#### **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

### 50. Integrated M.Tech. in Computer Science and Engineering with Specialization in Cognitive Computing

50. (a) Mission of the Department

	To applicable processing acquiring and discominating anginaging knowledge on computational intelligence to alcusto a student into
	To envision in creating, acquiring, and disseminating engineering knowledge on computational intelligence to elevate a student into
Mission Stmt – 1	a professional by imparting knowledge on mathematics, computing sciences, artificial intelligence, and software engineering along
	with the skills of cognitive computing.
Mission Stat 2	To offer a unique learning environment through world class faculty, curriculum, modernized lab facilities, and an interactive classroom environment with real-time experience from industrial experts that leads to a computing career in the latest technologies.
IVIISSION SUNC – Z	classroom environment with real-time experience from industrial experts that leads to a computing career in the latest technologies.
Mission Stat 2	To uplift the innovative research and development in computational intelligence and its allied fields by collaborating with renowned academic institutions and industries.
IVIISSION SUNC – 3	academic institutions and industries.
Mission Stat 4	To produce graduates who are global innovators and leaders in the development of computational intelligence-based systems, along with the commitment to ethical responsibilities and lifelong learning.
IVIISSIOTI SUITU – 4	with the commitment to ethical responsibilities and lifelong learning.

50. (b) Program Educational Objectives (PEO)

PEO – 1	Graduates will be able to perform in technical/managerial roles ranging from design, development, problem solving to production support in software industries and R&D sectors.
PEO – 2	Graduates will be able to successfully pursue higher education in reputed institutions.
PEO – 3	Graduates will have the ability to adapt, contribute and innovate new technologies and systems in the key domains of Computer Science and Engineering.
PEO – 4	Graduates will be ethically and socially responsible solution providers and entrepreneurs in Computer Science and other engineering disciplines.
PEO – 5	Graduates will possess the ability to adapt, contribute and innovate new technologies and systems in the key domains of Computer Science and Engineering

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

	Mission Stmt 1	Mission Stmt 2	Mission Stmt 3	Mission Stmt 4	Mission Stmt 5
PEO - 1	3	The State of the		3.30	1
PEO - 2	43.19	N 18 1 - 18 11	2	· 基本人, 4	
PEO - 3	- Congress	3	3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-
PEO - 4		10000000000000000000000000000000000000	W. 1	- 2	3
PEO - 5		100-1	A PARTY	3	3

<sup>3 -</sup> High Correlation, 2 - Medium Correlation, 1 - Low Correlation

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

	Program Outcomes (PO)													Program Specific					
	1	2	- 3	4	5	6	7	- 8	9	10	11	12	Outo	comes (P	SO)				
	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	PSO-1	PS0-2	PSO-3				
PEO - 1	3			1	-	2	-	3	2	3			2	-	-				
PEO - 2	-	2	2	· • • •	3	-	3	2	-			-	-	2	-				
PEO - 3	-	3	3	2		4-6-6	-	4-4-4		2	-	3	-	-	2				
PEO - 4	1	2	3	1	-	3	2	-	2	-	2	2	-	-	2				
PEO - 5	3	-	-	3	-	3	-	-	-	-	-	3	-	-	3				

<sup>3 –</sup> High Correlation, 2 – Medium Correlation, 1 – Low Correlation

PSO - Program Specific Outcomes (PSO)

100 1108	rain specific outcomes (150)
PSO - 1	To understand, analyze, design, and develop computing solutions by applying fundamental concepts of computer science and engineering.
PSO - 2	To apply computing principles, skills and practices to develop solutions using logical and reasoning skills, for real life problems.
PSO - 3	Ability to utilize Cognitive principles to design and develop cutting edge solutions for meeting the current demand of the industry.

