



JECRCTM
UNIVERSITY
BUILD YOUR WORLD

Faculty of IT & Computer Application

Scheme

Master of Computer Applications (MCA)

Academic Programme

July 2020-22

MCA

Total Credits for the Batch 2020-22 = 112 Credits

- 1. Minimum Credits required = 102 Credits**
- 2. Total Relaxation = 10 Credits**
- 3. No relaxation in courses of type Core and Foundation and Skill Enhance Course subjects.**
- 4. Theory exams duration will be of 03 hours and Practical exams will be of 02 hours.**
- 5. Internal Assessment will be of 50 marks and End Term Assessment will be of 50 marks for theory and lab courses.**

Semester wise Credit				Total Credits	Minimum Credits Required for Degree
III	IV	V	VI		
28	28	28	28	112	102

Semester – I

Course Code	Course Name	L (Hr.)	T (Hr.)	P (Hr.)	Credits	Type
MCA144B	Programming in Python	3	0	0	3	S
MCA119A	Programming in C++	3	0	0	3	CORE
MCA120B	Computer Networks	3	1	0	4	CORE
MCA121B	Advance Data Structures and Algorithms	3	0	0	3	CORE
MCA122A	Statistical Computing	3	0	0	3	ID
MCA123B	Business Communication Skills	2	0	0	2	F
MCA147B	Programming in Python Lab	0	0	2	2	S
MCA125A	Programming in C++ Lab	0	0	2	2	S
MCA126A	Advance Data Structures and Algorithms Lab	0	0	2	2	S
MCA127B	Business Communication Skills Lab	0	0	2	2	S
MCA176A	Designing Lab	0	0	2	2	S
	Total	17	1	10	28	

❖ **F- Foundation, ID- Interdisciplinary, S- Specialization (Skill Enhance Courses)**

❖ **L- Lecture, T- Tutorial, P- Practical**

Semester – II

Course Code	Course Name	L (Hr.)	T (Hr.)	P (Hr.)	Credits	Type
MCA182A	Soft Skills	3	0	0	3	F
MCA130A	Advance Java	3	0	0	3	CORE
MCA132B	PHP & MYSQL	3	0	0	3	CORE
MCA118A	Advance Database Management Systems	3	0	0	3	CORE
	Elective – I	2	0	2	4	S
	Elective – II	3	1	0	4	S
MCA133A	Advance Java Lab	0	0	2	2	S
MCA134B	PHP & MYSQL Lab	0	0	2	2	S
MCA124B	Advance Database Management Systems Lab	0	0	2	2	S
MCA136A	Minor Project	0	0	2	2	S
	Total	16	2	10	28	

❖ **F- Foundation, ID- Interdisciplinary, S- Specialization (Skill Enhance Courses)**

❖ **L- Lecture, T- Tutorial, P- Practical**

Semester – III

Course Code	Course Name	L (Hr.)	T (Hr.)	P (Hr.)	Credits	Type
MCA129A	Accounting Principles and Practices	3	0	0	3	ID
MCA183A	Agile Software Development	3	0	0	3	CORE
MCA138A	Information Security & Cyber Law	3	0	0	3	CORE
MCA184A	Data Science & Analytics	2	1	0	3	S
	Elective – III	2	0	2	4	S
	Elective – IV	3	1	0	4	S
MCA185A	Data Science & Analytics Lab	0	0	2	2	S
MCA143A	Minor Project (PHP, ASP.Net, Java)	0	0	4	4	S
MCA177A	Cloud Computing Lab	0	0	2	2	S
	Total	16	2	10	28	

❖ **F- Foundation, ID- Interdisciplinary, S- Specialization (Skill Enhance Courses)**

❖ **L- Lecture, T- Tutorial, P- Practical**

Semester – IV

Course Code	Course Name	Credits	Type
MCA175A	Industrial Training/Project Presentation	28	CORE

List of Courses for Elective – I & III

Course Code	Course Name
MCA139A	Programming in ASP.Net
MCA140A	Programming in R
MCA141A	Programming in ASP.Net Lab
MCA142A	Programming in R Lab
MCA145A	Android Application Development
MCA146A	Web Technologies
MCA148A	Android Application Development Lab
MCA149A	Web Technologies Lab
MCA160A	Unix & Shell Programming
MCA161A	Programming in C#
MCA162A	Professional Java
MCA163A	Unix & Shell Programming Lab
MCA164A	Programming in C# Lab
MCA165A	Professional Java Lab

List of Courses for Elective – II & IV

Course Code	Course Name
MCA150A	Parallel Computing
MCA151A	Advance Computer Architecture
MCA152A	Theory of Computation
MCA153A	Data warehousing and Data Mining
MCA154A	Optimization Techniques
MCA155A	NLP and Information Retrieval
MCA156A	Object Oriented Analysis & Design
MCA157B	Cloud Computing
MCA158A	Distributed Computing
MCA159A	Introduction to Sales Force
MCA166A	Design & Analysis of Algorithms
MCA167A	Mobile Computing
MCA168A	Image Processing
MCA169A	Soft Computing
MCA170A	Compiler Design
MCA171A	Big Data Analytics
MCA172A	Organization Behavior
MCA173A	Artificial Intelligence and Expert System
MCA174A	Computer Graphics
SMCA178A	Animations
SMCA179A	Computer Network and Internet
SMCA180A	Cyber Security
MCA181A	Entrepreneurship
MCA186A	Robotics Process Automation

Note:

- 1. Students have to select electives as per the given list for Elective – I & III and Elective – II & IV.**
- 2. Minimum Batch size is 20 for any Elective**