ACADEMIC CURRICULA

UNDERGRADUATE INTEGRATED POST GRADUATE DEGREE PROGRAMMES

(With exit option of Diploma)

(Choice Based Flexible Credit System)

Regulations 2021

Volume - 1

(Revised on July 2024)



SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

(Deemed to be University u/s 3 of UGC Act, 1956)
Kattankulathur, Chengalpattu District 603203,
Tamil Nadu, India



SRM INSTITUTE OF SCIENCE AND TECHNOLOGY Kattankulathur, Chengalpattu District 603203, Tamil Nadu, India

45. B.Tech. in Mechatronics Engineering (Industrial IoT and Systems Engineering)

45. (a) Mission of the Department

Mission Stmt – 1	To impart the principles of Mechatronics Engineering to produce engineers who are capable of competing on the global stage.
Mission Stmt – 2	To excel at solving multidisciplinary challenges through structured teaching-learning methods and by providing state-of-the-art facilities.
	To cultivate future leaders with a strong sense of integrity, communication, teamwork, and entrepreneurship

45. (b) Program Educational Objectives (PEO)

PEO – 1	Graduates will demonstrate a commitment to lifelong learning and career growth through participation and leadership in professional societies and organizations
PEO – 2	Graduates will advance professionally with a competency to solve challenges in industry, research, and academia leading to sustainable development of the society
PEO – 3	Graduates will be capable of solving ever-evolving-complex-system-integration problems through inter-disciplinary approaches.
PEO – 4	Graduates will be versatile in dealing with systems from a variety of modern engineering and technology fields with ease.

45. (c) Mission of the Department to Program Educational Objectives (PEO) Mapping

/ 6 /	1	Mission Stm	t1	Mission Stmt 2	М	ission Stmt 3	
PEO - 1	-	2	at the fill			_ 3	
PEO - 2	1	3	5000	STORY OF LARREST	34. V	2	
PEO - 3		3	100	3			
PEO - 4		-	NAME OF	3	25,21	4	

^{3 –} High Correlation, 2 – Medium Correlation, 1 – Low Correlation

45. (d) Mapping Program Educational Objectives (PEO) to Program Outcomes (PO)

			H7	75.	Pro	gram Ou	tcomes (PO)		271	rud		Prog	ram Spe	ecific
	1_	2	3	4	5	- 6	7	8	9	10	- 11	12	Outo	comes (F	PSO)
	Engineering Knowledge	Problem Analysis	Design/development of solutions	Conduct investigations of complex problems	Modern Tool Usage	The engineer and society	Environment & Sustainability	Ethics	Individual & Team Work	Communication	Project Mgt. & Finance	Life Long Learning	PS0-1	PSO-2	PSO-3
PEO - 1	-	•	7-1-	1	A-R	1	1	2	-	2	-	3	3		-
PEO - 2	3	. ,		3	3	- 3	3	3	2	2	3	=	1	/	2
PEO - 3	3	3	3	- 3	3	2	1		3	3	2	1	2	3	-
PEO - 4	3	3	2	1	3	1	-	1	1	-	-	-		3	3

^{3 –} High Correlation, 2 – Medium Correlation, 1 – Low Correlation

PSO – Program Specific Outcomes (PSO)

	PSO - 1	Graduates will apply scientific principles for modelling and simulation of multi-disciplinary engineering systems
	PSO - 2	Graduates will be able to interpret specifications of elements to design and develop an integrated system
•	PS() - 3	Graduates will be able to develop IoT solutions and apply systems engineering principles and techniques to integrate complex systems for a wide variety of applications.

