



### 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



### Teaching Scheme Third Year MCA

#### Trimester – VII

Sr. No.	Subject	Contact hrs/week				Total (credits)
		Theory (hrs)	Tutorial (hrs)	Practical (hrs)	Total (hrs)	
MCA371	Software Project Management	3	1	2	6	6
MCA372	Mobile Computing	3	1	4	8	8
MCA373	Enterprise Application Development using Java EE	3	1	4	8	8
MCA374	Elective II	3	1	4	8	8
	<b>Total</b>	<b>12</b>	<b>4</b>	<b>14</b>	<b>30</b>	<b>30</b>

#### Trimester – VIII

Sr. No.	Subject	Contact hrs/week				Total (credits)
		Theory (hrs)	Tutorial (hrs)	Practical (hrs)	Total (hrs)	
MCA381	Enterprise Applications (ERP, SCM, CRM)	3	1	-	4	4
MCA382	Distributed Computing and Service Oriented Architecture (SOA)	3	1	4	8	8
MCA383	Elective III	3	1	-	4	4
MCA384	System Development Project (Minor)	-	4	8	12	12
	<b>Total</b>	<b>9</b>	<b>7</b>	<b>12</b>	<b>28</b>	<b>28</b>

#### Trimester – IX

Sr. No.	Subject	Contact hrs/week	Total (credits)
MCA391	System Development Project (Major)	6 hrs/week for periodic review	24

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



# AHMEDABAD UNIVERSITY

## AES INSTITUTE OF COMPUTER STUDIES (MCA)

### Examination Scheme

### Third Year MCA

### Trimester – VII

Sr. No.	Subject	Internal Assessment		External Assessment		Total
		Mid-Term	Assignment	Theory	Practical	
MCA371	Software Project Management	25	25	50	50	150
MCA372	Mobile Computing	25	25	50	50	150
MCA373	Elective II	25	25	50	50	150
MCA374	Enterprise Application Development using Java EE	25	25	50	50	150
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>200</b>	<b>200</b>	<b>600</b>

### Trimester – VIII

Sr. No.	Subject	Internal Assessment		External Assessment		Total
		Mid-Term	Assignment	Theory	Practical	
MCA381	Enterprise Applications (ERP, SCM and CRM)	25	25	50	-	100
MCA382	Distributed Computing and Service Oriented Architecture (SOA)	25	25	50	50	150
MCA383	Elective III	25	25	50		100
MCA384	System Development Project (Minor)	50		150		200
	<b>Total</b>	<b>125</b>	<b>75</b>	<b>150</b>	<b>200</b>	<b>550</b>

### Trimester –IX

Sr. No.	Subject	Internal Assessment	External Assessment	Total
MCA391	System Development Project (Major)	200	400	600
	<b>Total</b>	<b>200</b>	<b>400</b>	<b>600</b>

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, Testing and Standards 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