

## University of Pune

### M.C.A. (Under Commerce Faculty ) (To be implemented from Academic year 2013-2014)

#### Credit Based System

#### 1. Programme Name

Master Degree in Computer Application (M.C.A.)

#### 2. Preamble

The M.C.A program is a combination of computer-related and general commerce courses. The computer related courses are used to introduce techniques of programming , databases, web designing, system analysis and design tools. The commerce courses include the education of Human recourse development, Organizations, accounting, inventory and production. The course is designed to emphasis on the building of business application software . The students are exposed to Software Engineering concepts, MIS and DSS for different organizations.

#### 3. Objective

3.1. The basic objective of the M.C.A (Commerce) is to provide knowledge and skills required for planning, designing and build Complex Application Software Systems as well as to provide support to automated systems or application.

#### 4. Programme Structure

##### 4.1. Duration

The entire Programme is of a Three year (Six semester) full time Program.

##### 4.2. Courses

First Five semesters will have Seven courses each. The entire period of the sixth semester shall be devoted for the Major project work. Two kinds of courses offered are Core courses and Elective courses. Core courses are offered by the department conducting the programme. Elective courses are offered either by the department conducting the programme or by any other department.

#### 5. Eligibility

**For First Year :** Bachelors Degree in any discipline of Pune University or any other degree of other University / Institution recognized by Pune University as equivalent .

**For Lateral Entry (Second Year) :** B.C.A. , B.Sc(IT) , B.Sc(cs) , B.C.S.

## 11. Completion of Degree Programme

- 1.1. As soon as a student obtains 156 credits, the student will be deemed to have completed the requirements of the M.C.A..(Commerce) degree programme.
- 1.2. If a student has failed in a course then the said course will not be taken into account for calculating GPA and overall grade. In fact, all the courses in which a student has passed will be taken into account for calculating the GPA and overall grade.
- 1.3. The policies and procedures determined by University will be followed for the conduct of examinations and declaration of the result of a candidate

Year/ Semester	Subject	Paper	Title of Paper	Hours / Week	Credit	Marks		
						CA	UE	Total
I Year Sem-I	Core	CAC-101	Fundamentals of Information Technology	4	4	50	50	100
	Core	CAC-102	Programming in C	4	4	50	50	100
	Core	CAC-103	Elements of Statistics	4	4	50	50	100
	Core	CAC-104	Financial Accounting	4	4	50	50	100
	Core	CAC-105	Principles of Management	4	4	50	50	100
	Core	CAC-106	Business Communication	4	4	50	50	100
	Core	CAC-107	Lab on CAC-101 &102	4	4	50	50	100

Minimum Credit : 28, Core Subject is compulsory CA- Continuous Assessment, UE –University Examination.

Year/ Semester	Subject	Paper	Title of Paper	Hours / Week	Credit	Marks		
						CA	UE	Total
<b>I Year Sem-II</b>	Core	CAC-201	Data Structures	4	4	50	50	100
	Core	CAC-202	OOP- C++	4	4	50	50	100
	Core	CAC-203	Elements of Mathematics	4	4	50	50	100
	Core	CAC-204	System Analysis and Design	4	4	50	50	100
	Core	CAC-205	Database Management System	4	4	50	50	100
	Core	CAC-206	Human Resource Management	4	4	50	50	100
	Core	CAC-207	Lab. on CAC-201,CAC-202	4	4	50	50	100

Minimum Credit : 28 , Core Subject is compulsory. CA- Continuous Assessment, UE – University Examination.

Year/ Semester	Subject	Paper	Title of Paper	Hours / Week	Credit	Mark		
						CA	UE	Total
<b>II Year Sem-III</b>	Core	CAC-301	Java	4	4	50	50	100
	Core	CAC-302	Advance Database Concepts	4	4	50	50	100
	Core	CAC-303	Object Oriented Software Engineering	4	4	50	50	100
	Core	CAC-304	Network Operations	4	4	50	50	100
	Core	CAC-305	Lab. on 301 & 302	4	4	50	50	100
	Elective	CAC-306	Introduction to Operating Systems	4	4	50	50	100
	Elective	CAC-307	M-Commerce	4	4	50	50	100
	Elective	CAC-308	Management Information Systems	4	4	50	50	100
	Elective	CAC-309	Project	4	4	50	50	100

Minimum Credit : 28 , Maximum Credit 32 . Core Subject is compulsory, From elective courses student can select Two course for Minimum credit and Three for Maximum Credit. CA- Continuous Assessment, UE –University Examination.

Year/ Semester	Subject	Paper	Title of Paper	Hours / Week	Credit	Mark		
						CA	UE	Total
II Year Sem-IV	Core	CAC-401	Advance Java	4	4	50	50	100
	Core	CAC-402	Visual Programming	4	4	50	50	100
	Core	CAC-403	Distributed Databases	4	4	50	50	100
	Core	CAC-404	Web Technology	4	4	50	50	100
	Core	CAC-405	Lab. on 401,402	4	4	50	50	100
	Elective	CAC-406	IT Project Management	4	4	50	50	100
	Elective	CAC-407	Cyber Law and IT Security	4	4	50	50	100
	Elective	CAC-408	Advanced Networking	4	4	50	50	100
	Elective	CAC-409	Project	4	4	50	50	100

Minimum Credit : 28 , Maximum Credit 32 . Core Subject is compulsory, From elective courses student can select Two course for Minimum credit and Four for Maximum Credit. CA- Continuous Assessment, UE –University Examination.

Year/ Semester	Subject	Paper	Title of Paper	Hours / Week	Credit	Mark		
						CA	UE	Total
II IYear Sem-V	Core	CAC-501	Advanced Web Programming	4	4	50	50	100
	Core	CAC-502	Data Center Technology	4	4	50	50	100
	Core	CAC-503	Information System Audit	4	4	50	50	100
	Core	CAC-504	Content Management Systems	4	4	50	50	100
	Core	CAC-505	Lab. on CAC-501,CAC-502	4	5	50	50	100
	Elective	CAC-	Mobile Communication	4	4	50	50	100

	e	506						
	Elective	CAC-507	System Simulation and Modeling	4	4	50	50	100
	Elective	CAC-508	Businesses and Professional Skills	4	4	50	50	100
	Elective	CAC-509	Project	4	4	50	50	100

Minimum Credit : 28 , Maximum Credit 32 . Core Subject is compulsory, From elective courses student can select one course for Minimum credit and Three for Maximum Credit. IA- Internal Assessment, UE –University Examination.

Year/ Semester	Subject	Paper	Title of Paper	Hours / Week	Credit	Marks		
						CA	UE	Total
<b>III Year Sem-VI</b>	Core	CAC-601	Industrial Training /Institutional project	--	16	100	200	300