



SRI VASAVI INSTITUTE OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING

COURSE OUTCOMES
2020-21 III B.TECH I SEM

CO NUMBER	COURSE OUTCOME(CO)STATEMENT –AT THE END OF THE COURSE ,THE STUDENTS WILL BE ABLE TO	BLOOMS TAXONOMY
DYNAMICS OF MACHINERY(C311)		
C311.1	Analyze stabilization of sea vehicles, aircrafts and automobile vehicles	Apply
C311.2	Compute frictional losses, torque transmission of mechanical systems.	Evaluate
C311.3	Analyze dynamic force analysis of slider crank mechanism and design of flywheel.	Apply
C311.4	Understand the working of various types of governors	Understand
C311.5	Understand balancing of reciprocating and rotary masses.	Understand
C311.6	Understand how to determine the natural frequencies of continuous systems starting from the general equation of displacement.	Understand
METAL CUTTING & MACHINE TOOLS(C312)		
C312.1	Describe the fundamentals of metal removal process.	Remember
C312.2	Explain the working of principle, mechanism, and various operations performed on lathe.	Understand
C312.3	Distinguish the mechanism of shaper, planner, slotter, drilling, boring and various operations performed on them.	Analyze
C312.4	Discuss milling machines and select the appropriate cutter for the required operation.	Apply
C312.5	Describe grinding machines, various bonds, finishing and super finishing operations.	Understand
C312.6	Differentiate the manual machines from automatic machines and also relate the part programs for various operations.	Analyze
DESIGN OF MACHINE MEMBERS–II(C313)		
C313.1	Select Suitable bearing based on the application of loads and predict the life of bearing.	Understand
C313.2	Interpret the new I.C engine parts such as connecting rod, crank, piston, cylinder with the help of design considerations	Apply
C313.3	Solve the expression of radius of neutral axis for different cross section of Curved beams	Apply
C313.4	Differentiate power transmission elements such as Chains, Belts, Ropes, Pulleys, Power screws	Apply
C313.5	Distinguish the analysis of Spur and Helical gears. different types of Levers.	Analyze

C313.6	Distinguish the analysis of brackets, and safety valves and explain the construction of wire ropes.	Analyze
OPERATIONS RESEARCH(C314)		
C314.1	Construct the mathematical models of conflicting situations and mathematical analysis methods in operations research.	Analyze
C314.2	Build and solve Transportation Models and Assignment Models.	Apply
C314.3	Assess the life of systems using replacement theory.	Analyze
C314.4	Calculate the waiting time of the queue and system and solve the game problems.	Analyze
C314.5	Develop the economical ordering quantity in various conditions.	Apply
C314.6	Apply dynamic programming to multi stage decision making problems.	Apply
THERMAL ENGINEERING –II(C315)		
C315.1	Recognize the rankine cycle analysis	Understand
C315.2	Demonstrate the working of different types of boilers and its mountings	Apply
C315.3	Distinguish the different steam nozzle performances and problem analysis	Analyze
C315.4	Differentiate the steam turbines and its performance parameters	Analyze
C315.5	Differentiate the working of gas turbines and its performance parameters	Analyze
C315.6	Interpret the basic principles of Jet propulsion and rocket engineering.	Apply
THEORY OF MACHINES LAB(C316)		
C316.1	Suggest and analyze mechanisms for a prescribed intermittent motion like opening and closing of IC engine and Compute frictional losses, torque transmission of mechanical systems.	Analyze
C316.2	Analyze dynamic force analysis of slider crank mechanism	Analyze
C316.3	Analyze stabilization of sea vehicles, aircrafts and automobile vehicles and Understand the working of various types of governors	Analyze
C316.4	Understand balancing of reciprocating and rotary masses.	Apply
C316.5	Understand how to determine the natural frequencies of continuous systems starting from the general equation of displacement.	Apply
C316.6	Calculate moment of inertia of a flywheel.	Apply
MACHINE TOOLS LAB(C317)		
C317.1	Demonstrate fundamentals of metal removal process	Apply

C317.2	Illustrate working principles ,mechanism and various operations performed on lathe	Apply
C317.3	Explain the mechanism of shaper,planner,slotter,drilling,boring and various operations performed	Apply
C317.4	Discuss milling machines,various operations ,various cutters and operations	Apply
C317.5	Describe grinding machines,various bonds,finishing and super finishing operations	Apply
C317.6	Differentiate the manual machines and automatic machine,jigs and fixtures and also write the part programs for various operations	Analyze
THERMAL ENGINEERING LAB(C318)		
C318.1	Implement the reasons and affects of various losses that occur in the actual engine operation.	Apply
C318.2	Describe the various engine systems along with their function and necessity.	Apply
C318.3	Interpret the combustion phenomenon in S.I. and C.I. engines.	Apply
C318.4	Analyze the performance evaluation of testing on S.I and C.I Engines	Analyze
C318.5	Analyze the performance and efficiency of reciprocating compressors.	Analyze
C318.6	Analyze the performance and efficiency of rotary compressors.	Analyze
IPR & PATENTS(C319)		
C319.1	Describe the basic concepts of intellectual property rights	Remember
C319.2	Explain the concept of copy right , law and procedure	Understand
C319.3	Explain the concept of patent ,patent law , Registration	Understand
C319.4	Describe the concept of trademark , trademark infringement, law	Remember
C319.5	Explain the concept of trademark ,physical security	Understand
C319.6	Explain the concept of cyber crime ,ecommerce & IT ACT	Understand

COORDINATOR

PSRB
HOD