45. (e) Program Structure: B.Tech. in Mechatronics Engineering (Industrial IoT and Systems Engineering)

	Humanities & Social Sciences						Basic Science Courses (B)				
	including Management Courses (H)					Course	Course	Н	ours	s /	
Course	Course		ours			Course	Course Title	V	Vee		
Code	Title	\	Nee		_			L	Τ	Р	С
		L	T	Р	C		Calculus and Linear Algebra	3	1	0	4
	Communicative English	2	1	0	3	21CYB101J		3	1	2	5
21LEH102T 21LEH103T	Chinese					21BTB103T	Advanced Calculus and Complex	2	0	0	2
21LEH103T	German	-				21MAB102T	Analysis	3	1	0	4
	Japanese	2	1	0	3	21PYB104.I	Physics: Mechanics	3	1	2	5
21LEH106T		1					Transforms and Boundary Value				
	Spanish					21MAB201T	Problems	3	1	0	4
21LEH108T	Russian						Numerical Methods	3	1	0	4
	Philosophy of Engineering	1	0	2	2	21MAB301T	Probability and Statistics	3	1	0	4
	Social Engineering	2	0	0	2		Tot	tal	Cre	dits	32
21GNH401T	Behavioral Psychology	2	1	0	3		Professional Care Courses (C)				
	Te	otal	Cre	dits	13		Professional Core Courses (C)	Ш	ours	. /	
	Engineering Science Courses (S)					Course	Course		Vee		
Course	Course		ours			Code	Title	I	T	Р	С
Code	Title	V	Veel		_	21MHC101P	¹ Elements of Mechatronics Systems	2	1	0	3
		L	Τ	Р	C	21MHC201T		3	0	0	3
	Programming for Problem Solving Basic Civil and Mechanical Workshop	3 0	0	2	2	21MHC202J	Analog and Digital Electronics	2	0	2	3
	Engineering Graphics and Design	0	0	4	2	21MHC203J		2	0	2	3
21EES101T	Electrical and Electronics Engineering	3	1	0	4	21MHC204L	Electrical Actuators and Drives	0	0	2	1
	Thermodynamics and Heat Transfer	3	0	0	3		Laboratory				
21DCS201P 1		1	2	0	3	21MHC205T		3	0	0	3
21CSS303T	Data Science	2	0	0	2	21MHC206T	Microcontroller and Embadded Customa	3	0	0	3
	To	tal	Cred	dits	20	21MHC207L	Laboratory	0	0	2	1
		-		-	-		Machanics of Solids and Fluids	_			
	Non Credit Courses (M)					21MHC208L	Laboratory	0	0	2	1
Course	Course		ours			21MHC209T	Project Management and Industrial	2	1	0	3
Code	Title	١ ٧	Vee				Practices		'		
21PDM101L	Professional Skills and Practices	0	T 0	Р	С	21CSC206T		2	1	0	3
21PDM101L		0	0	2		21MHC301T		3	0	0	3
21PDM201L		0	0	2		21MHC302J	Design and Analysis of Machine Elements	2	0	2	3
21PDM202L	Critical and Creative Thinking Skills	0	0	2	0	21MHC303J		2	0	2	3
21PDM301L		0	0	2		21MHC304L		0	0	2	1
21PDM302L	Employability Skills and Practices	0	0	2		21MHC305J		2	0	2	3
21CYM101T	Environmental Science	1	0	0	0	21MHC306T	Vinamatic Analysis and Dynamics of	3			3
21LEM101T 1	Constitution of India	1	0	0	0		Mechanisms	3	0	0	3
21LEM102T 1		1	0	0	0	21MHC307P	Model Based Systems Engineering	1	2	0	3
21LEM201T ¹	Professional Ethics	1	0	0	0		Tot	tal	Cre	dits	46
21LEM202T ¹	Universal Human Values-II: Understanding Harmony and Ethical	2	1	0	3	Project Wo	rk, Seminar, Internship in Industry / Highe	er T	ech	nic	al
ZILEWIZUZI	Human Conduct		'	U	J		Institutions (P)				
21LEM301T ¹	Indian Art Form	1	0	0	0	Course	Course		urs /	'	
21LEM302T 1	Indian Traditional Knowledge	1	0	0	0	Code	Title	_	eek		
21GNM101L							L	1		Р	С
21GNM102L	National Service Scheme	0	0	2	0	21GNP301L		_	_	2	1
21GNM103L		U	U		U	21MHP302L			_	6	3
21GNM104L		<u> </u>	Ĺ			21MHP3037 21MHP401		_		0 30	15
	To	otal	Cre	dits	03	21MHP401 21MHP402		_			10
	Open Elective Courses (O)					21MHP403		_		10	5
	(Any 3 Course)						Tota				
Course	, , , , , , , , , , , , , , , , , , ,	Н	lours	s/							
Course	Course	٧	Vee								
Code	Title	L	Т		С						
21MHO301T	Smart Farming	3	0	0	3						
	To	otal	Cre	dits	3						

