

**MCA 5 YEAR DUAL DEGREE PROGRAM**

SN	TYPES OF COURSE	SEM I	SEM II	SEM III	SEM IV	SEM V	SEM VI
1	<b>CORE COURSES</b>	Programming in 'C'	Object Oriented Programming - C++	Data Structure using C++	Programming using VB .NET	Programming in Core Java	Advanced JAVA Programming
2		Fundamentals of Computer	Relational Data Base Management System	Computer Graphics	Principles of Operating System & Linux Concepts	Web Designing	Introduction to Microsoft .Net Framework and C#
3		Quantitative Methods	Software Engineering	Discrete Mathematics	Data Communication and Networks		
4	<b>SEC( SKILL ENHANCMENT COURSE)</b>			Entrepreneurship	Mini Project		
5	<b>AECC (ABILITY ENHANCEMENT COMPULSORY COURSE)</b>	Environmental Studies	Communicative English				
6	<b>DSE ( DISCIPLINE SPECIFIC ELECTIVES) /CHOICE BASED</b>					ELECTIVE I	ELECTIVE III
						ELECTIVE II	ELECTIVE IV
						Industrial/Company/ Professional Training	System Development project (System Design and Implementation)
7	<b>GE( GENERIC ELECTIVES)</b>	Office Automation CERTIFICATION	Desktop Publishing	Computational Accounting and statistical tools	Client Server Architecture implementation and Network Trouble shooting		
8	<b>LAB COURSES</b>	Programming in 'C' LAB	Object Oriented Programming - C++ LAB	Algorithm and Data Structure using C++ LAB	Programming using VB .NET LAB	Core Programming in Java LAB	Advanced JAVA programming LAB
9		Fundamentals of Computer LAB	Relational Data Base Management System LAB	Computer Graphics LAB	Operating System Lab	Web Designing LAB	Introduction to Microsoft .Net Framework and C# LAB

<b>DSE ( DISCIPLINE SPECIFIC ELECTIVES)</b>			
<b>SEM V</b>		<b>SEM VI</b>	
<b>ELECTIVE I</b>	<b>ELECTIVE II</b>	<b>ELECTIVE III</b>	<b>ELECTIVE IV</b>
OPTIMIZATION TECHNIQUES	RESEARCCH METHODOLOGY	DATA MINING TECHNIQUES	CRYPTOGRAPHY
GRAPH THEORY	MIS	ELECTRONICS ON COMMUNICATION	CLOUD COMPUTING

SN	TYPES OF COURSE			SEM VII	SEM VIII	SEM IX	SEM X
1	CORE COURSES			Programming in Core JAVA	Web Programming and Extensible Markup language	Programming in Advance Java – J2EE	SYSTEM DEVELOPMENT PROJECT
2				Web designing and Scripting Language	Image processing	MS .Net PART II	
3				Elective I	Elective II	Elective III	
4	DSE ( DISCIPLINE SPECIFIC ELECTIVES)			Operations Research	Summer Internship	Industrial/Company/ Professional Training	
5				Theory of Computation	Artificial Intelligence	Research paper publication in the field of specialization	
1	LAB COURSES			Programming in Core JAVA LAB	Web Programming and Extensible Markup language Lab	Programming in Advance Java – J2EE – Lab	
2				Web designing and Scripting Language Lab	Image Processing Lab	MS .Net PART II LAB	

DSE ( DISCIPLINE SPECIFIC ELECTIVES)		
SEM III	SEM IV	SEM V
ELECTIVE I	ELECTIVE II	ELECTIVE III
ADVANCED DBMS	Data Warehousing and Data Mining	Advanced Data Warehousing and Mining
PRINCIPLE OF COMMUNICATION SYSTEMS	MANET and Wireless Sensor Network	Neural Networks