# 50. (e) Program Structure: Integrated M.Tech. in Computer Science and Engineering with Specialization in Cognitive Computing

	Humanities & Social Sciences	Basic Science Courses (B)											
	including Management Courses (H)					Hours							
Course	Course		ours			Course	Course Title	٧	Vee				
Code	Title	V	Vee			Code		L	Τ	Р	С		
		L	Τ	Р	С	21PYB102J	Semiconductor Physics and	3	1	2	5		
	Communicative English	2	1	0	3		Computational Methods				_		
21LEH102T		-				21CYB101J	Chemistry	3	1	2	5		
21LEH103T		4					Calculus and Linear Algebra	3	1	0	4		
	German					21MAB1021	Advanced Calculus and Complex Analysis	3	1	0	4		
21LEH105T		2	1	0	3	21MAB201T	Transforms and Boundary Value	3	1	0	4		
21LEH106T		4				2414402047	Problems	3	1	0	4		
21LEH107T 21LEH108T		-					Probability and Queueing Theory Discrete Mathematics	3	1	0	4		
		1	Λ	2	2		Introduction to Computational Biology	2	0	0	2		
21GNH101J	Philosophy of Engineering Social Engineering	2	0	0	2	ZIDIDIUZI				dits			
	Behavioral Psychology	2	0	0	3		10	olai	Cre	JILS	32		
ZIGNH4011		otal			_		Professional Core Courses (C)						
		olai	Cre	uits	13	0	Н	ours	; /				
	Engineering Science Courses (S)	Course	Course	٧	Vee	K							
Course	Course		ours			Code	Title	L	Т	Р	С		
Code	Title	V	Veel				Object Oriented Design and Programming	2	1	0	3		
		L	Τ	Р	С	21CSC201J	Data Structures and Algorithms	3	0	2	4		
21EES101T		3	1	0	4	21CSC202J	Operating Systems	$\mathcal{S}$	0	2	4		
21MES101L		0	0	4	2	21CSC203P 1	Advanced Programming Practice	3	1	0	4		
21MES102L		0	0	4	2		Design and Analysis of Algorithms	3	0	2	4		
21CSS101J		3	0	2	4		Database Management Systems	3	1	0	4		
21CSS201T	Computer Organization and	3	1	0	4		Artificial Intelligence	2	1	0	3		
	Arcnitecture	_	•	^	_		Formal Language and Automata	3	0	0	3		
21DCS201P	Ü	1	2	0	3	21CSC302J	Computer Networks	3	0	2	4		
21CSS303T		2	0	0	2	21CSC303J	Software Engineering and Project	2	0	2	3		
	10	otal	رre(	aits	<b>Z</b> 1		Management						
	Non Credit Courses (M)					21CSC304J	Compiler Design	2	0	2	3		
Course	Course	Н	lours	s/		21CSC305P 1	Machine Learning	2	1	0	3		
Code	Title	_\	Nee			21CSC402P 1		2	0	0	2		
		L	Т	Р	С	21CSC405J	Deep Learning for Cognitive Computing	ა	0	2	4		
	Professional Skills and Practices	0	0	2		21CSC505T	Computer Graphics and Vision	3	1	0	4		
21PDM102L1		0	0	2		21CSC506J	Computation and Cognition: The	3	0	2	4		
	Verbal Reasoning	0	0	2	0	04/00504/2	Probabilistic Approach	0	-	2			
21PDM202L1		0	0	2	ľ	21IPC501J <sup>2</sup>	Research Methodology	2	1	2	4		
	Analytical and Logical Thinking Skills	0	0	2			10	otai	Cre	dits	60		
	Employability Skills and Practices	0	0	2			Open Elective Courses						
	Environmental Science	1	0	0	0		(Any 4 Courses)						
	Constitution of India	1	0	0	0	Course	Course		ours				
	Universal Human Values – Introduction	1	0	0	0	Codo	Title		Vee				
21LEM2011	Professional Ethics	1	0	0	0			L	T	Р	С		
041 514000 7.1	Universal Human Values-II:	1	4	_	2		Web Programming	2	1	0	3		
21LEM202T <sup>1</sup>		2	7	0	3		Python Programming	2	1	0	3		
241 EM204T 1	Human Conduct Indian Art Form	1	0	0	٥		Mobile Application Development	2		0	3		
	Indian Traditional Knowledge	1	0	0	0	21CSO354T	Data Analytics	2	1	0	3		
	Physical and Mental Health using Yoga	I	U	U	U		To	tal	cre	SIL	12		
	Physical and Mental Health using Yoga  National Service Scheme					Duois at Mr.	rk, Seminar, Internship in Industry / High		'aa'	m!-	al.		
	National Cadet Corps	0	0	2	0	Project Wo	rk, Seminar, Internship in Industry / High Institutions (P)	er I	ecn	mica	al		
	National Sports Organization						institutions (P)	H۵	urs /	$\overline{}$			
Z I GINIVI I U4L		otal	Cre	dite	03	Course	Course		urs / eek				
		Jiai	OI C	uito	Code Title					Р	С		
								-	Γ		U		

