

Programme: BCA
Duration: Three-Years
Academic Curriculum (2018 – 19 onwards)

First Year
First (I) Semester

	S. No.	Course Code	Course Title	Contact Hours per Week			Credits	Total Hours
				L	T	P		
Autumn Semester	1	CAL-101-18	Fundamental of Computer and Programming using C	4	0	0	4	4
	2	CAL-103-18	PC Software	4	0	0	4	4
	3	AHL-107-18	Mathematics –I	4	0	0	4	4
	4	MSL-111-8	Business Practice	4	0	0	4	4
	5	CAP-101-18	Fundamental of Computer and Programming using C	0	0	2	1	2
	6	CAP-103-18	PC Software Lab	0	0	2	1	2
	7	SDP -101-18	Workplace Competencies-1	0	0	2	1	2
		Sub Total			16	0	6	19

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First Year
Second (II) Semester

	S. No.	Course Code	Course Title	Contact Hours per Week			Credits	Total Hours
				L	T	P		
Spring Semester	1	CAL-102-18	Fundamentals of Internet Technologies	4	0	0	4	4
	2	CAL-104-18	Mathematical Foundation of Computer Science	4	0	0	4	4
	3	CAL-106-18	Advanced C Programming	4	0	0	4	4
	4	CAL-108-18	Introduction to Computer Network	3	0	0	3	3
	5	AHL-108-18	Mathematics-II	4	0	0	4	4
	6	SDP-102-18	Workplace Competencies-2	0	0	2	1	2
	7	CAP-102-18	Introduction to Internet Technologies Lab	0	0	2	1	2
	8	CAP-106-18	Advanced C Programming Lab	0	0	2	1	2
		Sub Total			19	0	6	22

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Second Year

Third (III) Semester

	S. No.	Course Code	Course Title	Contact Hours per Week			Credits	Total Hours
				L	T	P		
Autumn Semester	1	CAL-213-18	Object Oriented Programming using Java	3	1	0	4	4
	2	CAL- 215-18	Web Technology	3	0	0	3	3
	3	CAL- 227-18	Introduction to Cyber Security	3	0	0	3	3
	4	ECL -203-18	Digital Electronics	3	1	0	4	4
	5	CSL -225- 18	NoSQL Database	3	1	0	4	4
	6	SDP -251-18	Aptitude Skills-1	2	0	0	1	2
	7	SDP -201 -18	Workplace Competencies-3	0	0	2	1	2
	8	CAP-201-18	Object Oriented Programming using Java lab	0	0	2	1	2
	9	CAP-215-18	Web technology Lab	0	0	2	1	2
	10	CAP -225-18	NoSQL Database Lab	0	0	2	1	2
		Sub Total			20	17	3	23

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Second Year
Fourth (IV) Semester

	S. No.	Course Code	Course Title	Contact Hours per Week			Credits	Total Hours
				L	T	P		
Spring Semester	1	CAL- 202- 18	Computer organization	3	1	0	4	4
	2	CAL-216-18	Data Structure & Applications using Java	3	1	0	4	4
	3	CAL -218 -18	Operating System	3	0	0	3	3
	4	CAL-212-18	Software Engineering	3	0	0	3	3
	5	AHL-110-18	Environment Studies	2	0	0	2	2
	6	SDP -252-18	Aptitude Skills-II	0	0	2	1	2
	7	SDP -202-18	Workplace Competencies-4	0	0	2	1	2
	8	CAP-204-18	Programming Skill lab	0	0	4	2	4
	9	CAP -216-18	Data Structure & Applications using Java Lab	0	0	2	1	2
		Sub Total			14	2	10	21

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Third Year
Fifth (V) Semester

	S. No.	Course Code	Course Title	Contact Hours per Week			Credits	Total Hours
				L	T	P		
Autumn Semester	1	CAL-305-18	Python Programming	4	0	0	4	4
	2	CAL-301-18	Computer Graphics	3	1	0	4	4
	3	-----	Core Elective – I*	3	0	0	3	3
	4	-----	Core Elective – I* Lab	0	0	2	1	2
	5	-----	Open Elective -I*	3	0	0	3	3
	6	CAP-305-18	Python Programming Lab	0	0	2	1	2
	7	CAP-301-18	Computer Graphics Lab	0	0	2	1	2
	8	CSD-309-18	Project-I	0	0	8	4	8
	9	SDP -301 -18	Workplace Competencies-5	0	0	2	1	2
		Sub Total			13	1	16	22

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Third Year
Sixth (VI) Semester

	S. No.	Course Code	Course Title	Contact Hours per Week			Credits	Total Hours
				L	T	P		
Spring Semester	1	CAL302-18	Software Project Management	4	0	0	4	4
	2	CAL306-18	Digital media Technology	4	0	0	4	4
	3	CAP-308-18	Project-II	0	0	16	8	16
	4	-----	Core Elective – II*	3	0	0	3	3
	5	SDP-302-18	Workplace Competencies – 6	0	0	2	1	2
				Sub Total	11	0	18	20

Course Code	Departmental Electives – I	L	T	P	Credits
CAL-319-18	Network Programming	3	0	0	3
CAL-309-18	Introduction to Big Data	3	0	0	3
CAP-319-18	Network Programming Lab	0	0	2	1
CAP-309-18	Introduction to Big Data Lab	0	0	2	1

Course Code	Departmental Electives – I	L	T	P	Credits
CAL-312 -18	Android Application Development	3	0	0	3
CAL -316-18	Basics of cloud computing	4	0	0	4
CAP-312-18	Android Application Development Lab	0	0	2	1

***Open Electives – I:**

A student will be required to select any one Open Elective paper in V Semester (from the common approved pool of open electives floated by University from different Schools).The Department will announce in the beginning of the respective semester, the list of electives which will be offered during the semester depending upon the availability of resources and the demand of electives.

Departmental Electives – I, II

A student will be required to select one Departmental Elective paper (from Departmental Elective Group I) in V Semester and one Departmental Elective paper (from Departmental Elective Group II) in VI Semester. The Department will announce Elective list in the beginning of the respective semester, the list of electives which will be offered during the semester depending upon the available resources and the demand of electives from students.

Project -I:

Each student would be required to write a minor project report based on their summer training. The student will write a project report under the supervision of a faculty member assigned by the Department. The Project Report will be evaluated both internally and externally by the University appointed examiners.

Project II:

Each student would be required to make a major project based on technical skills acquired final year. The student will write a project report under the supervision of a faculty member assigned by the Department. The Project Report will be evaluated both internally and externally by the University appointed examiners.

BCA Programme Total Credits and Total Hours

	Semester	Credits	Total Hours
Autumn Semester	I	19	22
Spring Semester	II	21	25
Autumn Semester	III	23	27
Spring Semester	IV	21	26
Autumn Semester	V	22	30
Spring Semester	VI	20	29
	Total	126	159

N.B. The curricular structure is subject to revision from time to time, which will be duly notified.