

Course Structure of BCA (Bachelors of Computer Applications)

BCA									
Semester	Nature of the Course	Subject Name	Subject Code	Credit Points	CIA Total Marks	ESE Total Marks	ESE Pass Marks	Total Marks	Pass Marks
I	Mandatory : Language Course -I	English- I	ENG101	4	30	70	28	100	40
	Choice Based : Language course -II *	Second Language- I	ARA101	4	30	70	28	100	40
			FRE101	4	30	70	28	100	40
			HIN101	4	30	70	28	100	40
			SAN101	4	30	70	28	100	40
			TEL101	4	30	70	28	100	40
	Choice Based : Core courses	Programming in C	BCA101	4	30	70	28	100	40
		Introduction to Web Technology	BCA102	4	30	70	28	100	20
		Digital Principles	BCA103	4	30	70	28	100	40
		Programming in C Lab	BCA111	1	15	35	14	50	20
		Web Technology Lab	BCA112	1	15	35	14	50	40
		IT Workshop	BCA113	1	15	35	14	50	
	Mandatory: Ability Enhancement Compulsory Course- I	Gender Sensitization	AECC101B	2	15	35	14	50	20
	Choice Based : Skill Oriented Course	Open Elective* : Any one from the List	SOC101	2	15	35	14	50	20

II	Mandatory : Language Course -I	English- II	ENG202	4	30	70	28	100	40
	Choice Based :Language course -II *	Second Language- II	ARA202	4	30	70	28	100	40
			FRE202	4	30	70	28	100	40
			HIN202	4	30	70	28	100	40
			SAN202	4	30	70	28	100	40
			TEL202	4	30	70	28	100	40
	Choice Based : Core courses	Object Oriented Programming using CPP	BCA201	4	30	70	28	100	40
		Data Structures	BCA202	4	30	70	28	100	40
		Computer Architecture	BCA203	4	30	70	28	100	40
		Computer Networks	BCA204	4	30	70	28	100	40
		Object Oriented Programming using CPP Lab	BCA211	3	15	35	14	50	20
		Data Structures Lab	BCA212	3	15	35	14	50	20
	Mandatory: Ability Enhancement Compulsory Course- II	Environmental Science	AECC202A	2	15	35	14	50	20
	Choice Based : Co- Curricular Activity	Open Elective* : Any one from the List	CCA601	2	15	35	14	50	20
III	Mandatory : Language Course -I	English- III	ENG303	3	30	70	28	100	40
	Choice Based	Second Language- III	ARA303	3	30	70	28	100	40

IV	:Language course -II *		FRE303	3	30	70	28	100	40
			HIN303	3	30	70	28	100	40
			SAN303	3	30	70	28	100	40
			TEL303	3	30	70	28	100	40
	Choice Based : Core courses	Java Programming	BCA301	4	30	70	28	100	40
		Operating System Concepts	BCA302	4	30	70	28	100	40
		Database Design	BCA303	4	30	70	28	100	40
		Design and Analysis of Algorithm	BCA304	4	30	70	28	100	40
		Design Thinking and Innovation	SEC302	2	15	35	14	50	20
		Java Programming Lab	BCA311	3	15	35	14	50	20
		Operating System Concepts Lab	BCA312	3	15	35	14	50	20
		Database Design Lab	BCA313	3	15	35	14	50	20
	Choice Based : Institutional Specific Skill Enhancement Course-I	Communication Skills	SEC301A	2	15	35	14	50	20
	Choice Based : DepZOOMent Specific Skill Enhancement Course-I	Open Elective* : Any one from the List	SEC302	2	15	35	14	50	20
	Mandatory :	English- IV	ENG404	3	30	70	28	100	40

	Language Course –I								
	Choice Based :Language course -II *	Second Language-IV	ARA404	3	30	70	28	100	40
			FRE404	3	30	70	28	100	40
			HIN404	3	30	70	28	100	40
			SAN404	3	30	70	28	100	40
			TEL404	3	30	70	28	100	40
	Choice Based : Core courses	Data Science using Python	BCA401	4	30	70	28	100	40
		Software Engineering	BCA402	4	30	70	28	100	40
		Network Security	BCA403	4	30	70	28	100	40
		Distributed and Cloud Computing	BCA404	4	30	70	28	100	40
		Artificial Intelligence	BCA405	4	30	70	28	100	40
		Design Thinking and Innovation	SEC404	2	15	35	14	50	20
		Data Science using Python Lab	BCA411	3	15	35	14	50	20
		Software Engineering Lab	BCA412	3	15	35	14	50	20
		Network Security	BCA413	3	15	35	14	50	20
	Choice Based : Institutional Specific Skill Enhancement Course-II	Universal Human Values	SEC403B	2	15	35	14	50	20
	Choice Based :DepZOOMent Specific Skill	Open Elective* : Second course from the List	SECE404	2	15	35	14	50	20

	Enhancement Course-II								
V	Mandatory : Language Course -I	English- V	ENG505	3	30	70	28	100	40
	Choice Based :Language course -II *	Second Language-V	ARA505	3	30	70	28	100	40
			FRE505	3	30	70	28	100	40
			HIN505	3	30	70	28	100	40
			SAN505	3	30	70	28	100	40
			TEL505	3	30	70	28	100	40
	Choice Based : Core courses	Programming using ASP. NET	BCA501	4	30	70	28	100	40
		Unix Programming	BCA502	4	30	70	28	100	40
		Object Oriented Analysis Design	BCA503	4	30	70	28	100	40
		Software Quality Testing	BCA504	4	30	70	28	100	40
		Mobile Application Development (or)	BCA505A	4	30	70	28	100	40
		Internet Protocols (or)	BCA505B	4	30	70	28	100	40
		Data Mining	BCA505C	4	30	70	28	100	40
		DOT NET Lab	BCA511	3	15	35	14	50	20
		Unix Programming Lab	BCA512	3	15	35	14	50	20
		OOSD Lab	BCA513	3	15	35	14	50	20

	Choice Based : Generic Elective Course	Inter Disciplinary Elective* : Any one from the List	GE501	4	30	70	28	100	40
	Mandatory: Ability Enhancement Compulsory Course-III	Capacity Building	AECC603	2	15	35	14	50	20
VI	Mandatory : Language Course -I	English- VI	ENG606	3	30	70	28	100	40
	Choice Based :Language course -II *	Second Language-VI	ARA606	3	30	70	28	100	40
			FRE606	3	30	70	28	100	40
			HIN606	3	30	70	28	100	40
			SAN606	3	30	70	28	100	40
			TEL606	3	30	70	28	100	40
	Choice Based : Core courses	Advanced JAVA	BCA601	4	30	70	28	100	40
		Information Security	BCA602	4	30	70	28	100	40
		Big Data Analytics	BCA603A	4	30	70	28	100	40
		Artificial Intelligence	BCA603B	4	30	70	28	100	40
		Cloud Computing	BCA603C	4	30	70	28	100	40
		Advanced Java	BCA611	3	15	35	14	50	20
		Programming-Lab	BCA612	3	15	35	14	50	21
		Project work	BCA613	3	15	35	14	50	20

	Choice Based: Project/ Internship/Core Elective* Any one from the core discipline	Maths	DSE607	4	30	70	28	100	40
		Statistics	DSE607	4	30	70	28	100	40
		Computer Science	DSE607	4	30	70	28	100	40