

MASTER OF COMPUTER APPLICATIONS (MCA)

FIRST YEAR

Course No.	Title of the Course
MCA-101	Programming Methodologies Using C
MCA-102	Digital Organization
MCA-103	Introduction to Organizational Structure & Personal Management
MCA-104	PC Packages
MCA-105	Effective Communication Skills
MCA-106	Practical-1 (C-Language)
MCA-107	Practical-2 (PC Packages)

SECOND YEAR

MCA-301	Operating System
MCA-302	Data Communication & Computer Networks
MCA-303	Data Base Management System
MCA-304	Software Engineering
MCA-305	Object Oriented Programming Using JAVA
MCA-306	Practical-5 (DBMS)
MCA-307	Practical-6 (JAVA)

THIRD YEAR

MCA-501	Data Warehouse & Mining
MCA-502	Computer Graphics
MCA-503	Fundamentals of Computer Algorithms
MCA-504	Elective-II
MCA-505	Elective-III
MCA-506	Practical-9 (Computer Graphics)
MCA-507	Practical-10 (FOCA)

FIRST YEAR

Course No.	Title of the Course
MCA-201	Data Structures
MCA-202	Computer Architecture
MCA-203	Programming in Visual Basic
MCA-204	Discrete Mathematics
MCA-205	Accounting & Financial Management
MCA-206	Practical-3 (Data Structure)
MCA-207	Practical-4 (Visual Basic)

SECOND YEAR

MCA 401	Programming Using C#
MCA-402	•NET Technology
MCA-403	Computer Oriented Optimization Methods
MCA 404	Internet Technologies & Web Page Designing
MCA-405	Elective-1
MCA-406	Practical-7 (C#)
MCA-407	Practical-8 (Internet Technologies & Web page design)

THIRD YEAR

MCA-601	System Development Project
(a)	System Design
(b)	Log Book and Interim Report
(c)	Seminars (2)
(d)	Project Report (4 copies)
(e)	Viva-Voce

LIST OF ELECTIVE SUBJECTS

Sr.No.	Course	Paper
1.	MCA-E01	Artificial Intelligence & Expert System
2.	MCA-E02	Software Quality and Testing
3.	MCA-E03	Automata Theory & Computer Design
4.	MCA-E04	Cyber Law

5.	MCA-E05	Distributed Data Base Management System
6.	MCA-E06	Management of Software Projects
7.	MCA-E07	Open Source Software
8.	MCA-E08	Image Processing
9.	MCA-E09	Distributed Systems
10.	MCA-E010	Object-Oriented Software Engineering
11.	MCA-E011	Stimulation and Modeling

SCHEME OF EXAMINATION IN MCA

English shall be the medium of instruction and examination. The pass marks shall be 40% in each written paper and in the internal assessment separately, and 40% in viva-voce, project work and semester course and 50% in the aggregate subject to the conditions that aggregate shall be determined at the end of the examination. Other rules shall be as per the rules of the University.

Theory Papers

Each paper will be of 100 marks (75 marks for theory exam and 25 marks for internal assessment) and duration of each paper will be 3 hours. In each theory paper, nine questions are to be set. Two questions are to set from each Unit and candidate is required to attempt at least one question from each unit. Question number nine will be compulsory, which will be of short answer type with 5-10 parts, out of the entire syllabus. In all, five questions are to be attempted.

Practical Examination

Max. Marks : 100 (50 marks for practical and 50 marks for internal assessment).

Duration : 3 hours.

Conduct : Practical exam will be conducted by the external examiner from the panel proposed by the Chairman, Department of Computer Science, Himachal Pradesh University, Shimla and duly approved by the concerned authorities of the Himachal Pradesh University Shimla.