

SRI VASAVI INSTITUTE OF ENGINEERING & TECHNOLOGY An Autonomous Institute



(Approved by AICTE, New Delhi & Affiliated to JNTU Kakinada)
Accredited by NBA (Mech, ECE & CSE) & NAAC with 'A' Grade
Nandamuru, Pedana Mandal, Krishna Dist – 521369.

Department of Mechanical Engineering

COURSE OUTCOMES

Academic year: 2023-2024

Year/sem- III-I (R20)

CO	Course Outcome(CO) Statement- At the end of the Course, the students	Blooms
Number	will be able to	Taxonomy
	Thermal Engineering-II(C311)	
C311.1	Recognize the Rankine cycle analysis and working of different types of boilers	Understand
C311.2	Analyze steam nozzles & steam turbines	Analyze
C311.3	Demonstrate working of reaction turbines and steam condenser	Analyze
C311.4	Differentiate the working of reciprocating ,rotary air compressors	Analyze
C311.5	Differentiate the working of centrifugal and axial flow compressors	Analyze
	Design of Machine Members-I(C312)	
C312.1	To understand the materials and their properties along with manufacturing considerations.	Understand
C312.2	To gain knowledge about the strength of machine elements	Understand
C312.3	To understand and apply the knowledge in designing the riveted and welded joints, keys, cotters and knuckle joints	Analyze
C312.4	To understand and apply the knowledge in designing the shafts and shaft	Analyze
C312.5	To understand and apply the knowledge in designing the mechanical	Analyze
	Machining_Machine Tools & Metrology(C313)	
C313.1	Discuss the concepts of machining processes	Understand
C313.2	Apply the principles of lathe, shaping, slotting and planning machines	Apply
C313.3	Apply the principles of drilling, milling and boring processes.	Apply
C313.4	Analyze the concepts of finishing processes and the system of limits and	Analyze
C313.5	Learn the concepts of surface roughness and optical measuring instruments.	Understand
	Advanced Materials(C314)	

C314.1	To gain knowledge about the metals and alloys and their utility in different environments	Understand
C314.2	To acquire knowledge about polymers and ceramics and their applications	Understand
C314.3	To analyze composite materials along with reinforcements and their applications	Analyze
C314.4	To understand the basics of shape memory alloys and functionally graded materials	Understand
C314.5	To gain knowledge about the nanomaterials and their applications	Analyze
	Renewable Energy Sources (C315)	
C315.1	Analyze solar radiation data, extra-terrestrial radiation, radiation on earth's surface and solar Energy Storage.	Analyze
C315.2	Explain the wind turbines	Understand
C315.3	Explain the biomass and geothermal energy.	Understand
C315.4	Explain the principle of Energy production from OTEC, Tidal and Waves.	Understand
C315.5	Evaluate the concept and working of Fuel cells & MHD power generation.	Evaluate
	Machine Tools Lab(C316)	
C316.1	Understand working principle, mechanisms and various operations on general purpose machines.	Understand
C316.2	Illustrate various operations performed on lathe.	Apply
C316.3	Explain the mechanism of shaper, drilling, boring and perform various operations.	Apply
C316.4	Perform Operations on slotting machines	Apply
C316.5	Perform various Operations on milling machines	Apply
	Thermal Engineering Lab(C317)	
	Implement the reasons and effects of various losses that occur in the actual engine operation.	Apply
3172	Describe the various engine systems along with their function and necessity.	Apply
317.3	Interpret the combustion phenomenon in S.I and C.I engines.	Apply
317.4	Analyze the performance evalution of testing on S.I and C.I engines	Analyze
317.5	Analyze the performance and efficiency of reciprocating compressors	Analyze
	Advanced Communication Skills Lab(C318)	

C318.1	To improve the students fluency and develop their vocabulary.	Remember
C318.2	To read and comprehend texts in different contexts and communicate their ideas relevantly and coherently in writing.	Understand.
C318.3	Students able to Speak effectively according to the context and make them industry-ready.	Analyze
C318.4	To help students acquire behavioural skills for their personal and professional life.	Apply
C318.5	To respond appropriately in different socio-cultural and professional contexts.	Apply
	Professional Ethics and Human Values(C319)	
C319.1	Explain the concept of Human values	understand
C319.2	Explain the knowledge about the principles of engineering ethics	understand
C319.3	Explain the concept of engineering as social experimentation.	understand
C319.4	Explain the concept of engineers' responsibility for safety and risk	understand
C319.5	Explain the knowledge about the engineers' rights and responsibilities	understand
	COMMUNITY SERVICE PROJECT(C3110)	
C3110.1	Describe the abstract and information of the project	Understand
C3110.2	Identify the time duration and cost required to develop the project	Understand
C3110.3	Implement and test the project which is useful to the society	Evaluate
C3110.4	Describe the summary of the project and identify the impact of the project in the society	Evaluate
C3110.5	Demonstrate the project individual and in a group	Apply

COORDINATOR

HOD