



School of Computer Applications

Scheme & Syllabus

Master of Computer Applications

Cloud Computing

(In Association with AWS Academy)

Academic Programme

July 2026

JECRC University, Jaipur

Plot No. IS-2036 to IS-2039 Ramchandrapura Industrial Area, Sitapura, Vidhani,
Jaipur, Rajasthan 303905

MCA

Semester wise Credit				Total Credits	Minimum Credits Required for Degree
I	II	III	IV		
21	23	20	16	80	80

Cloud Computing-AWS Specializations Subjects (MCA)							
Semester	Code	Course Name	L (Hr.)	T (Hr.)	P (Hr.)	Credits	Type
I	MCA235A	Cloud Computing Fundamental	4	0	0	4	S
II	MCA236A	AWS Academy Cloud Foundation Course	3	0	0	3	S
III	MCA237A	Cloud Security	4	0	0	4	S
III	MCA238A	AWS Academy Cloud Developing (Elective)	4	0	0	4	S
			15	0	0	15	

Semester –I

Course Code	Course name	Lecture Credits (Hrs.)	Tutorial Credits (Hrs.)	Practical Credits (Hrs.)	Total Credits (Hrs.)	Course Category
MCA125A	Competitive Programming (Using C++)	3	0	0	3	CORE
MCA129B	Competitive Programming (Using C++) Lab	0	0	4	2	CORE
MCA235A	Cloud Computing Fundamental	4	0	0	4	S
MCA121C	Advance Data Structures and Algorithms	3	0	0	3	CORE
MCA201B	Advance Operating Systems	3	0	0	3	CORE
MCA203B	Advance Data Structures Lab	0	0	4	2	CORE
JIC001A	Entrepreneurship Development	0	0	2	1	SEC
	Departmental Elective 1	3	0	0	3	DE
Total Credits		16	0	10	21	

Semester –II

Course Code	Course name	Lecture Credits (Hrs.)	Tutorial Credits (Hrs.)	Practical Credits (Hrs.)	Total Credits (Hrs.)	Course Category
MCA144C	Advance Programming in Python	3	0	0	3	CORE
MCA147A	Project Lab in Python	0	0	4	2	CORE
MCA118A	Advance Database Management System	3	0	0	3	CORE
MCA124A	Project Lab in Advance Database Management Systems	0	0	4	2	CORE
MCA130B	Advance Java	3	0	0	3	CORE
MCA202B	Advance Java Lab	0	0	4	2	CORE
MCA600A	Technical Research Paper Writing	0	0	2	1	CORE
MCA236A	AWS Academy Cloud Foundation Course	3	0	0	3	S
	Departmental Elective – 3	3	0	2	4	DE
Total Credits		15	0	16	23	

Semester –III

Course Code	Course name	Lecture Credits (Hrs.)	Tutorial Credits (Hrs.)	Practical Credits (Hrs.)	Total Credits (Hrs.)	Course Category
MCA312A/ MCA 313AB	Web Technology	3	0	4	5	CORE
MCA314B/ MCA315A	Information Security and Hacking	3	0	2	4	CORE
MCA237A	Cloud Security	4	0	0	4	S
MCA316A	Project	0	0	6	3	CORE
MCA238A	AWS Academy Cloud Developing (Elective)	4	0	0	4	S
Total Credits		14	0	12	20	

Semester -IV

Course Code	Course name	Lecture Credits (Hrs.)	Tutorial Credits (Hrs.)	Practical Credits (Hrs.)	Total Credits (Hrs.)	Course Category
MCA175A	Industrial Training/Internship/Dissertation Capstone Project Presentation	0	0	0	16	CORE