	Professional Elective Courses (E) (Any 7 Courses)						Professional Elective Courses (E)				
Course Code	Course Course		ours Vee T		С	Course Code	Course Title		lours Nee		С
	IIoT Courses (Minimum 4 Courses)					S	ystem Engineering (Minimum 3 Cours	ses)			
21MHE465T	Introduction to IoT and IIoT	3	0	0	3	21MHE474T	Foundations of Systems Engineering	2	1	0	3
21MHE466T	Foundations of Digital and Smart	3	Λ	٥	2	21MHE475J	Systems Architecture and Design	2	0	2	3
21WII1L4001	Manufacturing Technology	5	U	U	J	21MHE476J	Object Process Modelling and SysML	2	0	2	3
21MHE467J	Sensors and Actuators for IoT	2	0	2	3	21MHE477J	Verification and Validation	2	0	2	3
21MHE468T	Communication Networks in IoT	3	0	0	3	21MHE478L ¹	Capstone Project	0	0	6	3
21MHE469J	Cyber Physical System Design	2	0	2	3	21MHE479J	Optimization Techniques in Systems	2	0	2	3
21MHE470T	Cloud Computing, Big Data Analytics and	3	0	0	3	21WITE419J	Engineering		U	2	J
21WII1L4701	Security	٥	U	U	3			Total	Cre	dits	21
21MHE471J	X-Reality for Industry 4.0	2	0	2	3						
21MHE472J	Al and Robotics in Smart Factories	2	0	2	3						
21MHE473J	Data Modelling and Simulation	2	0	2	3						



45. (f) Implementation Plan: B.Tech. in Mechatronics Engineering (Industrial IoT and Systems Engineering)

