



**INSTITUTE OF DISTANCE EDUCATION
UNIVERSITY OF MADRAS**

MCA-MASTER OF COMPUTER APPLICATIONS (Two years programme)

Course Components	Name of Course	Credits	Max.Marks		Total
			Int.	Ext.	
FIRST YEAR-I SEMESTER					
Core Paper - I	C++ & Data Structures	4	20	80	100
Core Paper - II	Digital Logic Fundamentals	4	20	80	100
Core Paper - III	Database Management Systems	4	20	80	100
Core Paper - IV	Practical-I: DS using C++ Lab	2	40	60	100
Core Paper - V	Practical-II: RDBMS Lab.	2	40	60	100
Inter Disciplinary- I	Accounting & Financial Management	3	20	80	100
Elective Paper-I	Operating Systems	3	20	80	100
II SEMESTER					
Core Paper - VI	Design and Analysis od Algorithms	4	20	80	100
Core Paper - VII	Object Oriented Analysis and Design	4	20	80	100
Core Paper - VIII	Artificial Intelligence	4	20	80	100
Core Paper - IX	Practical-III: OOAD Lab	2	40	60	100
Core Paper -X	Practical-IV: Web Based Application Development Lab.	2	40	60	100
Inter Disciplinary- II	Web Based Application Development	3	20	80	100
Elective Paper -II	Computer Network	3	20	80	100
SECOND YEAR- III SEMESTER					
Core Paper -XI	Machine Learning	4	20	80	100
Core Paper -XII	Practical-V: Machine Learning Lab	2	40	60	100
Core Paper -XIII	Practical-VI: Mini Project (Group Project)	2	40	60	100
Elective Paper -III	Software Project Management	3	20	80	100
Elective Paper -IV	Cloud Computing	3	20	80	100
Elective Paper -V	Mobile Application Development	3	20	80	100
IV SEMESTER					
Core Paper -XIV	Project & Viva-Voce	20	20	60+20	100



List of Elective Papers

Sl.No	Elective-I	Sl.No	Elective - II
1	Operating Systems (OR)	1	Computer Networks (OR)
2	Theory of Computation(OR)	2	Digital Image Processing (OR)
3	Explorative Data Analysis with R	3	Software Engineering
	Elective - III		Elective - IV
1	Software Project Management (OR)	1	Mobile Computing (OR)
2	Supply Chain Management(ANS) (OR)	2	Cloud Computing (OR)
3	Management Information Systems	3	Soft Computing
	Elective – V		
1	Mobile Application Development (OR)		
2	Information Security (OR)		
3	IoT		

Students are encouraged to do courses from the resources like SWAYM, NPTEL etc

*Operation systems	*Software testing
*Principles of Programming Languages,	*Bigdata Analytics
*Computer Networks	*Robotics
*Compiler design	*Agile technologies
*Natural Language Processing	*Robotics Process Automation
*Software Engineering	*Organizational Behaviors.