

Dr D Y Patil School of Science & Technology

Details of BCA Course Structure as follows:

I & II Semester Certificate in Computer Applications after securing 44 credits	Course Code	Course Type	Course Name
	BCA-CA-101	Major	Problem Solving and Programming In C
	BCA-CA-102	Major	Discrete Mathematics and Graph Theory
	BCA-CA-103	Major	Computer Organization and Architecture
	PCC-CA-101	VA	Value Added Course – I
	PEC-CA-101	DSE	Discipline Specific Elective -1
	HSMC-CA-101	AEC	Ability/Skill Enhancement Course
	Course Code	Course Type	Course Name
	BCA-CA-201	Major	Object Oriented Programming
	BCA-CA-202	Major	Statistics for Engineers
	BCA-CA-203	Major	Principles of Database Systems
	PCC-CA-201	VA	Value Added Course
	PEC-CA-201	DSE	Discipline Specific Elective -2
HSMC-CA-201	AEC	Ability/Skill Enhancement Course	
III & IV Semester Diploma in Computer Application after securing 88 credits	Course Code	Course Type	Course Name
	BCA-CA-301	Major	Data Structures
	BCA-CA-302	Major	Advanced Database Management Systems
	BCA-CA-303	Major	Operating System Principles
	PCC-CA-301	VA	Value Added Course
	PEC-CA-301	DSE	Discipline Specific Elective -3
	HSMC-CA-301	AEC	Ability/Skill Enhancement Course
	Course Code	Course Type	Course Name
	BCA-CA-401	Major	Design and Analysis of Algorithms
	BCA-CA-402	Major	System Programming
	BCA-CA-403	Major	Cloud Computing Methodologies
	PCC-CA-401	VA	Value Added Course
	PEC-CA-401	DSE	Discipline Specific Elective -4
HSMC-CA-401	AEC	Ability/Skill Enhancement Course	
V & VI Semester	Course Code	Course Type	Course Name
	BCA-CA-501	Major	Introduction to Data Science
	BCA-CA-502	Major	Formal Languages and Automata Theory.
	BCA-CA-503	Major	Data Communication and Networks
	PCC-CA-501	VA	Value Added Course
	PEC-CA-501	DSE	Discipline Specific Elective -5

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Bachelor in Computer Applications after securing 132 Credits	HSMC-CA-501	AEC	Ability/Skill Enhancement Course
	Course Code	Course Type	Course Name
	BCA-CA-601	Major	Applied Cryptography and Network Security
	BCA-CA-602	Major	Artificial Intelligence and Experts Systems
	BCA-CA-603	Major	Compiler Design
	PCC-CA-601	VA	Value Added Course
	PEC-CA-601	DSE	Discipline Specific Elective -6
HSMC-CA-601	AEC	Ability/Skill Enhancement Course	
VII & VIII Semester			
Bachelor in Computer Science (Honors) after securing 164 credits	Course Type		Course Name
	Major		Research Project -I
	Course Type		Course Name
	Major		Research Project -II
			Total