	Semester - I						Semester - II				
Course	Course	Н	ours	s /		Course	Course	H	lour	s/	
Course Code	Course Title	٧	Vee	k		Course	Title	١	Wee	k	
Code	Title	L	Τ	Р	С	Code	Title	L	Τ	Р	С
21LEH101T	Communicative English	2	1	0	3	21LEH102T	Chinese				
21MAB101T	Calculus and Linear Algebra	3	1	0	4	21LEH103T	French				
	Physics :Mechanics	3	1	2	5	21LEH104T	German				
	Engineering Graphics and Design	0	0	4	2	21LEH105T	Japanese	2	1	0	3
21EES101T	Electrical and Electronics Engineering	3	1	0	4	21LEH106T	Korean	1-			Ĭ
	Environmental Science*	1	0	0	0	21LEH107T	Spanish	1			
	Professional Skills and Practices	0	0	2	0	21LEH108T	Russian	1			
	Constitution of India	1	0	0	0		Philosophy of Engineering	1	0	2	2
LILLWITOTT	Total Credits		U	U	18		Advanced Calculus and Complex				
	Total Credits				10	21MAB102T	Analysis	3	1	0	4
	Semester - III					21CYB101J	Chemistry	3	1	2	5
			Н	ours	3		Elements of Mechatronics systems	2	1	0	3
Course	Course			1			Programming for Problem Solving	3	0	2	4
Code	Title			/eek			Biology	2	0	0	2
			L	ΤF	C						
21MAB201T	Transforms and Boundary Value Proble	ms	3	1 0) 4		Basic Civil and Mechanical Workshop	0	0	4	2
21MHC201T			3	0 0	3		General Aptitude*	0	0	2	0
21MHC202J			2	0 2			Physical and Mental Health using Yoga	4			
21MHC203J			2	_			National Service Scheme	0	0	2	0
21PDH209T			2	0 0			National Cadet Corps	Ţ	Ŭ	_	Ĭ
21MHS201T			3	0 0		21GNM104L ¹	National Sports Organization				
21MHC204L		nn/		0 2			То	tal	Cre	dits	25
21LEM201T		n y		0 0			Semester - IV				
21PDM201L				0 2			Semester - IV		ш	ouro	_
	Universal Human Values III Understone	ina				Course	Course		П	ours	1
21LEM202T	Harmony and Ethical Human Conduct	iiig	2	1 0	3	Code	Title		۱۸	, /eek	
		otal	Cro	dite	. 22	Code	riue		I V	TP	1
	THE RESERVE TO STREET	otai	CIE	uits	22	OALAA DOOOT	Nt			1 0	
	2.5 W. S. C. Otto		9	•	- 7		Numerical methods				
										1 0	
	Somostor - V						Artificial Intelligence			1 0	
	Semester - V		Тυ	ouro		21MHC205T	Microcontroller and Embedded Systems		3	0 0	3
Course			Н	ours		21MHC205T 21MHC206T	Microcontroller and Embedded Systems Mechanics of Solids and Fluids		3		3
Course	Course			/		21MHC205T 21MHC206T	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems		3	0 0	3 3
Course Code			W	/ /eek		21MHC205T 21MHC206T 21MHC207L ¹	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory		3 3 0	0 0 0	3 3 2 1
Code	Course Title		W	/ /eek T F	С	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC208L ¹	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory		3 3 0 0	0 0 0 0 0 2 0 2	3 3 2 1 2 1
Code 21MAB301T	Course Title Probability and Statistics		W L	/eek T F	C C	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC208L ¹ 21MHC209T	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic		3 3 0 0 2	0 0 0 0 0 2 0 2 1 0) 3) 3 ? 1 ? 1) 3
Code 21MAB301T 21MHC301T	Course Title Probability and Statistics System Dynamics and Control		W L 3	/eek T F 1 0	C C 4 3	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC208L ¹ 21MHC209T	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology		3 3 0 0 2 1	0 0 0 2 0 2 1 0 2 0) 3) 3 ? 1 ? 1) 3
