



**Pune District Education Association's
Annasaheb Magar Mahavidyalaya**

Hadapsar, Pune -411028

NAAC Reaccredited B grade



**SAVITRIBAI PHULE
PUNE UNIVERSITY**

**Three Year B.Sc. Degree Program in Computer Science
(Faculty of Science & Technology)**

**Course structure
for
Academic Year 2020-21**

F.Y.B.Sc. (Computer Science)

Choice Based Credit System Syllabus

Implemented from Academic Year 2019-2020

Semester I (Total credits=22)

Course type	Paper Code	Paper title	Credits		Evaluation		
			T	P	CA	UA	TOTAL
CC-I	CS-111	Problem Solving using Computer and 'C' Programming	2		15	35	50
	CS-112	Database Management Systems	2		15	35	50
	CS-113	Practical course based on CS101 and CS102		1.5	15	35	50
CC-II*		Mathematics – I, II and III					
CC-III*		Electronics – I,II and III					
CC-IV*		Statistics – I, II and III					

Semester II (Total credits=22)

Course type	Paper Code	Paper title	Credits		Evaluation		
			T	P	CA	UA	TOTAL
CC-V	CS-121	Advanced 'C' Programming	2		15	35	50
	CS-122	Relational Database Management Systems	2		15	35	50
	CS-123	Practical course based on CS201 and CS202		1.5	15	35	50
CC-VI*		Mathematics – I,II and III					
CC-VII*		Electronics – I, II and III					
CC-VIII*		Statistics – I,II and III					

S.Y.B.Sc. (Computer Science)

Choice Based Credit System Syllabus
To be implemented from Academic Year 2020-2021

Semester III (Total credits=22)

Course type	Paper Code	Paper title	Credits	Evaluation		
				CA	UE	TOTAL
CC-VIII	CS 231	Data Structures and Algorithms – I	2	15	35	50
	CS 232	Software Engineering	2	15	35	50
	CS 233	Practical course on CS 231 and CS 232	2	15	35	50
CC-IX		Mathematics - I	2	15	35	50
		Mathematics - II	2	15	35	50
		Practical course in Mathematics	2	15	35	50
CC-X		Electronics - I	2	15	35	50
		Electronics - II	2	15	35	50
		Practical course in Electronics	2	15	35	50
AECC-I		Environment Science – I	2			
AECC-II		Language Communication – I	2			

Semester IV (Total credits=22)

Course type	Paper Code	Paper title	Credits	Evaluation		
				CA	UE	TOTAL
CC-XI	CS 241	Data Structures and Algorithms – II	2	15	35	50
	CS 242	Computer Networks - I	2	15	35	50
	CS 243	Practical course on CS 241 and CS 242	2	15	35	50
CC-XII		Mathematics – I	2	15	35	50
		Mathematics – II	2	15	35	50
		Practical course in Mathematics	2	15	35	50
CC-XIII		Electronics – I	2	15	35	50
		Electronics – II	2	15	35	50
		Practical course in Electronics	2	15	35	50
AECC-I		Environment Science – II	2			
AECC-II		Language Communication –II	2			

- Each theory Lecture time for S.Y. B.Sc Computer Science is of 50 min (3 lectures/ week for 2 credit course)
- Each practical session time for S.Y. B.Sc Computer Science is of 4 hrs 20 minutes (260 min)
Practical batch size =12

Third Year B. Sc. (Computer Science)

Semester Pattern Syllabus

Implemented from Academic Year 2015-2016

No	Paper	Title: Semester I	Title: Semester II
1	Computer Science Paper I	CS-331: System Programming	CS-341: Operating System
2	Computer Science Paper II	CS-332: Theoretical Computer Science	CS-342: Compiler Construction
3	Computer Science Paper III	CS-333: Computer Networks-I	CS-343: Computer Networks-II
4	Computer Science Paper IV	CS-334: Internet Programming- I	CS-344: Internet Programming- II
5	Computer Science Paper V	CS-335: Programming in Java-I	CS-345: Programming in Java-II
6	Computer Science Paper VI	CS-336: Object Oriented Software Engineering	CS-346: Computer Graphics
7	Computer Science Paper VII	CS-347: Practicals Based on CS-331 and CS341 – Sem I & Sem II	
8	Computer Science Paper VIII	CS-348: Practicals Based on CS-335 and CS-344 – Sem I & Sem II and Computer Graphics using Java	
9	Computer Science Paper IX	CS-349: Practicals Based on CS-334 and CS-344 – Sem I & Sem II and Project	

Pattern of examination: Semester Theory courses: (Sem III: CS-331-CS-336): Semester (Sem IV: CS-341-CS-346): Semester
Practical Course: (CS-347-CS-349): Annual