University of Pune

Two Year M.Sc. Degree Course in
Computer Science

M.Sc. Computer Science
(Credit and Semester based Syllabus to be implemented from
Academic Year 2013-14)

Structure of Course

- Duration : The entire Programme is a Two year and four semester full time Programme.
- No of Courses : For first three semesters there will be Five courses. The fourth semester will be Industrial Training/Institutional Project and two theory courses.

Year/ Semester	Subject	Paper	Title of Paper	Credit	% of Assessment		
					IA	UE	Total
I Year Sem-I	Core	CS-101	Principles of Programming Languages	5	50	50	100
	Core	CS-102	Advanced Networking	5	50	50	100
	Core	CS-103	Distributed Database Concepts	5	50	50	100
	Core	CS-104	Design and Analysis of Algorithms	5	50	50	100
	Core	CS-105	Network Programming	5	50	50	100

Minimum Credit : 25 Maximum Credit : 25. Core Subject is compulsory . IA :- Internal Assessment, UE :- University Examination

Year/ Semester	Subject	Paper	Title of Paper	Hours/ Weak	Credit	% of Assessment		
						IA	UE	Total
I Year Sem-II	Core	CS-201	Digital Image Processing	4	5	50	50	100
	Core	CS-202	Advanced Operating Systems	4	5	50	50	100
	Core	CS-203	Data Mining and Data Warehousing	4	5	50	50	100
	Core	CS-204	Project	4	5	50	50	100
	Elective	CS-205	Programming With DOT NET	4	5	50	50	100
	Elective	CS-206	Artificial Intelligence	4	5	50	50	100

					% of Assessment		
					IA	UE	Total
Elective	CS-207	Advance Design and Analysis of Algorithms	4	5	50	50	100

Minimum Credit : 25 Maximum Credit : 30. Core Subject is compulsory. From elective courses student can select one course for minimum credit and two for maximum credit. IA :- Internal Assessment, UE :- University Examination

Year/ Semester	Subject	Paper	Title of Paper	Credit	% of Assessment		
					IA	UE	Total
II Year Sem-III	Core	CS-301	Software Metrics & Project Management	5	50	50	100
	Core	CS-302	Mobile Computing	5	50	50	100
	Core	CS-303	Soft Computing	5	50	50	100
	Elective	CS-304	Project	5	50	50	100
	Elective	CS-305	Web Services	5	50	50	100
	Elective	CS-306	Database and System Administrator	5	50	50	100
	Elective	CS-307	Functional Programming	5	50	50	100
	Elective	CS-308	Business Intelligence	5	50	50	100

Minimum Credit : 25   Maximum Credit : 35, Core Subject is compulsory, From elective courses student can select two course for minimum credit and four for maximum credit. IA :- Internal Assessment, UE :- University Examination

Year/ Semester	Subject	Paper	Title of Paper	Credit	% of Assessment		
					IA	UE	Total
II Year Sem-IV	Core	CS-401	Industrial Training /Institutional project	15	50	50	100
	Elective	CS-402	Parallel Computing	5	50	50	100
	Elective	CS-403	Embedded System	5	50	50	100
	Elective	CS-404	Software Quality Assurance	5	50	50	100
	Elective	CS-405	Modeling and Simulation	5	50	50	100

Core Subject is compulsory. If student had completed 85 credit within three semesters then no need to select any elective course otherwise student should select appropriate number of elective courses to minimum complete 100 credits.

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