						21GNP301L	. 1 Community Connect	0	0	2	4
							community common				1
						21CSP302L		0	0	6	3
						21CSP303T		3	0	0	
						21CSP401I	L Major Project	0		30	15
						21CSP402I		0	0	20	10
						21CSP403I	L Internship#	0	0	10	5
						21CSP501L	L Specialization Project	0	0	40	20
						21CSP502I	L Specialization Project	0	0	30	15
						21CSP503I	L Domain Internship	0	0	10	5
							T	otal	Cre	dits	39
Pr	rofessional Elective Courses (E)						Professional Elective Courses (E)			<u> </u>	
	(Any 11 courses)						Tiolessional Elective Courses (L)				
Course	Course	Н	ours	/		_	_		Hou	s/	Т
Course	Course Title	٧	Veel	<		Course	Course		We		
Code	riue	L	Τ	Р	С	Code	Title	Т	T	P	С
21CSE251T Digi	gital Image Processing	3	0	0	3	21CSE418T	Cyber Physical Systems	3		0	
21CSE252T Bior	ometrics	2	1	0	3		Business Intelligence and Analytics	2			
21CSE271T Prog	ogramming in Java	2	1	0	3		Automatic Speech Recognition	2			3
21CSE272T Ger	netic Algorithm and its Applications	3	0	0	3		Virtual Reality and Augmented Reality	2			
21CSE291T Intro	roduction to Cognitive Neuroscience	3	0	0	3		Pattern Recognition Techniques	2		0	3
21CSE311P 1 Rob	bot Programming	2	1	0	3		Probabilistic Graphical Models: Principles	_	_	1	
Soft	ftware Engineering in Artificial	2	1	>	3	21CSE541T	and Techniques	3	0	0	3
21CSE312P 1 Inte	elligence	2	1	0	3	21CSE542T	Deep Generative Models	3	0	0	3
21CSE313P 1 Acc	celerated Data Science	2	1	0	3		Brain Machine Interface: Science.				
21CSE326T Artif	ificial Neural Networks	3	0	0	3	21CSE543T	Technology and Application	3	0	0	3
21CSE355T Data	ta Mining and Analytics	2	1	0	3	21CSE544T	Data Analysis and Visualization	3	0	0	3
21CSE356T Nati	tural Language Processing	2	1	0	3		Computational Perception and				
21CSE358T Net	twork Security and Cryptography	2	1	0	3	21CSE545T	Cognition	3	0	0	3
	tabase Security and Privacy	2	1	0	3	21CSE546T	Medical Signal Processing	3	0	0	3
21CSE371T Adv	vanced Algorithms	3	0	0	3		Deep Multitask and Meta Learning	2		0	3
21CSE376T Nati	ture Inspired Computing Techniques	3	0	0	3		Spatial and Temporal Computing	3			
21CSE381T Fore	rensics and Incident Response	2	1	0	3		Decision Making Under Uncertainty	3		0	3
21CSE397T Phil	ilosophy of Cognitive Science	3	0	0	3		Computational Linguistics	3			3
	gic and Knowledge Representation	3	0	0	3		Artificial Intelligence Engines	3	0	0	3
A rtit	ificial Intelligence in genomics and		^	^	_		Artificial Intelligence for Industrial			1	
	ease prediction	3	0	0	3		Applications	3	0	0	3
	chine learning in drug discovery	3	0	0	3		Artificial Intelligence in Medical Imaging	3	0	0	3
	Concepts and Applications	3	0	0	3		Multimodal Machine Learning	3	0	0	3
Poh	botics: Computational Motion						Neural Network models of Cognition	3		0	3
	anning	3	0	0	3	2.0020001		Tota	_	-	
21CSE417T Rein	inforcement Learning Techniques	2	1	0	3					U	100

