SESSION:	WINTER 2023
BRANCH:	MECHANICAL ENGINEERING
SEMESTER:	5TH SEC-B
SUBJECT:	MECHATRONICES TH-4
NAME OF THE FACULTY:	RAJEEB LOCHAN DASH

SL NO.	MONTH	CHAPT. NO.	DATE	TOPICS TO BE COVERED	NO. OF ACADEMIC DAYS AVAILABLE FOR THE SUBJECT	% COVERED
1	AUGUST	1	4/8/2023	1.1Definition of Mechatronics	13	33%
			5/8/2023	1.2Advantages & disadvantages of Mechatronics		
			11/8/2023	1.3Application of Mechatronics		
			12/8/2023	1.4Scope of Mechatronics in Industrial Sector		
			18/8/23	1.5Components of a Mechatronics System		
			19/8/23	1.6Importance of mechatronics in automation		
		2	21/8/23	2.1Defination of Transducers		
			22/8/23	2.2Classification of Transducers		
			25/8/23	2.3Electromechanical Transducers		
			26/8/23	2.3Electromechanical Transducers		
			28/8/23	2.4Transducers Actuating Mechanisms		
			29/8/23	2.5Displacement &Positions Sensors		
2	SEPT.	2	1/9/2023	2.6Velocity, motion, force and pressure sensors	15	34%
			2/9/2023	2.6Velocity, motion, force and pressure sensors		
			4/9/2023	2.7Temperature and light sensors		
		3	5/9/2023	3.1.1Machine, Kinematic Link, Kinematic Pair		
			8/9/2023	3.1.2Mechanism, Slider crank Mechanism		
			9/9/2023	3.1.3Gear Drive, Spur gear, Bevel gear, Helical gear, worm gear		
			11/9/2023	Gear Drive, Spur gear, Bevel gear, Helical gear, worm gear		
			12/9/2023	3.1.4Belt & Belt drive		
			15/9/23	3.1.5Bearings		
			22/9/23	3.2.1Switches and relay		
			23/9/23	3.2.2Solenoid		
			25/9/23	3.2.3D.C Motors		
			26/9/23	3.2.4A.C Motors		
	SEPT.	3	29/9/23	3.2.5Stepper Motors		
			30/9/23	3.2.6Specification and control of stepper motors		
	OCT.	3	3/10/2023	3.2.7Servo Motors D.C & A.C	7	16%
			6/10/2023	3.2.7Servo Motors D.C & A.C		

3	OCT.	4	7/10/2023	4.3Selection and uses of PLCArchitecture basic internal structures	7	14%
			9/10/2023	4.5Input/output Processing and ProgrammingMnemonics		
			10/10/2023	4.7Master and Jump Controllers		
		5	13/10/23	5.1.1NC machines CNC machines CAD/CAM		
			31/10/23	CAD CAM		
4	NOV.	5	3/11/2023	5.1.3.3Software and hardware for CAD/CAM Functioning of CAD/CAM system	9	20%
			4/11/2023	5.1.3.4Features and characteristics of CAD/CAM systemApplication areas for CAD/CAM		
			6/11/2023	5.2.2Machine Structure Guideways/Slide ways		
			7/11/2023	5.2.3.1Introduction and Types of GuidewaysFactors of design of guideways		
			10/11/2023	5.2.4.1Spindle drives Feed drive Spindle and Spindle Bearings		
		6	13/11/23	6.1Definition, Function and laws of robotics		
			14/11/23	6.2Types of industrial robots		
			17/11/23	6.3Robotic systems		
			18/11/23	6.4Advantages and Disadvantages of robots		

BRIEF SUMMARY OF THE PLAN

SL. NO.	MONTH	UNIT/CHAPTER TO BE COVERED	% COVERAGE
1	AUGUST	CHAPT. NO.- 1 & 2	30%
2	SEPTEMBER	CHAPT. NO.- 2 & 3	34%
3	OCTOBER	CHAPT. NO.- 3 ,4, & 5	16%
4	NOVEMBER	CHAPT. NO.- 5 & 6	20%

signature of faculty 3/8/23

signature of HOD 3/8/23

signature of principal 3/8/23