

**BCA (Bachelor of Computer Applications)-2018  
Curriculum**

Course Code	Course Title	L	T	P	Cr	ES	Course Code	Course Title	L	T	P	Cr	ES		
<b>SEMESTER 1</b>							<b>SEMESTER 2</b>								
18CUL101	Cultural Education I	2	0	2			18CUL111	Cultural Education II	2	0	2				
18ENG101	Communicative English	2	0	2			18ENG121	Professional Communication	1	0	2				
	Language I	2	0	2				Language II	1	1	0	2			
18MAT102	Mathematical Foundation	3	1	0	4		18MAT112	Discrete Mathematics	3	1	0	4			
18ENV300	Environmental Science and Sustainability	3	0	0	3		18CSA114	Database Management System	3	1	0	4			
18CSA103	Computer Essentials	3	0	2	4		18CSA113	Programming in C	3	1	0	4			
18CSA101	Computational Thinking and Problem Solving	3	0	0	3		18CSA111	Computer Organization	3	1	0	4			
18CSA182	Computational Thinking and Problem Solving Lab	0	0	2	1		18CSA183	Database Management System Lab	0	0	2	1			
							18CSA184	Programming in C Lab	0	0	2	1			
	TOTAL				22			TOTAL				24			
<b>SEMESTER 3</b>							<b>SEMESTER 4</b>								
18AVP201	Amrita Value Programme I	1	0	0	1		18AVP211	Amrita Value Programme II	1	0	0	1			
18SSK201	Life Skills I	1	0	2	2		18SSK211	Life Skills II	1	0	2	2			
18MAT208	Statistical and Numerical Methods	3	1	0	4		18CSA214	Computer Networks	3	1	0	4			
18CSA209	Data Structures and Algorithms	3	1	0	4		18CSA215	Java Programming	3	1	0	4			
18CSA206	Object Oriented Programming using C++	3	1	0	4		18CSA216	Web Technologies	3	1	0	4			
18CSA201	Operating System	3	1	0	4		18CSA211	Software Engineering	3	0	2	4			
18CSA207	Principles of Management and Accounting	3	0	0	3			Open Elective A	3	0	0	3			
18CSA283	Data Structures and Algorithms Lab	0	0	2	1		18CSA285	Java Programming Lab	0	0	2	1			
18CSA284	Object Oriented Programming using C++ Lab	0	0	2	1		18CSA286	Web Technologies Lab	0	0	2	1			
	TOTAL				24			TOTAL				24			
<b>SEMESTER 5</b>							<b>SEMESTER 6</b>								
18SSK301	Life skills III	1	0	2	2		18CSA317	Computer Graphics	3	0	0	3			
18CSA307	C# and .NET Framework	2	0	2	3		18CSA318	Cryptography and Cyber Security	4	0	0	4			
18CSA306	Advanced Java and J2EE	3	0	0	3		18CSA319	Python Programming	2	0	2	3			
	Elective A	3	0	0	3			Elective B	3	0	0	3			
18CSA390	Live in Labs / Open Elective B	3	0	0	3		18CSA383	Computer Graphics Lab	0	0	2	1			
18CSA389	Mobile Application Development Lab	0	1	2	2		18CSA399	Project				6			
18CSA388	Advanced Java and J2EE Lab	0	0	2	1										
18CSA391	Comprehensive Technical VIVA-Voce				2										
18CSA392	Minor Project				3										
	TOTAL				22			TOTAL				20			
<b>LANGUAGES</b>															
	<b>Paper I</b>								<b>Paper II</b>						
18HIN101	Hindi I	1	0	2	2	B	18HIN111	Hindi II	1	0	2	2	B		
18KAN101	Kannada I	1	0	2	2	B	18KAN111	Kannada II	1	0	2	2	B		
18MAL101	Malayalam I	1	0	2	2	B	18MAL111	Malayalam II	1	0	2	2	B		
18SAN101	Sanskrit I	1	0	2	2	B	18SAN111	Sanskrit II	1	0	2	2	B		
<b>Elective A, B</b>															
18CSA331	Artificial Intelligence	3	0	0	3	E									
18CSA332	Architecture and Deployment of Secure and Scalable WAN	3	0	0	3	E									
18CSA333	Client Server Computing	3	0	0	3	E									
18CSA334	Embedded Systems	3	0	0	3	E									
18CSA335	Enterprise Resource Planning Management	3	0	0	3	E									
18CSA336	Knowledge Management	3	0	0	3	E									
18CSA337	LAN Switching and Advanced Routing	3	0	0	3	E									
18CSA338	Micro Processor Systems	3	0	0	3	E									
18CSA339	Multimedia and Graphics	3	0	0	3	E									
18CSA340	Social and Professional Issues in Computing	3	0	0	3	E									
18CSA341	Soft Computing	3	0	0	3	E									
18CSA342	Systems and Network Administration	3	0	0	3	E									