

Savitribai Phule Pune University, Pune
Faculty of Commerce and Management

Master of Computer Application (MCA)

Programme Structure

MCA programme is Two-Year Full-Time Programme affiliated to Savitribai Phule Pune University.

The revised MCA Curriculum 2020 builds on the implementation of the Choice Based Credit System (CBCS) and Grading System initiated in the AY 2015. The curriculum takes the MCA programme to the next level in terms of implementing Outcome Based Education along with the Choice Based Credit System (CBCS) and Grading System.

The MCA programme is a combination of:

- a. Three-Credit Courses (75 Marks each): 3 Credits each
- b. Two-Credit Courses (50 Marks each): 2 Credits each
- c. One-Credit Courses (25 Marks each) : 1 Credits each

The session details per credit for each of Lecture-Practical/Project-Tutorial (L-P-T) model are as follows:

1. Every ONE-hour session per week of L amounts to 1 credit per semester
2. Minimum of TWO hours per week of P amounts to 1 credit per semester
3. Minimum of ONE hours per week of T amounts to 1 credit per semester

Open Courses:

Institute has to offer two open courses of 1 credit each per semester to the students from Semester I to Semester III. The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. Full autonomy is given to the Institute to plan and execute the open courses. Each semester total 2 credits are reserved for open courses.

Evaluation and Assessment:

In total 112 credits represent the workload of a year for MCA program. The final total assessment of the candidate is made in terms of an internal (concurrent) evaluation and an external (university) examination for each course. In total the internal (concurrent) to external (university) marks ratio is maintained 50:50.

For each course, 25 marks will be based on internal evaluation and 50 marks for semester end examination conducted by University.

Semester - I					
Sr. No.	Course Title	Course Code	CP	EXT	INT
1	Java Programming	IT11	3	50	25
2	Data Structure and Algorithms	IT12	3	50	25
3	Object Oriented Software Engineering	IT13	3	50	25
4	Operating System Concepts	IT14	3	50	25
5	Network Technologies	IT15	3	50	25
6	Open Course 1	OC11	1		25
7	Open Course 2	OC12	1		25
	* Practicals				
8	Practical	IT11L	5	50	75
9	Mini Project	ITC11	5	50	75
	Soft Skills				
10	Soft Skills - I	SS11	1		25
			28	350	350

Semester - II					
Sr. No.	Course Title	Course Code	CP	EXT	INT
1	Python Programming	IT21	3	50	25
2	Software Project Management	IT22	3	50	25
3	Optimization Techniques	MT21	3	50	25
4	Advanced Internet Technologies	IT23	3	50	25
5	Advanced DBMS	IT24	3	50	25
6	Open Course 3	OC21	1		25
7	Open Course 4	OC22	1		25
	* Practicals				
8	Practical	IT21L	5	50	75
9	Mini Project	ITC21	5	50	75
	Soft Skills				
10	Soft Skills - II	SS21	1		25
			28	350	350

Semester - III					
Sr. No.	Course Title	Course Code	CP	EXT	INT
1	Mobile Application Development	IT31	3	50	25
2	Data Warehousing and Data Mining	IT32	3	50	25
3	Software Testing and Quality Assurance	IT33	3	50	25
4	Knowledge Representation & Artificial Intelligence - ML, DL	IT34	3	50	25
5	Cloud Computing	IT35	3	50	25
6	Open Course 5	OC31	1		25
7	Open Course 6	OC32	1		25
* Practicals					
8	Practical	IT31L	5	50	75
9	Mini Project	ITC31	5	50	75
Soft Skills					
10	Soft Skills - III	SS31	1		25

Semester - IV					
Sr. No.	Course Title	Course Code	CP	EXT	INT
1	DevOps	IT41	3	50	25
2	PPM and OB	BM41	3	50	25
3	Project	ITC41	22	250	300
			28	350	350

Total Marks				
Sr. No.	Semester	Credit	IE	UE
1	Semester-I	28	350	350
2	Semester-II	28	350	350
3	Semester-III	28	350	350
4	Semester-IV	28	350	350
	Total	112	1400	1400
				2800