SEMESTER WISE CREDIT DISTRIBUTION, MARKS AND CONTACT HOURS

Generic (Cluster): Computer Science
Programme: M.Sc., Computer Science (CS)

Part	Type of Course	Course Code	Title of the Course	Credits	Contact Hours/ Week	Marks
SEMESTER–I						
III	Core Theory –I	24PCS101	Mathematical foundations of computer science	4	4	100
	Core Theory- II	24PCS102	Design and Analysis of Algorithms	4	4	100
	Core Theory –III	24PCS103	Python and R Programming	4	4	100
	Elective Theory-I	24PCS201/ 24PCS204/ 24PCS207/ 24PCS210	Advanced Java Programming / DevOps/ Fundamentals of Internet of Things (IoT) / Cross platform application development using flutter	4	4	100
	Elective Theory-II	24PCS213/ 24PCS216/ 24PCS219	Computer vision / Advanced operating system / User Interface Design and Development	4	4	100
	Core Laboratory-I	24PCS301	Design and Analysis of Algorithms lab	2	4	100
	Core Laboratory-II	24PCS302	Python And R Programming lab	2	4	100
	Core Research Review – 1	24PCS601	Research Review on Current Trends in the Discipline: Report	2	2	100
Sub Total				**26**	**30**	**800**
SEMESTER–II						
III	Core Theory–IV	24PCS104	Advanced Relational and Distributed Management System	4	4	100
	Core Theory-V	24PCS105	Full stack development	4	4	100
	Core Theory –VI	24PCS106	Artificial Intelligence and Machine Learning	4	4	100
	Core Laboratory-III	24PCS303	Advanced Database Using NoSQL Lab	2	4	100
	Core Laboratory-IV	24PCS304	Full stack development lab	2	4	100
	Core Laboratory-V	24PCS305	Artificial Intelligence and Machine Learning Lab	2	4	100
	Elective Theory - III	24PCS202/ 24PCS205/ 24PCS208/	Java Web Development / Cloud Platforms in DevOps / Wireless Sensor Networks/	4	4	100

		24PCS211	React Native: Advanced Concepts			
	Core Article Publication-1	24PCS602	Publication of Article in Research Journal	-	1	CIA
	Ability Skills Enhancement Courses	24PCS451	Innovation Skills: Design Thinking	1	2	100
Sub Total				**23**	**30**	**800**
SEMESTER–III						
	Core Theory-VII	24PCS107	Open Source Application Development	4	5	100
	Core Theory - VIII	24PCS108	Cyber Security and Ethical Hacking	4	5	100
	Core Theory-IX	24PCS109	Deep Learning	4	5	100
	Core Laboratory-VI	24PCS306	Deep Learning Lab	2	4	100
	Elective Theory – IV	24PCS203/ 24PCS206/ 24PCS209/ 24PCS212	Object Oriented Analysis and Design/ Docker for DevOps/ Data-Driven Wireless Sensor Networks/ Firebase for Android Development	4	4	100
	Core Article Publication-1	24PCS602	Publication of Article in Research Journal	-	1	CIA
	Application Development	24PCS603	Mobile and Web Application	2	4	100
	Ability(Skills) Enhancement Courses	24PCS401	Soft Skills and Quantitative Skills	1	2	100
	Sub Total			**21**	**30**	**700**
SEMESTER IV						
III	Elective Theory – V	24PCS214/ 24PCS217/ 24PCS220	Reinforcement learning/ 5G and Network Technologies/ Responsive and Adaptive Design	4	4	100
	Elective Theory – VI	24PCS215/ 24PCS218/ 24PCS221	Time Series and Sequential Data Analysis/ Quantum Computing/ Human Computer Interaction	4	4	100
	Core Article Publication-1	24PCS602	Publication of Article in Research Journal	2	2	100
	Core: Project	24PCS605	Research Project	8	20	100
	Core: Internship	24PCS604	Internship	2	-	100
	Sub Total			**20**	**30**	**500**

Total Credits: 26+23+21+20=90 Credits

Total Marks: 800+800+700+500 = 2800