		BCA(Science) Majar + Minor(AI & Data Science + AI & IoT)							
Level	Sem	Disciplinary Major Mandatory	DSE Electives	Minor	OE	VSC/SEC	AEC, VEC, IKS	OJT, FP, CEP, CC, RP	Total
4.5	I	4 to 6=4+2			2+2	VSC : 2 SEC : 2	AEC : 2 VEC : 2 IKS : 2	CC : 2	22
		1. Fundamentals of Computers (Th) (2) 2. C Programming (Th) (2) 3. Applied Mathematics and Statistics (Th) (2)			Arts Basket(2) Commerce Basket(2)	VSC1: C Programming Laboratory (Pr) (2) SEC1: Fundamentals of Computers and Applied Mathematics & statistics laboratory (Pr) (2)	AEC1: Soft Skills and Personality Development (2) VEC1:Constitution of India(2) IKS1: Vedic Mathematics and Computing(2)	CC1: Health & Wellness/ Yoga education(2)	
4.5	II	4 to 6=4+2		2	2+2	VSC : 2 SEC : 2	AEC : 2 VEC : 2	CC : 2	22
		1. Advance C programming (Th) (2) 2. Computer organization (Th) (2) 3. Database Management System (Th) (2)		1. Embedded C Programming laboratory (Pr) (2)	Arts Basket(2) Commerce Basket(2)	VSC1. Advanced C programming laboratory (Pr) (2) SEC 1. Computer oraganization and Database Management System laboratory (Pr) (2)	AEC2: Corporate Communication (2) VEC2: Environmental Studies (2)	CC2: Sports /NCC/NSS (2)	
Cumulative		12		2	8	8	10	4	44
		Certificate on Exit + 4 credit Bridge Course							44
Level	Sem	Disciplinary Major Mandatory	DSE Electives	Minor	OE	VSC/SEC	AEC, VEC, IKS	OJT, FP, CEP, CC, RP	Total
5	III	6 (4+2) to 8 (2*4)		4	2	VSC : 2	AEC : 2	FP : 2 CC: 2	22
		1. Basics of Data Structure & Algorithm (Th) (2) 2. Advanced Database Management System (Th) (2) 3.Computer Networks (Th) (2) 3. Advanced Database Management System laboratory (Pr) (2)		1.Web Technology (Th) (2) 2.Web Technology laboratory (Pr) (2)	Arts Basket(2) or Commerce Basket(2)	VSC:Data Structure laboratory (Pr) (2)	AEC3: English for All: An Emphasis on LSRW/Hindi/Marathi (2)	FP1: Project Based Learning-I: C/Data Structure (2) CC3:Cultural Activities/Fine/ Performing Arts (2)	