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# 50. (f) Programme Articulation: Integrated M.Tech. in Computer Science and Engineering with Specialization in Cognitive Computing

		Program Outcomes (PO)												PSO				
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3		
Course Code	Course Name	Engineering Knowledge	Problem Analysis	Design/development of solutions	Conduct investigations of complex problems	Modern Tool Usage	The engineer and society	Environment & Sustainability	SS	Individual & Team Work	Communication	Project Mgt. & Finance	Life Long Learning	1-1	-2	.3		
		-ngi	Prob	Desi soluf	Con	Mod	Phe	∃nvi	Ethics	ndiv	Som	Proje	<u>=</u>	PS0-1	PSO-2	PSO-3		
21CSS101J	Programming for Problem Solving	2	3	-	-	-	-	٠.,	-		-	-	2	-	3	-		
21CSS303T		-	-	-	-	-	-	-		-	-	-	-	1	1	-		
21CSS201T	Computer Organization and Architecture	3	2		-	-	-	-			-		-	1	2	1		
21CSC201J	Data Structures and Algorithms	2	3	3	1	1	-	-	-	ď		-	-	1	1	2		
	Object Oriented Design and Programming	-	2	_2	-	2	7-	-		-	-	٠.	3	-	2	2		
	De <mark>sign and Ana</mark> lysis of Algorithms	2	1	2	1	-	100	4-	A	-	3	-	3	3	1	-		
21CSC202J	Operating Systems	3	3	3	2	-	-	4	- /		-	-	3	2	-	-		
21CSC303J	Software Engineering and Project		3	2	_				14	2		2		3	_	_		
	Management Management									-	4		1		<u>L</u>			
	Advanced Programming Practice	3	2	2	1	2	-	-	-	1	P		-	2	-	-		
	Formal Language and Automata	2	2	2	15		-	-	-	-	-	G.	-		3	-		
	Computer Networks	3	-	الأجانا	2	- 3	-	-	-	-	Ξ.	_	-	1	-	-		
21CSC205P	Database Management Systems	3	2	2			-	-	-	-	-	<b>-</b>	) -	2	1	-		
	Compiler Design	3	3	2	3	2	-	-	-	-	<u>.</u> -	\ <u>-</u>		-	1	-		
	Artificial Intelligence	1	2	3	- '		<u> </u>	-	-	-	-	-	-	1	2	-		
	Machine Learning	1/2	3		3	7 - 1		4	-	-	-	- 1	-	-	1	3		
21CSC505T	Computer Graphics and Vision	3	3		11	-	-	-	Ţ.,		-	- [	الت	-	- 1	3		
21CSC506J	Computation and Cognition: the probabilistic approach	120	2	3	7	d		Ťŧ.		14	•	-	7	-	-	3		
	Digital Image Processing	3	2	2	3	1	30	$A_{ij}^{\mu}(x_i)$	1	١,	ŀ	-	-	2	3	-		
21CSE252T		3 -		1	2	ı		1.7	1	2		-	-	-	1	-		
	Programming in Java	3	2	- 1	2			-	125	- 63	-	-	1	3	2			
	Genetic Algorithm and its Applications	_1	2	3	Ē	-	-	13	1.4	-	-	-		3	1	- 1		
	Introduction to Cognitive Neuroscience	1	3	2	2	-	1.40	-4		-	-	-	_1	3	2	-		
21CSE311P	Robot Programming	2	2	l r	3	-		-	-	-	-	- 4	-	2	- 1	3		
	Software Engineering in Artificial Intelligence	-	3	3	3	3	-	-	-	-	-		-	2	2	3		
	Accelerated Data science	1	2		3	-	-	-	-	-	-		Ξ	1		2		
	Artificial Neural Networks	-	-	1:	-	-	-	-	-	-	/-		-	2	2	2		
	Data Mining and Analytics	1	2	LÆ2	-	3	-	-	-			d-	7 -	2	-	-		
	Natural Language Processing	3	3	2	3	3	-	-	-	-	Æ,	<i>(</i> -	-	2	-	-		
	Network Security and Cryptography	2	- 3	2	7.	2	-	-	-	-	-7	-	-	2	-	-		
21CSE361T	Database Security and Privacy	3	2	2	2	1	-	-		-	1 - 1		2	1	-	-		
	Advanced Algorithms	- 1	2_	-	2	- 1 -	-	-	-		1	<i>-</i>	-	1	-	2		
	Nature Inspired Computing Techniques	-3	3	ريك	15				4	1-1	1		-		-	3		
	Forensics and Incident Response			2			-		2	3.7	Ш					3		
	Philosophy of Cognitive science	-	3	-	3	-	-	-	-			-		1	-	3		
21CSE398T	Logic and Knowledge representation	-	2	-	3	-	-	-	-		-	-		2	-	3		
	Artificial Intelligence in genomics and disease prediction	3	3	2	-			-	Ĭ,		•					3		
21CSE412T	Machine learning in Drug Discovery	3	2	3	-	-	-			-		-	_	_	-	3		
21CSE414T	IoT Concepts and applications	2	3	3	-	•	-	4				-	1	1		3		
21CSE416T	Robotics: Computational Motion Planning	3	3	2		ij	712	-		•		-	-	1	2	3		
21CSE417T	Reinforcement Learning Techniques	3	3	-	3	-		-	-	-	-	-	-	-	-	3		
21CSE418T	Cyber physical systems	3	3	2	-	-	_	-	-	-	-	_	-	2	-	3		
21CSE421T	Business Intelligence and Analytics	-	-	-	-	-	-	-	3	-	3	-	-	2	2	2		
	Automatic Speech Recognition	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2		
	Virtual Reality and Augmented Reality	3	3	2	2	3	-	-	-	-	-	-	-	2	-	2		
	Pattern Recognition Techniques	3	2	2	-	2	-	-	-	-	-	-	-	1	2	2		
	Neural Network models of Cognition	3	3	-	-	-	-	-	-	-	-	-	-	-	-	3		
21CSE5/1T	Probabilistic Graphical models: Principles and Techniques	2	-	-	3	-	-	-	-	-	-	-	-	1	-	3		
	Deep Generative Models	-	3	<u> </u>	3	_	_		-	3	_	_	-	1	_	3		
2103E3421	Deep delicialive Models	-	J		J			-	-	J		L -	_	ı	-	J		

