## **ACADEMIC CURRICULA**

# POST GRADUATE DEGREE PROGRAMMES

**Master of Technology** 

(Choice Based Flexible Credit System)

**Regulations 2021** 

Volume - 21 Curriculum



#### 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

#### 25 M.Tech in Internet of Things

#### 25. (a) Department Vision Statement

	To Nurture as globally recognizable department in imparting the students high quality education and providing high
Stmt - 1	confidence, unique knowledge and research experience in the field of networking, cyber security, forensics, information
	technology, cognitive computing and internet of things.

#### 25. (b) Department Mission Statement

Stmt - 1	To provide world-class IT professionals with appropriate industry and research-based curriculum.
Stmt - 2	To train the students, that leads to entrepreneurship and develop societal need-based industries.
Stmt - 3	To nourish the students as socially responsible professionals by providing them training in personality development, ethics, and leadership program.

#### 25. (c) Program Education Objectives (PEO)

PEO - 1	Graduates will be able to demonstrate their knowledge and skills acquired in Computer Science and Engineering domain
PEO - 2	Graduates will be able to successfully pursue their research in reputed institutions
PEO - 3	Graduates will have the proficiency to adapt, contribute and innovate new technologies and systems in their job domains with appropriate professional skills
PEO-4	Graduates will be ethically and socially responsible solution providers and entrepreneurs in Computer Science and other engineering disciplines.
PEO - 5	Graduates will have the ability to excel in their career producing outstanding contribution in Computer Science with IoT domain.

#### 25. (d) Consistency of PEO's with Mission of the Department

	Mission Stmt 1	Mission Stmt 2	Mission Stmt 3
PEO - 1	3	3	
PEO - 2	2	3	2
PEO - 3	3	2	2
PEO - 4	2	2	3_
PEO-5	3	2	2

#### 25. (e) PO - Program Outcomes

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PO - 1	An ability to independently carry out research /investigation and development work to solve practical problems.
PO - 2	An ability to write and present a substantial technical report/document.
PO - 3	Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program.

#### 25. (f) Consistency of PEO's with Program Outcomes (PO)

		Program Outcomes (PO)	•**
	1	2	3
PEO - 1	3	2	3
PEO - 2	3	3	2
PEO - 3	2	2	2
PEO - 4	2	2	2
PEO - 5	2	2	3

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

#### 25. (g) Programme Structure: M.Tech Internet of Things

Course Code Title L T P C  21CSC529T Inferential Statistics 2 1 0 3  21CSC519J Web Development for Internet of Things  21CSC522J Embedded System and Software development for Internet of Things  21CSC520J Cloud Storage and Edge Computing 3 0 2 4  21CSC560J Cyber Physical Systems in IoT 3 0 2 4  21CSC501J Research Methodology 2 1 2 4  21CSC501T Course Code Title  21CSE566T IoT Data Analytics  21CSE566T Communication and Networking Technologies for Internet of Things  21CSE573T Real Time Systems in Emerging IoT  21CSC500J Cloud Storage and Edge Computing 3 0 2 4  21CSC560J Cyber Physical Systems in IoT 3 0 2 4  21CSC501T Case Studies 3 0 0 3	3 3 3 3	T 0 0	k	
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21CSE569T <sup>3</sup> Components and Energy	3	۸	U	3
Project Work, Internship In  Industry / Higher Technical Institutions (P)  Optimization Techniques for Internet of Things	3	U		
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100% assessment by the Department (1)	Но	ure/	т	
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21CSE569T <sup>3</sup> Components and Energy 0 All elective courses may be studied under MOOC pla	atfor	m		
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25. (h) Implementation Plan: M.Tech Internet of Things