21MAB301T 21MHC301T 21MHC303J	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces		W L 3 3	/eek T F 1 0 0 0 0 2	C C 3	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC208L ¹ 21MHC209T 21DCS201P ¹	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I		3 3 0 0 2 1 3	0 0 0 0 0 2 0 2 1 0 2 0	3 3 2 1 2 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Code 21MAB301T 21MHC301T	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element	nts	W L 3 3 2 2	/eek T F 1 0 0 0 0 2 0 2	C C 3	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC208L ¹ 21MHC209T	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills*	ces	3 3 0 0 2 1 3 0	0 0 0 0 0 2 0 2 1 0 2 0 0 0 0 2	3 3 3 1 1 1 1 1 3 3 3 3 3 3 3 3 3 3 3 3
21MAB301T 21MHC301T 21MHC303J	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II	nts	W L 3 3 2 2	/eek T F 1 0 0 0 0 2 0 2 0 0	C C 3 3 3 3 3 3 3 3	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC208L ¹ 21MHC209T 21DCS201P ¹	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills*	ces	3 3 0 0 2 1 3 0	0 0 0 0 0 2 0 2 1 0 2 0	3 3 2 1 2 1 3 3 3 3 3 3 3 3 2 0 3
21MAB301T 21MHC301T 21MHC303J 21MHC302J	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I	nts	3 3 2 2 3	/eek T F 1 0 0 0 0 2 0 2 0 0 0 0	C C 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC208L ¹ 21MHC209T 21DCS201P ¹ 21PDM202L ¹	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills*	ces	3 3 0 0 2 1 3 0	0 0 0 0 0 2 0 2 1 0 2 0 0 0 0 2	3 3 2 1 2 1 3 3 3 3 3 3 3 3 2 0 3
Code 21MAB301T 21MHC301T 21MHC303J 21MHC302J	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab	nts	W L 3 3 2 2 2 3 3	//eek T F 1 0 0 0 0 2 0 2 0 0 0 0 0 0 0 0	C C 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC208L ¹ 21MHC209T 21DCS201P ¹ 21PDM202L ¹	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI	ces	3 0 0 2 1 3 0 Cre	0 0 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 1 1 1 1 1 3 3 3 3 3 3 3 3 3 3 3 3
Code 21MAB301T 21MHC301T 21MHC303J 21MHC302J 21MHC304L 21PDM301L	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab Analytical and Logical Thinking Skills*	nts	W L 3 3 2 2 2 3 3 0 0	//eek T F 1 0 0 0 0 2 0 2 0 0 0 0 0 0 0 2 0 0 2	C C 0 4 3 3 3 3 3 3 3 3 3 2 1 0 3	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC208L ¹ 21MHC209T 21DCS201P ¹ 21PDM202L ¹ Course	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI Course	otal	3 3 0 0 2 1 3 0 Cree	0 0 0 0 0 0 2 1 0 0 0 0 0 0 0 0 2 edits	3 3 3 1 1 1 1 1 3 3 3 3 3 3 3 3 3 3 3 3
Code 21MAB301T 21MHC301T 21MHC303J 21MHC302J 21MHC304L 21PDM301L 21LEM301T	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab Analytical and Logical Thinking Skills* Indian Art Form	nnts	W L 3 3 2 2 2 2 3 3 0 0	//eek T F 1 0 0 0 0 2 0 0	C C 3 3 3 3 3 3 1 3 1 2 1 0 0 0 0	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC208L ¹ 21MHC209T 21DCS201P ¹ 21PDM202L ¹	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI	otal	3 0 0 2 1 3 0 Cree	0 0 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0) 3 3 2 1 1 2 1 3 3 3 3 3 3 3 3 3 3 2 0
Code 21MAB301T 21MHC301T 21MHC303J 21MHC302J 21MHC304L 21PDM301L	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab Analytical and Logical Thinking Skills* Indian Art Form Community Connect		W L 3 3 2 2 2 2 3 3 0 0 0	//eek T F 1 0 0 0 0 2 0 0 2 0 0 0 0 2 0	C C 3 3 3 3 3 3 3 3 1 2 1 1 2 0 0 0 0 0 1 1 1	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC208L ¹ 21MHC209T 21DCS201P ¹ 21PDM202L ¹ Course Code	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI Course Title	otal H	3 3 0 0 2 1 3 0 Cree	0 0 0 0 0 0 2 1 0 0 0 0 0 0 0 0 2 edits) 3) 3) 3) 3) 3) 3) 3) 3) 3) 3