					P	rogra	m Ou	tcome	s (PO	)					PSO	
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
Course Code	Course Name	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	PSO-1	PSO-2	PSO-3
21CSE543T	Brain Machine Interface: Science, Technology and Application	3	2	-	3	-	1	,	•	1	-	-	,	1	1	3
21CSE544T	Data Analysis and Visualization	1		6.0	3	2	i 11	-	-	-	-	-		3	1	3
21CSE545T	Computational Perception and Cognition	3	3	_	3	-	-	٧.,	-	-	-	-	-	2	1	3
21CSE546T	Medical signal Processing	1	-	3	-	-	-		4.0		-	-	-	1	-	3
21CSE547T	Deep Multitask and meta learning	3	3	-	-	-	-	-		7-0		-	-	1	-	3
21CSE548T	Spatial and Temporal Computing	-	2	2		2		-	-					-	2	2
21CSE549T	Decision making under uncertainty	-, 1	3	_ 2	2	7.5	4-	-	-	-		<b>U</b>	-	1	-	3
21CSE552T	Computational Linguistics	3	2	-	-		J- /	÷	4	-	á			2	-	3
21AIE536T	Artificial Intelligence Engines	3	2	2	-	-	-	+	- /	-	-	-	4	1	2	1
ZTAIE538T	Artificial Intelligence for Industrial applications	-	1	-	3	3		1	7	9	1		2	1	3	2
21AIE53 <mark>9T</mark>	Artificial Intelligence in Medical Imaging	3	3	3	h	-	1	-	Н	•	٩	1	1	1	2	2
21AIE <mark>541T</mark>	Multimodal machine learning	3	3	3	20		-	-				1	-	1	2	2
21CSP302L	Project Project	2	2	2	2	- 2	2	2	2	2	2	2	2	2	2	2
21CSP303T	MOOC	2	- 2	2	2	2	2	2	2	2	2	2	2	2	2	2
21CSP401L	Major Project	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	Semester Internship-I	3 -	3	3	. 3	3	3	3	3	3	3	3	3	3	3	3
2 <mark>1CSP501</mark> L	Specialization Project	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
21CSP502L	Semester Internship-II	3	3	3	3	3	3	- 3	3	- 3	3	3	3	3	3	3
	Program Average	3	3	3	3	3	3	3	3	3	3	3	3	<del>-</del> 3	3	3



## 50. (g) Implementation Plan: Integrated M.Tech. in Computer Science and Engineering with Specialization in Cognitive Computing

