



Department of Information Technology (In-house)  
Syllabus of Bachelor of Computer Application (BCA)  
(Effective from academic session 2019-20)

Curriculum Structure

Semester I						
Sl. No.	Course Code	Course Name	L	T	P	Credits
<b>Theory</b>						
1	BCA101	Programming for Problem Solving	3	0	0	3
2	BCA102	Soft Skills	3	0	0	3
3	BCA103	Digital Electronics	3	1	0	4
4	BCA104	Basic Mathematical Computation	3	1	0	4
<b>Practical</b>						
1	BCA191	Programming for Problem Solving Lab	0	0	4	2
2	BCA192	Soft Skill Lab	0	0	4	2
3	BCA195	PC Software Lab	0	0	4	2
<b>Total Credit</b>						20

Semester II						
Sl. No.	Course Code	Course Name	L	T	P	Credits
<b>Theory</b>						
1	BCA201	Computer Architecture	3	0	0	3
2	BCA202	Data Structure with Python	3	0	0	3
3	BCA203	Advanced Mathematical Computation	3	1	0	4
4	BCA204	Software Engineering	3	1	0	4
5	BCA205	Environmental Science	1	0	0	1
<b>Practical</b>						
1	BCA291	Computer Architecture Lab	0	0	4	2
2	BCA292	Data Structure with Python Lab	0	0	4	2
<b>Total Credit</b>						19



**Department of Information Technology (In-house)**  
**Syllabus of Bachelor of Computer Application (BCA)**  
**(Effective from academic session 2019-20)**

<b>Semester III</b>						
<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Theory</b>						
1	BCA301	Object Oriented Programming	3	0	0	3
2	BCA302	Computer Graphics	3	0	0	3
3	BCA303	Operating Systems	3	0	0	3
4	BCA304	Mathematics for Computing	3	1	0	4
<b>Practical</b>						
1	BCA391	Object Oriented Programming Lab	0	0	4	2
2	BCA392	Computer Graphics Lab	0	0	4	2
3	BCA393	Operating System Lab	0	0	4	2
<b>Total Credit</b>						19

<b>Semester IV</b>						
<b>Sl. No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Theory</b>						
1	BCA401	Database Management System	3	0	0	3
2	BCA402	Design and Analysis of Algorithms	3	0	0	3
3	BCA403	Computer Networking	3	0	0	3
4	BCA404	Numerical Analysis	3	1	0	4
<b>Practical</b>						
1	BCA491	DBMS Lab	0	0	4	2
2	BCA492	Design and Analysis of Algorithms Lab	0	0	4	2
3	BCA493	Computer Networking Lab	0	0	4	2
<b>Total Credit</b>						19



**Department of Information Technology (In-house)**  
**Syllabus of Bachelor of Computer Application (BCA)**  
**(Effective from academic session 2019-20)**

Semester V						
Sl. No.	Course Code	Course Name	L	T	P	Credits
<b>Theory</b>						
1	BCA501	Internet Technology	3	0	0	3
2	BCA502	Introduction to Information Security	3	1	0	4
3	BCA503	Theory of Computation	3	1	0	4
<b>Practical</b>						
1	BCA591	Internet Technology Lab	0	0	4	2
<b>Sessional</b>						
1	BCA581	Minor Project	0	0	4	6
2	BCA582	Industrial Training				2
<b>Total Credit</b>						21

Semester VI						
Sl. No.	Course Code	Course Name	L	T	P	Credits
<b>Theory</b>						
1	BCA601	A. Digital Image Processing B. Introduction to AI and Machine Learning C. Advanced DBMS with PL-SQL	3	0	0	3
2	BCA602	A. Cloud Computing B. Information and Coding Theory C. E-Commerce	3	1	0	4
3	BCA603	Values and Ethics in Profession	3	0	0	3
<b>Practical</b>						
1	BCA691 A/B/C	Elective I Lab	0	0	4	2
<b>Sessional</b>						
1	BCA681	Major Project with Viva-Voce				8
<b>Total Credit</b>						20

**Total Credit: 118**