



JECRCTM
UNIVERSITY
BUILD YOUR WORLD

Faculty of IT & Computer Application
Scheme
of
Bachelor of Computer Applications (BCA)
Academic Programme

July 2020

BCA (Batch 2020-23)

Total Credits for the Batch 2020-23 = 168 Credits

- 1. Minimum Credits required = 155 Credits**
- 2. Total Relaxation = 13 Credits**
- 3. No relaxation in Core and Foundation subjects**
- 4. Theory exams duration will be of 03 hours and Practical exams will be of 02 hours.**
- 5. Internal Assessment will be of 50 marks and End Term Assessment will be of 50 marks in both lab and theory courses.**

Semester wise credit						Credits	Minimum Credit for degree
I	II	III	IV	V	VI	Total	
28	28	28	28	28	28	168	155

Semester – I

Course Code	Course Name	L (Hr.))	T (Hr.)	Pr (Hr.)	Credits	Type
BCA101A	Fundamentals of Computer Systems	3	0	0	3	F
BCA102A	Programming Fundamentals using C-I	3	1	0	4	CORE
BCA103A	System Analysis and Design	3	0	0	3	CORE
BCA104A	Digital Electronics	3	0	0	3	F
BCA105B	Communication Skills	3	0	0	3	F
BCA106A	Office Automation Tools Lab	0	0	2	2	F
BCA107A	Programming Fundamentals using C-I Lab	0	0	2	2	CORE
BCA108B	Communication Skills Lab	0	0	2	2	F
BCA166A	Designing Lab(Photoshop and CorelDraw)	0	0	2	2	S
BCA110A	Digital Electronics Lab	0	0	2	2	F
BCA111A	Seminar	0	0	2	2	S
	Total	15	1	12	28	

❖ **F- Foundation, ID- Interdisciplinary, S- Specialization (Skill Enhance Courses)**

❖ **L- Lecture, T- Tutorial, P- Practical**

Semester – II

Course Code	Course Name	L (Hr.)	T (Hr.)	Pr (Hr.)	Credits	Type
BCA112A	Environmental Studies	2	0	0	2	F
BCA113B	Operating System	3	1	0	4	CORE
BCA114B	Database Management System	3	0	0	3	CORE
BCA115B	Computer Architecture	3	1	0	4	F
BCA116A	Programming Fundamentals using C-II	3	1	0	4	CORE
BCA117B	HTML Programming	2	1	0	3	F
BCA118B	Database Management System Lab	0	0	2	2	CORE
BCA119A	Programming Fundamentals using C-II Lab	0	0	2	2	CORE
BCA120B	HTML Lab	0	0	2	2	F
BCA121A	UNIX and Shell Programming Lab	0	0	2	2	CORE
	Total	16	4	8	28	

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Semester – III

Course Code	Course Name	L (Hr.)	T (Hr.)	Pr (Hr.)	Credits	Type
BCA135B	Computer Network	3	0	0	3	CORE
BCA123A	Programming in PHP	3	0	0	3	S
BCA124A	Basic Mathematics	3	0	0	3	F
BCA125A	Data Structures and Algorithms using C	3	1	0	4	CORE
BCA126A	Programming Fundamentals using C++	3	1	0	4	CORE
BCA127A	Software Engineering	3	0	0	3	CORE
BCA128A	PHP Lab	0	0	2	2	S
BCA129A	Data Structure and Algorithm using C Lab	0	0	2	2	CORE
BCA130A	Programming Fundamentals using C++ Lab	0	0	2	2	CORE
BCA167A	Multimedia Lab (Audio/Video editing tools, Flash, Dreamweaver)	0	0	2	2	S
	Total	18	2	8	28	

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Semester – IV

Course Code	Course Name	L (Hr.)	T (Hr.)	Pr (Hr.)	Credits	Type
BCA171A	Soft Skills	2	0	0	3	F
BCA133A	Programming in Java	3	1	0	3	CORE
BCA134A	Programming in Python	2	1	0	3	S
BCA169A	Data Science & Analytics	3	0	0	3	S
	Elective – I	3	0	0	3	CORE
	Elective – II	3	0	0	3	CORE
BCA136A	Programming in Java Lab	0	0	2	2	CORE
BCA137A	Programming in Python Lab	0	0	2	2	S
BCA170A	Data Science & Analytics Lab	0	0	2	2	S
BCA139A	Project	0	0	4	4	S
	Total	16	2	10	28	

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❖ **L- Lecture, T- Tutorial, P- Practical**

Semester – V

Course Code	Course Name	L (Hr.)	T (Hr.)	P (Hr.)	Credits	Type
BCA132A	Introduction to Accounting and Economics	3	0	0	3	ID
BCA141A	Android Applications Development	3	0	0	3	S
BCA142A	Information Security and Cyber Law	3	1	0	4	CORE
BCA143A	Advance Java	3	1	0	4	CORE
	Elective – III	3	0	0	3	CORE
	Elective – IV	3	0	0	3	CORE
BCA145A	Android Applications Development Lab	0	0	2	2	S
BCA146A	Advance Java Lab	0	0	2	2	CORE
BCA138A	Introduction to PL/SQL Lab	0	0	2	2	S
BCA147A	Project	0	0	2	2	S
	Total	18	2	8	28	

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- ❖ L- Lecture, T- Tutorial, P- Practical

Semester – VI

Course Code	Course Name	Credits	Type
BCA165A	Industrial Training/Internship/Project Presentation	28	CORE

List of courses for Electives

Course Code	Course Name
BCA148A	Computer Graphics
BCA149A	Compiler Design
BCA150A	MIS (Management Information System)
BCA151A	Theory of Computation
BCA152A	Web Technologies
BCA153A	Artificial Intelligence and Expert System
BCA154A	Data Mining
BCA155A	Data Warehousing
BCA156A	Mongo Database
BCA157A	Soft Computing
BCA158A	Parallel Computing
BCA159A	Mobile Computing
BCA160A	Image Processing
BCA161A	Big Data Analytics
BCA162A	Organization Behavior
BCA163A	Introduction to Cloud Computing
BCA164A	Introduction to Sales Force
BCA168A	Entrepreneurship
BCA140A	Data Analytics using R
BCA171A	Robotics Process Automation

Note:

- 1. Students have to select different elective courses from the given list.**