		C124.5	Illustrate the concepts of super conducting materials and nano-materials for scientific and engineering applications. (BL-2)

ENGINEERING DRAWING	C125	C125.1	Demonstrate the Principles of Engineering Drawing, BIS conventions and importance of various curves in engineering for solving engineering problems. (BL-2)
		C125.2	Apply the concepts of Engineering scales for drawing view of projection points of a problem. (BL-3)
		C125.3	Analyze the procedure of projection of lines and regular plane surfaces for development of engineering models. (BL-4)
		C125.4	Construct the development of surfaces by understanding the projection of solids concept. (BL-3)
		C125.5	Demonstrate the strategies of projections and visualization skills for conversion of Isometric views into orthographic projections. (BL-2)
MSE lab	C126	C126.1	Identify the importance of various material and structure of the materials(BL-3)
		C126.2	Apply practical application knowledge to test the materials(BL-3)
		C126.3	Apply the knowledge to conduct various tests like hardness tes, impact test, fatique test for materials(BL- 3)
Engineering physics lab	C127	C127.1	Identify the importance of optical phenomenon like Interference and diffraction and illustrstethe knowledge about diffraction phenomenon and applications of lasers. (BL-3)
		C127.2	Apply practical application knowledge of optical fiber and lasers by the study of their relative parameters. (BL-3)
		C127.3	Apply the knowledge of semiconductor and magnetic materials in day to day science applications. (BL-3)
Engineering & IT Workshop (13A99103)	C128	C128.1	Design and development of sheet metal objects by surface development and join the metals for obtaining desired shape.(BL-3)

	C128.2	Build a Personal Computer and Install operating
		systems and prepare the computer ready to use.(BL-3)
	C128.3	Develop presentation and documentation of a given
		tasks through Microsoft Windows and access the
		Internet & test Interconnect two or more computers for
		information sharing.(BL-3)