Code 21MAB301T 21MHC301T 21MHC303J 21MHC302J 21MHC304L 21PDM301L 21LEM301T	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab Analytical and Logical Thinking Skills* Indian Art Form Community Connect	nts	W L 3 3 2 2 2 2 3 3 0 0 0	//eek T F 1 0 0 0 0 2 0 0 2 0 0 0 0 2 0	C C 3 3 3 3 3 3 3 3 1 2 1 1 2 0 0 0 0 0 1 1 1	21MHC205T 21MHC206T 21MHC207L 1 21MHC208L 1 21MHC209T 21DCS201P 1 21PDM202L 1 Course Code 21CSS303T	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI Course Title Data Science	otal H- V	3 3 0 0 2 1 3 0 Cree	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0) 3 3 2 1 2 1 1 2 1 3 3 3 3 3 3 2 2 0 0 0 0 0 0 0 0 0 0 0 0
Code 21MAB301T 21MHC301T 21MHC303J 21MHC302J 21MHC304L 21PDM301L 21LEM301T	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab Analytical and Logical Thinking Skills* Indian Art Form Community Connect		W L 3 3 2 2 2 2 3 3 0 0 0	//eek T F 1 0 0 0 0 2 0 0 2 0 0 0 0 2 0	C C 3 3 3 3 3 3 3 3 1 2 1 1 2 0 0 0 0 0 1 1 1	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC209L ¹ 21MHC209T 21DCS201P ¹ 21PDM202L ¹ Course Code 21CSS303T 21MHC305J	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI Course Title Data Science Manufacturing Processes	otal H V L 2	3 3 0 0 2 1 3 0 Cree T 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Code 21MAB301T 21MHC301T 21MHC303J 21MHC302J 21MHC304L 21PDM301L 21LEM301T 21GNP301L	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab Analytical and Logical Thinking Skills* Indian Art Form Community Connect Semester - VII	otal	W L 3 3 2 2 2 3 3 0 0 0 1	//eek T F 1 0 0 0 0 2 0 0 0 0 0	C C 3 3 3 3 3 3 3 3 1 2 1 1 2 0 0 0 0 0 1 1 1	21MHC205T 21MHC206T 21MHC207L 1 21MHC208L 1 21MHC209T 21DCS201P 1 21PDM202L 1 Course Code 21CSS303T	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI Course Title Data Science Manufacturing Processes Kinematic Analysis and Dynamics of	otal H- V	3 3 0 0 2 1 3 0 Cree	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0) 3 3 2 1 2 1 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4
Code 21MAB301T 21MHC301T 21MHC303J 21MHC302J 21MHC304L 21PDM301L 21LEM301T 21GNP301L Course	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab Analytical and Logical Thinking Skills* Indian Art Form Community Connect Semester - VII Course	Total	W L 3 3 2 2 2 2 3 3 0 0 0	//eek T F 1 0 0 0 2 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 2	C C 3 3 3 3 3 3 3 3 1 2 1 1 2 0 0 0 0 0 1 1 1	21MHC205T 21MHC206T 21MHC207L 1 21MHC208L 1 21MHC209T 21DCS201P 1 21PDM202L 1 Course Code 21CSS303T 21MHC306T	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI Course Title Data Science Manufacturing Processes Kinematic Analysis and Dynamics of Mechanisms	H-VL 2 2 3	3 3 0 0 2 1 3 0 Cree T 0 0	0 0 0 0 0 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 0 3 0 3 2 1 1 2 1 3 3 3 3
Code 21MAB301T 21MHC301T 21MHC303J 21MHC302J 21MHC304L 21PDM301L 21LEM301T 21GNP301L	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab Analytical and Logical Thinking Skills* Indian Art Form Community Connect Semester - VII	Total	W L 3 3 2 2 2 2 3 3 0 0 0 0 1 0 Cree	//eek T F 1 0 0 0 0 2 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0	C C 3 3 3 3 3 3 1 1 0 0 0 0 0 0 0 0 0 0 0 0	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC209L ¹ 21MHC209T 21DCS201P ¹ 21PDM202L ¹ Course Code 21CSS303T 21MHC305J	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI Course Title Data Science Manufacturing Processes Kinematic Analysis and Dynamics of Mechanisms Model Based Systems Engineering	Ces H V L 2 2 3	3 3 0 0 2 1 3 0 Cree T 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C C 2 3 3 3 3