	Semester - I						Semester - II				
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Code	Course Title					Codo	Course Title				
Code	Course Title	1	T		_	Code	Course Title		T	_	15
21CSC529T	Inferential Statistics	2	1			21CSC520.I	Cloud Storage and Edge Computing	3	0		4
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21CSC519J	Things	3	0	2	4				0	0	,
21CSC522J	Embedded System and Software	2	^	2	1			3	0	0	3
	Development for Internet of Things	3	U	2	4	:	, , , , , , , , , , , , , , , , , , , ,	3	0	0	
21IPC501J <sup>2</sup>	Research Methodology	2	1	2	4	21CSE571T 3	SDN and NFV for Internet of Things	3	0	0	3
21CSE566T 3	IoT Data Analytics	3	0	0				3	0	0	
21CSE567T 3		3	0	0	3	21CSE574T 3	Digital Twins Driven Distributed IoT	2	0	0	3
	Technologies for Internet of Things		U	U			Solutions	3	U		
	Total Credits				18		Total Credits				17
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	Semester - III		-		-					./	
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21CSE568T <sup>3</sup>	Open Elective Privacy and Security in IoT	J 2 3	Vee T 0	k P		21CSP501L 21CSP502L	Specialization Project (OR) Specialization Project	V L 0	Veek T 0	P 40	20 15
21CSE568T <sup>3</sup> 21CSE569T <sup>3</sup>	Open Elective Privacy and Security in IoT	L 3	Vee T 0	k P 0	3	21CSP501L 21CSP502L	Specialization Project (OR) Specialization Project	0 0	Veek T 0	P 40 30	20 15 5
21CSE568T <sup>3</sup> 21CSE569T <sup>3</sup>	Open Elective Privacy and Security in IoT Components and Energy Optimization Techniques for Internet of Things	J 2 3	Vee T 0	k P 0	3	21CSP501L 21CSP502L	Specialization Project (OR) Specialization Project Domain Internship	0 0	Veek T 0	P 40 30	20 15 5
21CSE568T <sup>3</sup> 21CSE569T <sup>3</sup> 21CSE619T <sup>3</sup>	Open Elective Privacy and Security in IoT Components and Energy Optimization Techniques for Internet of Things Smart Convergent Technologies	3 3 3	Vee T 0 0	k P 0 0	3	21CSP501L 21CSP502L	Specialization Project (OR) Specialization Project Domain Internship	0 0	Veek T 0	P 40 30	20 15 5
21CSE568T <sup>3</sup> 21CSE569T <sup>3</sup> 21CSE619T <sup>3</sup> 21CSE620T <sup>3</sup>	Open Elective Privacy and Security in IoT Components and Energy Optimization Techniques for Internet of Things Smart Convergent Technologies Cognitive Internet of Things	3 3 3	Vee T 0 0 0 0	k P 0 0	3	21CSP501L 21CSP502L	Specialization Project (OR) Specialization Project Domain Internship	0 0	Veek T 0	P 40 30	20 15 5
21CSE568T <sup>3</sup> 21CSE569T <sup>3</sup> 21CSE619T <sup>3</sup> 21CSE620T <sup>3</sup> 21CSE600T <sup>1</sup>	Open Elective Privacy and Security in IoT Components and Energy Optimization Techniques for Internet of Things Smart Convergent Technologies Cognitive Internet of Things Journal Publication	3 3 3	Vee T 0 0 0 0 0	k P 0 0 0	3	21CSP501L 21CSP502L	Specialization Project (OR) Specialization Project Domain Internship	0 0	Veek T 0	P 40 30	20 15 5
21CSE568T <sup>3</sup> 21CSE569T <sup>3</sup> 21CSE619T <sup>3</sup> 21CSE620T <sup>3</sup> 21CSE600T <sup>1</sup> 21CSE621T <sup>3</sup>	Open Elective Privacy and Security in IoT Components and Energy Optimization Techniques for Internet of Things Smart Convergent Technologies Cognitive Internet of Things Journal Publication Advanced Distributed Systems	3 3 3 3 0	Vee T 0 0 0 0 0 0 0 0 0	k P 0 0 0 0	3	21CSP501L 21CSP502L	Specialization Project (OR) Specialization Project Domain Internship	0 0	Veek T 0	P 40 30	20 15 5
21CSE568T <sup>3</sup> 21CSE569T <sup>3</sup> 21CSE619T <sup>3</sup> 21CSE620T <sup>3</sup> 21CSE600T <sup>1</sup> 21CSE621T <sup>3</sup> 21CSE623T <sup>3</sup>	Inferential Statistics										
21CSE568T <sup>3</sup> 21CSE569T <sup>3</sup> 21CSE619T <sup>3</sup> 21CSE620T <sup>3</sup> 21CSE600T <sup>1</sup> 21CSE621T <sup>3</sup> 21CSE623T <sup>3</sup>	Open Elective Privacy and Security in IoT Components and Energy Optimization Techniques for Internet of Things Smart Convergent Technologies Cognitive Internet of Things Journal Publication Advanced Distributed Systems Wireless Sensor Networks in IoT Fog Networks in IoT	3 3 3 3 3 0 3 3 3	Vee T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	k P 0 0 0 0 0 0 0	3 3 3	21CSP501L 21CSP502L	Specialization Project (OR) Specialization Project Domain Internship	0 0	Veek T 0	P 40 30	20 15 5

# Students must register either 21CSP501L or 21CSP502L and 21CSP503L both in fourth semester

25. (i) Pro	gram Articulation Matrix: M.Tech Internet of Things	Drog	ramme Outco	omos
Course Code	Course Name	1	2	3
21CSC529T	Inferential Statistics	2	2	1.67
2 <mark>1CSC51</mark> 9J	Web Development for Internet of Things	3	0	3
21CSC522J	Embedded System and Software development for Internet of Things	2.6	0	2.75
21CSC520J	Cloud Storage and Edge Computing	3	0	3
21CS <mark>C5</mark> 66J	Cyber Physical Systems in IoT	2.25	2	2.5
21CSC601T	Case Studies		/ 6	
21CSE5 <mark>66T</mark>	IoT Data Analytics	2.6	0	2
21CSE567T	Communication and Networking Technologies for Internet of Things	-2	0	3
21CSE568T	Privacy and Security in IoT	3	0	3
21CSE569T	Components and Energy Optimization Techniques for Internet of Things	- 3	0	3
21CSE570T	Sensor Data Management in IoT	3	0	3
21CSE571T	SDN and NFV for Internet of Things	2	0	3
	IoT Visuali <mark>zation</mark>	3	0	2.6
21CSE573T	Real Time Systems in Emerging IoT	3	0	3
21CSE574T	Digital Twins Driven Distributed IoT Solutions	2.25	2	2.5
21CSE619T	Smart Convergent Technologies	2.6	0	3
21CSE620T	Cognitive Internet of Things	2.6	0	3
21CSE621T	Advanced Distributed Systems	2.8	0	2.5
21CSE622T	Industrial Internet of Things	3	0	3
21CSE623T	Wireless Sensor Networks in IoT	2.75	0	2.5
21CSE624T	Fog Networks in IoT	3	0	2.75
21CSE600T	Journal Publication			
21IPC501J	Research Methodology	3	2.6	
	Open Elective			
21CSP501L	Specialization Project			
21CSP502L	Specialization Project			
21CSP503L	Domain Internship			
	Program Average			 



### SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

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

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