



MCA - COURSE STRUCTURE

FIRST YEAR MCA					
Subject Code	Trimester – I	Subject Code	Trimester – II	Subject Code	Trimester - III
MCA111	Structured Programming using C	MCA121	Data Structures	MCA131	Fundamentals of Operating System
MCA112	Computer Organization and Architecture	MCA122	Database Management Systems –II	MCA132	Object Oriented Concepts and Programming using
MCA113	Database Management Systems-I	MCA123	Programming using C and C++	MCA133	System Software
MCA114	IT Tools	MCA124	Discrete Mathematics for Computer Science	MCA134	Computer Oriented Numerical and Statistical
		MCA125	Communication Skills	MCA	Management Systems
SECOND YEAR MCA					
Subject Code	Trimester – IV	Subject Code	Trimester – V	Subject Code	Trimester – VI
MCA241	Core Java	MCA251	Web Development using ASP.NET	MCA261	TCP/IP Protocol Suite
MCA242	Software Engineering	MCA252	Object Oriented Analysis and Design using UML	MCA262	Open Source Technologies
MCA243	Operations Research	MCA253	Managerial Economics	MCA263	Elective-I
MCA244	Introduction to .NET Technology using VB.NET	MCA254	Data Communication and Networking	MCA264	Dissertation
MCA245	Advances in Operating Systems with Linux	MCA255	Seminar and Professional Skills Development		
THIRD YEAR MCA					
Subject Code	Trimester – VII	Subject Code	Trimester - VIII	Subject Code	Trimester – IX
MCA371	Software Project Management	MCA381	Enterprise Applications (ERP, SCM, CRM)	MCA391	System Development Project (Major)
MCA372	Mobile Computing	MCA382	Distributed Computing and Service Oriented Architecture (SOA)		
MCA373	Enterprise Application Development using Java EE	MCA383	Elective-III		
MCA374	Elective-II	MCA384	System Development Project (Minor)		

Elective-I	Elective-II	Elective-III
1. Artificial Intelligence 2. Linux Kernel Programming 3. Computer Graphics 4. Search Engine Optimization 5. Advanced Software Engineering using IBM Rational Suite	1. Compiler Construction 2. Multimedia Systems 3. Software Quality Management 4. Data Warehousing and Data Mining	1. Information Security 2. GIS 3. Cyber Laws 4. IT Infrastructure Management 5. E-Governance 6. Grid and Cloud Computing



AHMEDABAD UNIVERSITY

AES INSTITUTE OF COMPUTER STUDIES (MCA)

Teaching Scheme Second Year MCA

Trimester – IV

Sr. No.	Subject	Contact hrs/week				Total (credits)
		Theory (hrs)	Tutorial (hrs)	Practical (hrs)	Total (hrs)	
MCA241	Core Java	3	1	4	8	8
MCA242	Software Engineering	3	1	-	4	4
MCA243	Operations Research	3	1	-	4	4
MCA244	Introduction to .NET Technology using VB.NET	3	1	4	8	8
MCA245	Advances in Operating Systems with Linux	3	1	4	8	8
	Total	15	5	12	32	32

Trimester – V

Sr. No.	Subject	Contact hrs/week				Total (credits)
		Theory (hrs)	Tutorial (hrs)	Practical (hrs)	Total (hrs)	
MCA251	Web Development using ASP.NET	3	1	4	8	8
MCA252	Object Oriented Analysis and Design using UML	3	1	2	6	6
MCA253	Managerial Economics	3	1	-	4	4
MCA254	Data Communication and Networking	3	1	4	8	8
MCA255	Seminar and Professional Skills Development	3	-	-	3	3
	Total	15	4	10	29	29

Trimester – VI

Sr. No.	Subject	Contact hrs/week				Total (credits)
		Theory (hrs)	Tutorial (hrs)	Practical (hrs)	Total (hrs)	
MCA261	TCP/IP Protocol Suite	3	1	4	8	8
MCA262	Open Source Technologies	3	1	4	8	8
MCA263	Elective - I	3	1	4	8	8
MCA264	Dissertation	-	4	4	8	8
	Total	9	7	16	32	32



Examination Scheme Second Year MCA

Trimester – IV

Sr. No.	Subject	Internal Assessment		External Assessment		Total
		Mid-Term	Assignment	Theory	Practical	
MCA241	Core Java	25	25	50	50	150
MCA242	Software Engineering	25	25	50	-	100
MCA243	Operations Research	25	25	50	-	100
MCA244	Introduction to .NET technology using VB.NET	25	25	50	50	150
MCA245	Advances in Operating Systems with Linux	25	25	50	50	150
	Total	125	125	250	150	650

Trimester – V

Sr. No.	Subject	Internal Assessment		External Assessment		Total
		Mid-Term	Assignment	Theory	Practical	
MCA251	Web Development using ASP.NET	25	25	50	50	150
MCA252	Object Oriented Analysis and Design using UML	25	25	50	50	150
MCA253	Managerial Economics	25	25	50	-	100
MCA254	Data Communication and Networking	25	25	50	50	150
MCA255	Seminar and Professional Skills Development	25		75		100
	Total	150	150	200	150	650

Trimester – VI

Sr. No.	Subject	Internal Assessment		External Assessment		Total
		Mid-Term	Assignment	Theory	Practical	
MCA261	TCP/IP Protocol Suite	25	25	50	50	150
MCA262	Open Source Technologies	25	25	50	50	150
MCA263	Elective – I	25	25	50	50	150
MCA264	Dissertation	50		150		200
	Total	125	75	150	300	650