Level	Sem	Disciplinary Major Mandatory	DSE Electives	Minor	OE	VSC/SEC	AEC, VEC, IKS	OJT, FP, CEP, CC, RP	Total
5	IV	6 (4+2) to 8 (2*4)		4	2	SEC : 2	AEC : 2	CEP : 2 CC: 2	22
		1. Core JAVA (Th) (2) 2. Object Oriented Software Engineering (Th) (2) 3. Python programming (Th) (2) 4. Python programming laboratory (Pr) (2)		1. Artificial Intelligence (Th) (2) 2. Artificial Intelligence laboratory (Pr) (2)	Arts Basket(2) or Commerce Basket(2)	SEC: JAVA programming laboratory (Pr) (2)	AEC4: Interview and Professional Skills/Hindi/Marathi (2)	CEP1: Project Based Learning-II: AI/ Java/ Python (2) CC4: Fitness (2)	
Cumulative		28		10	12	12	14	12	88
Diploma on Exit + 4 credits of NSQF and Internship									
Level	Sem	Disciplinary Major Mandatory	DSE Electives	Minor	OE	VSC/SEC	AEC, VEC, IKS	OJT, FP, CEP, CC, RP	Total
5.5	V	8= (2*4) to 10= (2*4 + 2)	4	4		VSC : 2		FP / CEP : 2	22
		1. Advanced Java (Th) (2) 2. Basics of Angular and React JS (Th) (2) 3. Operating System (Th) (2) 4. Advanced Java Laboratry (Pr) (2) 5. Operating System Laboratory (Pr) (2)	1. Go programming (Th) (2) 2. Go programming laboratory (Pr) (2) OR 1.Data Science using Python (Th) (2) 2. Data Science using Python Laboratory (Pr) (2)	1. Data mining (Th) (2) 2. R Programming laboratory (Pr) (2)		Angular and React JS Laboratory (Pr) (2)		FP2: Project Based Learning-III: Advance Computing(2)	
5.5	VI	8= (2*4) to 10= (2*4 + 2)	4	4				OJT : 4	22
		1. Android Programming (Th) (2) 2. Cloud Computing (Th) (2) 3. Android Programming laboratory (Pr) (2) 4. Cloud Computing Laboratory (Pr) (2)	1. React Native (Th) (2) 2. React Native Laboratory (Pr) (2) OR 1. Django Web Framework (Th) (2) 2. Django Web Framework Laboratory (Pr) (2)	1. Internet of Things (Th) (2) 2. Internet of Things Laboratory (Pr) (2)				OJT1: Internship-I : IoT or Data Science or other IT sector (4)	

		Disciplinary Major Mandatory	DSE Electives	Minor	OE	VSC/SEC	AEC, VEC, IKS	OJT, FP, CEP, CC, RP	Total
Cumulative		48	8	18	12	14	14	18	132
Award of Degree									
Level	Sem	Disciplinary Major Mandatory	DSE Electives	Minor	OE	VSC/SEC	AEC, VEC, IKS	OJT, FP, CEP, CC, RP	Total
6	VII	12 (2*4+2*2) to 14 (3*4 + 2)	4	RM : 4					22
		1. Advanced Opearting System (Th) (2) 2. NoSQL (Th) (2) 3. Machine Learning (Th) (4) 4. Advanced Opearting System Laboratory (Pr) (2) 5. NoSQL Laboratory (Pr) (2) 6. Machine Learning Laboratory (Pr) (2)	1. Industry 4.0 and Industrial internet of things (Th) (2) 2. Industry 4.0 and Industrial internet of things Laboratory (Pr) (2) OR 1. Block chain Technology (Th) (2) 2. Block chain Technology Laboratory (Pr) (2)	Research Methodology (4)					
6	VIII	12 (2*4+2*2) to 14 (3*4 + 2)	4					OJT : 4	22
		1. Design and Analysis of Algorithms (Th) (2) 2. Big Data analysis (Th) (2) 3. Deep Learning (Th) (2) 4. Human Computer Interaction and Virtual Reality(Th) (2) 5. Design and Analysis of Algorithms Laboratory (Pr)(2) 6. Big Data analysis Laboratory (Pr) (2) 7. Deep Learning Laboratory (Pr) (2)	1. Network and Cyber Security (Th) (2) 2. Network and Cyber Security Laboratory (Pr) (2) OR 1. Cross Platform Mobile application Development (Th) (2) 2. Cross Platform Mobile application Development Laboratory (Pr) (2)					OJT2: Internship-II : Big Data analysis or Deep learning or other IT sector(4)	
Cumulative		76	16	22	12	14	14	22	176
Four Year UG Honors Degree									

OPEN ELECTIVES PROPOSED BY BCA (Science) for Arts and Commerce Students

Sr.No.	Semester	Course Name
1	Semester-I	Basics of Computers Fundamentals
2		Basics of Office Automation
3	Semester-II	Basics of C Programming
4		Basics Of Web Designing
5	Semester-III	Functions & Array in C Programming
6		Introduction to PLSQL
7	Semester-IV	Introduction to C++
8		Basics of Python Programming