Course	Semester – I						Semester - II				
			Hours								
	Course	٧	Veel	k		Course	Course	٧	Veel	(	
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				
045)/54007	Semiconductor Physics and	•	_	^	-	21LEH104T	German				
21PYB102J	Computational Methods	3	1	2	5	21LEH105T	Japanese	2	1	0	3
21MES102L 1		0	0	4	2	21LEH106T	Korean				
	Electrical and Electronics Engineering	3	1	0	4	21LEH107T	Spanish				
	Programming for Problem Solving	3	0	2	4	21LEH108T	Russian				
		1	0	0	0	21GNH101J	Philosophy of Engineering	1	0	2	2
	Professional Skills and Practices	0	0	2	0		Advanced Calculus and Complex		U		
	Constitution of India	1	0	0	0	21MAB102T	Analysis	3	1	0	4
ZILLIVITOTT		otal	Cro	•	V	21CYB101J	Chemistry	3	1	2	5
					22	21BTB102T	Introduction to Computational Biology	2	0	0	2
	Semester – III						Object Oriented Design and		U	U	
_		Н	ours	s /		21CSC101T	Programming	2	1	0	3
Course	Course		Nee			24MEC4041 1		Λ	Λ	1	2
Code	Title	П	T	Р	С	21MES101L 1		0	0	4	2
	Transforms and Boundary Value	Ħ.					General Aptitude*	0	0	2	0
21MAB201T	Problems	3	1	0	4		Physical and Mental Health using Yoga				
21CSC201J	Data Structures and Algorithms	3	0	2	4		National Service Scheme	0	0	2	0
	Operating Systems	3	0	2	4	21GNM103L 1		Ů	Ů	- 1	Ŭ
210002020	Advanced Programming Practice	3	1	0	4	21GNM104L <sup>-1</sup>	National Sports Organization				
21CSS201T	Computer Organization and Architecture	3	1	0	4		То	tal	Cred	lits	21
	Design Thinking and Methodology	1	2	0	3		Semester – IV				
		1	0	_	_		Jeniester – IV	Ц	ours	1	
				0	0	Course	Course		Veel		
21PDM201 <sup>1</sup>	Verbal Reasoning	0	0	2	0	Code	Title	V	T	P	С
	Te	otal	Cre	dits	23	21MAB204T	Drahahility and Oversing Theory	2	1	_	
			0		30		Probability and Queueing Theory	3		0	4
	22 CO 11 SEC.					21CSC204J	Design and Analysis of Algorithms	3	0	2	4
		Ψ.				21CSC205P 1	Database Management Systems	3	1	0	4
	Semester – V			-		21CSC206T	Artificial Intelligence	2	7	0	3
_		Н	ours	s/		E	Professional Elective – I	0	^	0	3
Course	Course		Nee			21PDH209T 1		2	0	0	2
Code	Title	L	Τ	Р	С	21PDM202L 1		0	0	2	0
21MAB302T	Discrete Mathematics	3	1	0	4		Universal Human Values-II:				
	Formal Language and Automata	3	0	0	3	21LEM202T <sup>1</sup>	,	2	1	0	3
	Computer Networks	3	0	2	4		Human Conduct				
		2	1	0	3		To	otal	Cred	lits	23
E	Professional Elective – II	_			3		Semester – VI				
0	Open Elective – I				3	0		Н	ours	/	
	Community Connect	0	0	2	1	Course	Course		Veel		
	Analytical and Logical Thinking Skills	0	-	2	0	Code	Title	L	Т	Р	С
21PDM301I 1	r mary tour and Logical Timming Crimo		0	0	0	21CSS303T	Data Science	2	0	0	2
	Indian Art Form	1						_			_
	Indian Art Form	1 otal			21		Software Engineering and Project			2	3
		1 otal			21		Software Engineering and Project Management	2	0	-	-
					21	210303033	Management				.3
	T				21	21CSC303J	Management Compiler Design	2	0	2	3
21LEM301T <sup>1</sup>	Semester - VII	otal	Cre	dits	21	21CSC304J E	Management Compiler Design Professional Elective – III				3
21LEM301T <sup>1</sup> Course	Semester - VII  Course	otal H	<b>Cre</b>	dits	21	21CSC304J E E	Management Compiler Design Professional Elective – III Professional Elective – IV				3
