Chhatrapati Shahu Institute of Business Education and Research Kolhapur

An Autonomous Institute under UGC, Government of India

College with Potential for Excellence (CPE) Phase III

Reaccredited by NAAC with 'A+' Grade, RUSA 2.0

School of Computer Science and Applications

Master of Computer Application (MCA)

Programme Structure and Syllabus

To be implemented from the academic year 2026-27

Aligned with NEP 2020

Programme Structure

MCA I - Level 6.0 - Semester I

Code	Course Title	Credits	Contact Hours	Internal Marks	Practical Marks	EOS Marks	Total Marks
MCA101	Data and File Structures	4	60		40	60	100
MCA102	Web Application Development	4	60		40	60	100
MCA103	Software Engineering & Agile Methods	4	60	40		60	100
MCA104	Relational Database Management System	4	60	40		60	100
MCA105	Operating Systems	4	60	40		60	100
MCA106	Computer Networks	4	60	40		60	100
MCA107	Elective-1 a. Software Project Management b. Foundations of Cyber Security c. Introduction to Data Science	2	30	20		30	50
		26					**550**

MCA I - Level 6.0 - Semester II

Code	Course Title	Credits	Contact Hours	Internal Marks	Practical Marks	EOS Marks	Total Marks
MCA201	Java Programming	4	60		40	60	100
MCA202	.NET Programming	4	60		40	60	100
MCA203	Mobile Application Development	4	60	40		60	100
MCA204	Cloud Computing	4	60	40		60	100
MCA205	Design and Analysis of Algorithms	4	60	40		60	100
MCA206	Blockchain Technology	4	60	40		60	100
MCA207	Elective-II a. Software Testing and Quality Assurance b. Web Security c. Data Visualization and Business Intelligence	2	30	20		30	50
MCA208	Mini Project I	2	30	20		30	50
		28					**700**

MCA II - Level 6.5 - Semester III

Code	Course Title	Credits	Contact Hours	Internal Marks	Practical Marks	EOS Marks	Total Marks
MCA301	Advanced Java	4	60		40	60	100
MCA302	MERN Stack Development	4	60		40	60	100
MCA303	AI and Machine Learning	4	60		40	60	100
MCA304	Large Language Models	4	60	40		60	100
MCA305	Linux Administration	4	60	40		60	100
MCA306	DevOps Technology	4	60	40		60	100
MCA307	Elective-III a. Internet of Things b. Penetration Testing c. Big Data Analytics	2	30	20		30	50
MCA308	Mini Project II	2	30	20		30	50
		28					**700**

MCA II - Level 6.5 - Semester IV

Code	Course Title	Credits	Contact Hours	Internal	EOS Marks	Marks
MCS401	**Industry Project**	18	16 weeks			
	Project Documentation				100	100
	Presentation				100	100
	Evaluation by Industry				100	100
	Viva-Voce				100	100
MCS402	MOOC I	4	-	40	60	100
		22				**500**