

**SCHEME OF STUDY AND EXAMINATION FOR MASTER OF COMPUTER APPLICATIONS
(MCA)**

Semester	Paper Code	Title of the Paper	Hours /Week	Marks			Credits	
				IA	Exam	Total	Subject	Total
I	MCA101T	Object Oriented Programming with Java	4	30	70	100	4	28
	MCA102T	Advanced Software Engineering	4	30	70	100	4	
	MCA103T	Mathematical Foundations	4	30	70	100	4	
	MCA104T	Advanced Database Management System	4	30	70	100	4	
	MCA105T	Data Structures and Algorithms	4	30	70	100	4	
	MCA106T	Theory of Computation	4	30	70	100	4	
	MCA107P	Java Programming Lab	4	30	70	100	2	
	MCA108P	Data Structures and Algorithm Lab	4	30	70	100	2	
II	MCA201T	Artificial Intelligence	4	30	70	100	4	28
	MCA202T	Web Technologies	4	30	70	100	4	
	MCA203T	Advanced Python Programming	4	30	70	100	4	
	MCA204T	Operating System and Linux	4	30	70	100	4	
	MCA205T	Network and Information Security	4	30	70	100	4	
	MCA206T	Cloud Computing	4	30	70	100	4	
	MCA207P	Web Technologies Lab	4	30	70	100	2	
	MCA208P	Python Programming Lab	4	30	70	100	2	
III	MCA301T	Research Methodology	4	30	70	100	4	28
	MCA302T	Data Science	4	30	70	100	4	
	MCA303T	Elective-I	4	30	70	100	4	
	MCA304T	Elective-II	4	30	70	100	4	
	MCA305T	Elective-III	4	30	70	100	4	
	MCA306P	Data Science Lab	8	30	70	100	4	
	MCA307P	Mini Project	8	30	70	100	4	
IV	MCA401P	Main Project	32	120	280	400	16	16

Electives

Elective-I (Any one to be opted)	Machine Learning
	Object Oriented Analysis and Design using UML
	Internet of Things
Elective-II (Any one to be opted)	Cyber Security and Cyber Laws
	Software Testing Tools
	Mobile Computing
Elective-III (Any one to be opted)	Big Data Analytics
	Deep Learning
	Blockchain Technologies