

**CURRICULUM**  
**POST GRADUATE PROGRAM – M.Sc.**



**INDIAN INSTITUTE OF INFORMATION TECHNOLOGY TIRUCHIRAPPALLI**  
Tiruchirappalli – 620 012,  
Tamil Nadu, India

### CREDIT DISTRIBUTION

Sl. No.	Program	Semester				
		1	2	3	4	Total
1.	M. Sc. (Computer Science)	20	19	20	10	69

## M.Sc. (C.S.) SYLLABUS – CORE SUBJECTS

Semester	Subject Code	Subject Name	L	T	P	C
I	CS7101	Mathematical Foundations of Computer Science	3	0	0	3
	CS7102	Networking Technologies	2	1	0	3
	CS7103	Data Structures and Algorithms	2	1	0	3
	CS7104	Problem Solving using Python and R	2	1	0	3
	CS7105	Operating Systems Fundamentals	3	0	2	4
	CS7106	Data Structures Lab	0	0	4	2
	CS7107	Python and R Lab	0	0	4	2
II	CS7151	Computer Organization and Architecture	3	0	0	3
	CS7152	Theory of Computation	2	1	0	3
	CS7153	Advanced Statistical Techniques for Data Science	3	0	0	3
	CS7154	DBMS and Data Mining	3	0	0	3
	E1	Elective I	3	0	0	3
	CS7155	Free and Open Source Software (FOSS) Lab	0	0	4	2
	CS7156	DBMS and Data Mining Lab	0	0	4	2
III	CS8101	Web Computing	3	0	0	3
	CS8102	Artificial Intelligence and Machine Learning	3	0	2	4
	CS8103	Object Oriented Software Engineering	3	0	0	3
	E2	Elective II	3	0	0	3
	E3	Elective III	3	0	0	3
	CS8104	Artificial Intelligence and Machine Learning Lab Project Work Phase-I	0	0	4	2
	CS8105	Project Work Phase-I	0	0	4	2
IV	CS8151	Project Work Phase-II	-	-	-	10
		<b>Grand Total</b>	40	5	26	69

L: LECTURE | T: TUTORIAL | P: PRACTICAL | C: Credits

## LIST OF ELECTIVES

Subject Code	Subject Name	L	T	P	C
<b>ELECTIVE – I</b>					
CS7111	Internet of Things	3	0	0	3
CS7112	Cyber Security	3	0	0	3
CS7113	Cloud and Edge Computing	3	0	0	3
CS7114	Mobile Computing	3	0	0	3
CS7115	Cryptography and Blockchain Technology	3	0	0	3
CS7116	Computer Graphics	3	0	0	3
<b>ELECTIVE – II</b>					
CS7117	Big Data Analytics	3	0	0	3
CS7118	Computational Intelligence	3	0	0	3
CS7119	Computer Vision and Pattern Recognition	3	0	0	3
CS7120	Soft Computing Techniques	3	0	0	3
CS7121	Defensive and Secure Software Development	3	0	0	3
CS7122	Software Verification and Validation	3	0	0	3
<b>ELECTIVE – III</b>					
CS8111	General Purpose Computing on Graphics Processing Unit (GPGPU) Programming	3	0	0	3
CS8112	Design Patterns	3	0	0	3
CS8113	Compiler Design	3	0	0	3
CS8114	Mobile Application Development	3	0	0	3
CS8115	Augmented Reality and Virtual Reality	3	0	0	3
CS8116	Fault Tolerance Systems and Techniques	3	0	0	3

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