21LEM301T <sup>1</sup>	Semester - VII	otal H	Ours Vee	dits		21CSC304J E E O	Management Compiler Design Professional Elective – III Professional Elective – IV Open Elective – II	2	0	2	3
21LEM301T 1  Course Code	Semester - VII  Course Title	otal H	ours Vee	dits s / k	С	21CSC304J E E O 21CSP302L 1	Management Compiler Design Professional Elective – III Professional Elective – IV Open Elective – II Project	2	0	2	3
21LEM301T 1  Course Code  21GNH401T	Semester - VII  Course Title  Behavioral Psychology	otal H	Ours Vee	dits	C 3	21CSC304J E E O 21CSP302L <sup>1</sup> 21CSP303T <sup>1</sup>	Management Compiler Design Professional Elective – III Professional Elective – IV Open Elective – II Project MOOC	0 3	0 0 0	6 0	3 3 3
Course Code 21GNH401T E	Semester - VII  Course Title  Behavioral Psychology Professional Elective – V	otal H	ours Vee	dits s / k	C 3	21CSC303J E E O 21CSP302L <sup>1</sup> 21CSP303T <sup>1</sup> 21PDM302L <sup>1</sup>	Management Compiler Design Professional Elective – III Professional Elective – IV Open Elective – II Project MOOC Employability Skills and Practices	0 3 0	0 0 0 0	6 0 2	3 3 3 0
Course Code 21GNH401T E E	Semester - VII  Course Title  Behavioral Psychology Professional Elective – V Professional Elective – VI	H L 2	ours Nee T	k P	C 3 3 3	21CSC303J E E O 21CSP302L <sup>1</sup> 21CSP303T <sup>1</sup> 21PDM302L <sup>1</sup>	Management Compiler Design Professional Elective – III Professional Elective – IV Open Elective – II Project MOOC Employability Skills and Practices Indian Traditional Knowledge	2 0 3 0 1	0 0 0 0 0 0	2 6 0 2 0	3 3 3 0 0
21LEM301T 1  Course Code  21GNH401T  E  21CSC402P 1	Semester - VII  Course Title  Behavioral Psychology Professional Elective – V Professional Elective – VI Report Writing	H L 2	ours Vee T 1	dits  k P 0	C 3 3 3	21CSC303J E E O 21CSP302L 1 21CSP303T 1 21PDM302L 1	Management Compiler Design Professional Elective – III Professional Elective – IV Open Elective – II Project MOOC Employability Skills and Practices Indian Traditional Knowledge	2 0 3 0 1	0 0 0 0	2 6 0 2 0	3 3 3 0 0
Course Code 21GNH401T E E 21CSC402P 1 21CSC405J	Semester - VII  Course Title  Behavioral Psychology Professional Elective – V Professional Elective – VI Report Writing Deep Learning for Cognitive Computing	H L 2	ours Nee T	k P	C 3 3 3 2 4	21CSC303J E E O 21CSP302L 1 21CSP303T 1 21PDM302L 1	Management Compiler Design Professional Elective – III Professional Elective – IV Open Elective – II Project MOOC Employability Skills and Practices Indian Traditional Knowledge	2 0 3 0 1	0 0 0 0 0 0	2 6 0 2 0	3 3 3 0 0
Course Code 21GNH401T E E 21CSC402P1	Semester - VII  Course Title  Behavioral Psychology Professional Elective – V Professional Elective – VI Report Writing Deep Learning for Cognitive Computing Open Elective – III	H \ \L 2 \ 2 \ 3	Ours Vee	dits  s / k P 0 2	C 3 3 3	21CSC303J E E O 21CSP302L 1 21CSP303T 1 21PDM302L 1	Management Compiler Design Professional Elective – III Professional Elective – IV Open Elective – II Project MOOC Employability Skills and Practices Indian Traditional Knowledge	2 0 3 0 1	0 0 0 0 0 0	2 6 0 2 0	3 3 3 0 0