21MAB301T 21MHC301T 21MHC303J 21MHC302J 21MHC304L 21PDM301L 21LEM301T 21GNP301L Course Code	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab Analytical and Logical Thinking Skills* Indian Art Form Community Connect Semester - VII Course Title	Fotal	W L 3 3 3 2 2 2 3 3 3 0 0 0 1 1 0 Cree	//eek T F 1 0 0 0 0 2 0	C C C C C C C C C C C C C C C C C C C	21MHC205T 21MHC206T 21MHC207L 1 21MHC209L 1 21MHC209T 21DCS201P 1 21PDM202L 1 Course Code 21CSS303T 21MHC306T 21MHC307P 1	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI Course Title Data Science Manufacturing Processes Kinematic Analysis and Dynamics of Mechanisms Model Based Systems Engineering Professional Elective – III	Ces Dtal H V L 2 2 3 1 3	3 3 0 0 2 1 1 3 0 Cree T 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C C 2 3 3 3 3
Code 21MAB301T 21MHC301T 21MHC303J 21MHC302J 21MHC304L 21PDM301L 21LEM301T 21GNP301L Course Code 21GNH401T	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab Analytical and Logical Thinking Skills* Indian Art Form Community Connect Semester - VII Course Title Behavioural Psychology	Fotal H V L	W L 3 3 3 2 2 2 3 3 0 0 0 1 1 0 Cree Ours Wee T 1	//eek T F 1 0 0 0 0 0 0 0 0 0	C C 3	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC209L 21MHC209T 21DCS201P ¹ 21PDM202L ¹ Course Code 21CSS303T 21MHC306T 21MHC307P ¹ 21MHC307P ¹	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI Course Title Data Science Manufacturing Processes Kinematic Analysis and Dynamics of Mechanisms Model Based Systems Engineering Professional Elective – III Project	H. V. L. 2 2 3 1 3 0	3 3 0 0 2 1 3 0 Cree T 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CC 22 3 3 3 3 3 3
21MAB301T 21MHC301T 21MHC303J 21MHC302J 21MHC304L 21PDM301L 21LEM301T 21GNP301L Course Code	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab Analytical and Logical Thinking Skills* Indian Art Form Community Connect Semester - VII Course Title Behavioural Psychology Professional Elective – IV	Fotal H V L 2 3	W L 3 3 3 2 2 2 3 3 0 0 0 1 0 Cree T 1 0 0	//eek T F 1 0 0 0 0 0 0 0 0 0	C C C C 3 3 3	21MHC205T 21MHC206T 21MHC207L 1 21MHC209L 1 21MHC209T 21DCS201P 1 21PDM202L 1 Course Code 21CSS303T 21MHC306T 21MHC307P 1 21MHC307P 1 21MHP302L 1 21MHP303T 1	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI Course Title Data Science Manufacturing Processes Kinematic Analysis and Dynamics of Mechanisms Model Based Systems Engineering Professional Elective – III Project MOOC	Dotal H- V L 2 2 3 1 3 0 3	3 0 0 2 1 3 0 Cree T 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C C 2 3 3 3 3 3 3 3 3
21MAB301T 21MHC301T 21MHC303J 21MHC302J 21MHC304L 21PDM301L 21LEM301T 21GNP301L Course Code	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab Analytical and Logical Thinking Skills* Indian Art Form Community Connect Semester - VII Course Title Behavioural Psychology Professional Elective – IV Professional Elective – V	Fotal H V L	W L 3 3 3 2 2 2 3 3 0 0 0 1 1 0 Cree Ours Wee T 1	//eek T F 1 0 0 0 0 0 0 0 0 0	C C 3 3 3 3	21MHC205T 21MHC206T 21MHC207L 1 21MHC209L 1 21MHC209T 21DCS201P 1 21PDM202L 1 Course Code 21CSS303T 21MHC306T 21MHC307P 1 21MHC307P 1 21MHP302L 1 21MHP303T 1 0	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI Course Title Data Science Manufacturing Processes Kinematic Analysis and Dynamics of Mechanisms Model Based Systems Engineering Professional Elective – III Project MOOC Open Elective – II	H-V L 2 2 3 1 3 0 3 3 3	3 3 0 0 2 1 3 0 Cree T 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CC 2 3 3 3 3 3 3 3 3
