Sree Chitra Thirunal College of Engineering

Pappanamcode Thiruvananthapuram kerala -695018

principal@sctce.ac.in

Consolidated Course Outcomes Report

Batch	Slno	Subject	CO	Topic	Bloom's taxonomy level
ME 2K20 A	1	MECHATRONICS	CO1	Explain the working of Sensors	Understanding(U)
			CO2	Illustrate the Hydraulic and Pneumatic Circuits with diagram	Understanding(U),Applying(P)
			CO3	Explain MEMS Fabrication Techniques and its applications	Understanding(U)
			CO4	Explain the working & Write Ladder programs for simple applications of PLC in industrial automation	Understanding(U),Applying(P)
			CO5	Illustrate the Mechatronics Elements in CNC & Robotics	Understanding(U)
	2	INDUSTRIAL HYDRAULICS	CO1	Identify the basic elements of a fluid power system	Remembering(R)
			CO2	Describe the properties of a hydraulic fluid	Understanding(U)
			CO3	Distinguish between different types of pumps	Applying(P)
			CO4	Explain the operation and features of various hydraulic actuators	Understanding(U)
			CO5	Describe the purpose, construction and operation of various control valves	Applying(P)
			CO6	Develop a hydraulic circuit to perform a desired function	Applying(P)
	3	DATA ANALYTICS FOR ENGINEERS	CO1	prediction errors, sampling methods	Remembering(R)
			CO2	descriptive and predictive analysis	Understanding(U)
			CO3	5V's in big data analytics ,different sources of bigdata	Applying(P)
			CO4	big data analysis, data visualization,	Analyzing(A)
	4	COMPOSITE MATERIALS	CO1	To understand the history of composites, various matrices and reinforcements used in composites.	Understanding(U)
			CO2	To understand types of fibers/ whiskers used in composites, structures, properties, characteristics applications and manufacturing and methods.	Understanding(U)
			CO3	To know about polymer matrix composites, classification, properties, characteristics, applications and manufacturing methods.	Understanding(U)
			CO4	To know about metal matrix composites, classification, properties, characteristics, application and manufacturing methods.	Understanding(U)
			CO5	To know about ceramic matrix composites, classification, properties, characteristics, application and manufacturing methods.	Understanding(U)
			CO6	To understand the micromechanics of composites	Understanding(U)
	5	CRYOGENIC ENGINEERING	CO1	Describe in detail the variation of mechanical properties of various materials at cryogenic temperatures.	Remembering(R)
			CO2	Explain the production of low temperatures using Joule-Thomson effect,the working of strilling cycle cryo cooler.	Understanding(U)
			CO3	Describe the working of Vuilleumier refrigerator.	Remembering(R)
			CO5	Describe the pressure measurement system used in cryogenic applications.	Remembering(R)
			CO4	Understand the basic design parameters of cryogenic fluid storage vessels.	Understanding(U)

	6	**ADVANCED ENERGY ENGINEERING**	**CO1**	Explain the concept of various types of power generation.	Understanding(U)
			CO4	Explain various renewable energy sources	Applying(P)
			CO5	Explain environmental impacts of various energy generation	Understanding(U),Remembering(R),Applying(P)
			CO2	Explain solar and wind power generation and its economics	Understanding(U)
			CO3	Explain biomass energy sources and its economics	Understanding(U)