							Semester - VIII				
						Course Code	Course Title		Hours Wee	k	
						21CSC505T	Computer Graphics and Vision	3	1	P 0	C 4
						21CSC506J	Computation and Cognition: The Probabilistic Approach	3	0	2	4
						21IPC501J <sup>2</sup>	Research Methodology	2	1	2	4
							Major Project	0	0	30	15
							Major Project	0	0	20	10
						21CSP403L	Internship	0	0	10	5
								Tota	l Cre	dits	27
	Semester - IX						Semester - X				
Course Code	Course Title		ours Nee T		С	Course Code	Course Title		Hour Wee		С
Ε	Professional Elective – VII				3	21CSP501L	Specialization Project	0	0	40	20
Ε	Professional Elective – VIII				3	21CSP502L		0	0	30	15
Ε	Professional Elective – IX				3	21CSP503L	<u> </u>	0	0	10	5
Ε	Professional Elective – X				3		,	Tota	l Cre	dits	20
Ε	Professional Elective –XI				3						
0	Open Elective-IV				3						
	To	otal	Cra	dite	18						

#Students have to register either 21CSP401L or 21CSP402L and 21CSP403L both in eighth semester and either 21CSP501L or 21CSP502L and 21CSP503L in tenth semester





#### SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

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

Kattankulathur, Chengalpattu District 603203, Tamil Nadu, India