21MAB301T 21MHC301T 21MHC303J 21MHC302J 21MHC304L 21PDM301L 21LEM301T 21GNP301L Course Code	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab Analytical and Logical Thinking Skills* Indian Art Form Community Connect Semester - VII Course Title Behavioural Psychology Professional Elective – IV Professional Elective – V Professional Elective – VI	Fotal H V L 2 3	W L 3 3 3 2 2 2 3 3 0 0 0 1 0 Cree T 1 0 0	//eek T F 1 0 0 0 0 0 0 0 0 0	C C 3 3 3 3 3 3 3	21MHC205T 21MHC206T 21MHC207L ¹ 21MHC209L 21MHC209T 21DCS201P ¹ 21PDM202L ¹ Course Code 21CSS303T 21MHC305J 21MHC306T 21MHC307P ¹ 21MHP302L ¹ 21MHP303T ¹ 0 21PDM302L ¹	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI Course Title Data Science Manufacturing Processes Kinematic Analysis and Dynamics of Mechanisms Model Based Systems Engineering Professional Elective – III Project MOOC Open Elective – II Employability Skills and Practices*	Dotal H- V L 2 2 3 1 3 0 3	3 3 0 0 2 1 3 0 Cree T 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C C 2 3 3 3 3 0
21MAB301T 21MHC301T 21MHC303J 21MHC302J 21MHC304L 21PDM301L 21LEM301T 21GNP301L Course Code	Course Title Probability and Statistics System Dynamics and Control Measurement, Sensors and Interfaces Design and Analysis of Machine Element Professional Elective – II Open Elective – I Modelling and Control Lab Analytical and Logical Thinking Skills* Indian Art Form Community Connect Semester - VII Course Title Behavioural Psychology Professional Elective – IV Professional Elective – V	Fotal H V L 2 3	W L 3 3 3 2 2 2 3 3 0 0 0 1 0 Cree T 1 0 0	//eek T F 1 0 0 0 0 0 0 0 0 0	C C 3 3 3 3	21MHC205T 21MHC206T 21MHC207L 1 21MHC209L 1 21MHC209T 21DCS201P 1 21PDM202L 1 Course Code 21CSS303T 21MHC306T 21MHC307P 1 21MHC307P 1 21MHP302L 1 21MHP303T 1 0	Microcontroller and Embedded Systems Mechanics of Solids and Fluids Microcontroller and Embedded Systems Laboratory Mechanics of Solids and Fluids Laboratory Project Management and Industrial Practic Design Thinking and Methodology Professional Elective – I Critical and Creative Thinking Skills* To Semester - VI Course Title Data Science Manufacturing Processes Kinematic Analysis and Dynamics of Mechanisms Model Based Systems Engineering Professional Elective – III Project MOOC Open Elective – II Employability Skills and Practices* Indian Traditional Knowledge	Dotal HI V L 2 2 3 1 3 0 3 0 1	3 3 0 0 2 1 3 0 Cree T 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C C C C C C C C C C

Students have to register either 21MHP401L or 21MHP402L and 21MHP403L both in eighth semester

		Semester - VIII				
	Course Code	Course Title		lour: Wee		
	Code	riue	L	Τ	Р	С
I	21MHP401L	Major Project	0	0	30	15
	21MHP402L	Major Project	0	0	20	10
	21MHP403L	Internship#	0	0	10	5
	·	<u> </u>	Γotal	Cre	dits	15





SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

(Deemed to be University u/s 3 of UGC Act, 1956)

Kattankulathur, Chengalpattu District 603203, Tamil Nadu, India