



P.E.S.'s
Modern College of Engineering, Pune-05
MCA Department

MCA Course Structure- 2008 Course

COURSE STRUCTURE FOR M.C.A. (2008 Course) w. e. f. June – 2008

SEMISTER I

CODE	SUBJECT	TEACHING SCHEME		EXAMINATION SCHEME					
		Lect.	Pr.	Paper		TW	Oral	Pr	Total
				Int	Ext	Int	Ext	Ext	
510901	Problem Solving & Programming in C	4	--	30	70	--	--	---	100
510902	Discrete Mathematics	4	--	30	70	--	--	---	100
510903	Foundations of Information Technology	4	--	30	70	--	--	---	100
510904	Probability & Statistics	4	--	30	70	--	--	---	100
511905	Management Science	4	--	30	70	--	--	---	100
510906	Programming Laboratory	--	4	---	---	50	--	50	100
510907	Information Technology Laboratory	--	4	---	---	50	--	50	100
510908	Soft Skills	--	2	---	---	50	--	--	050
Total of First Term		20	10	150	350	150	--	100	750

Term work will be assessed continuously during the semester internally by a pair of examiners appointed by the Head of the Institution. Practical/Oral examination will be conducted at the end of semester by a pair of examiners with one internal and one external examiner appointed by the University.

SEMISTER II

CODE	SUBJECT	TEACHING SCHEME		EXAMINATION SCHEME					
		Lect.	Pr.	Paper		TW	Oral	Pr	Total
				Int	Ext	Int	Ext	Ext	
510909	Object-Oriented Programming	4	--	30	70	--	--	---	100
510910	Data Structures and Files	4	--	30	70	--	--	---	100
510911	Operations Research	4	--	30	70	--	--	---	100
510912	Microprocessor Applications	4	--	30	70	--	--	---	100
510913	Management Information Systems	4	--	30	70	--	--	---	100
510914	Data Structures Laboratory	--	4	---	---	50	--	50	100
510915	Object Oriented Programming Laboratory	--	4	---	---	50	--	50	100
510916	Microprocessor Laboratory	--	2	---	---	50	--	--	050
Total of First Term		20	10	150	350	350	--	100	750

SEMESTER III

CODE	SUBJECT	TEACHING SCHEME		EXAMINATION SCHEME					
		Lect	Pr.	Paper		TW	Oral	Pr	Total
				Int	Ext	Int	Ext	Ext	
610901	Operating Systems	4	--	30	70	--	--	---	100
610902	Databases: Concepts & Systems	4	--	30	70	--	--	---	100
610903	Financial Accounting & Management	4	--	30	70	--	--	---	100
610904	Computer Communications & Networks	4	--	30	70	--	--	---	100
611905	Principles of Multimedia	4	--	30	70	--	--	---	100
610906	Software Laboratory I	--	4	---	---	50	50	---	100
610907	Database Laboratory	--	4	---	---	50	--	50	100
610908	Seminar*	--	2#	---	---	50	--	--	050
Total of First Term		20	10	150	350	150	50	50	750

*Each student will select a topic in the area of Computer Engg./Technology preferably keeping track with recent technological trends and development. The topic must be selected in consultation with the institute guide. Each student will make a seminar presentation in the term making use of audio/visual aids for a duration of 20 – 25 minutes and submit two copies of the seminar report in a prescribed format provided by the host institution duly signed by the guide and Head of the department. Attendance for all seminars for all students is compulsory. Staff members of the institute will assess the seminar internally.

SEMESTER IV

CODE	SUBJECT	TEACHING SCHEME		EXAMINATION SCHEME					
		Lect.	Pr.	Paper		TW	Oral	Pr	Total
				Int	Ext	Int	Ext	Ext	
610909	System Analysis and Design	4	--	30	70	--	--	---	100
610910	Web Technology	4	--	30	70	--	--	---	100
610911	Object Oriented Analysis & Design	4	--	30	70	--	--	---	100
610912	Java	4	--	30	70	--	--	---	100
610913	Elective I	4	--	30	70	--	--	---	100
610914	Web Programming Laboratory	--	4	---	---	50	50	---	100
610915	Software Laboratory II	--	4	---	---	50	---	50	100
610916	Mini Project**	--	2#	---	---	50	--	--	050
Total of First Term		20	10	150	350	150	50	50	750

Hours/per/week/Student

** Mini Project is to be carried out in a group of 4 students. Each group will be assigned a guide. At the end of the term the students should submit 2 copies of the report in a prescribed format provided by the institute duly signed by the guide and Head of the Department. Staff members of the institute will assess the mini project internally.

SEMESTER V

CODE	SUBJECT	TEACHING SCHEME		EXAMINATION SCHEME					
		Lect	Pr.	Paper		TW	Oral	Pr	Total
				Int	Ext	Ext	Ext	Ext	
710901	Software Engineering	4	--	30	70	--	--	---	100
710902	Software Testing	4	--	30	70	--	--	---	100
710903	Advanced Databases	4	--	30	70	--	--	---	100
710904	Principles & Practices of IT Management	4	--	30	70	--	--	---	100
711905	Elective II	4	--	30	70	---	---	---	100
710906	Computer Laboratory	--	4	---	---	50	--	50	100
710907	Elective Laboratory	--	2	---	---	50	50	---	100
710908	Survey & Case Study ¹	--	2	---	---	---	---	---	---
Total of First Term		20	08	150	350	100	50	50	700

¹ Students should submit the report of the Survey/Case Study in the format prescribed by the host institution and will be duly signed by the guide and the Head of the Department. The term will be granted only after submission of the report.

SEMESTER VI

CODE	SUBJECT	TEACHING SCHEME		EXAMINATION SCHEME					
		Lect.	Pr.	Paper	TW	Oral	Pr	Total	
					Ext	Ext			
710909	Comprehensive Viva	---	4*	---	--	100	---	100	
710910	Project Work	---	20**	---	250	150	---	400	
Total of First Term		---	24	---	250	250	---	500	

*** Hours/per Week/student (Self Study Only)**

Comprehensive Viva will be based on questions from any of the subjects taught during semester I to Semester V by a panel consisting of 2-3 examiners with at least one external examiner from industry/academics. 5-6 panels may be formed. Viva will be conducted during 7th to 10th week from the commencement of 6th semester.

**** Hours/per/week/Student (For calculating workload: 6 Hrs/week/student)**

Project work is to be carried out either individually or in a group. Each group will be assigned a guide. At the end of the term the students should submit at least 2 copies of the project report in a prescribed format. Examination will be carried out by a pair of examiners for each group with one internal and one external examiner appointed by the University.

Elective I
 Distributed Systems
 Human Computer Interface
 ERP
 IT Infrastructure management

Elective II
 Software Architecture
 Artificial Intelligence & Neural Networks
 Unix
 Design & Analysis of Algorithms