

BCA - Specialization in Data Science and Data Analytics In collaboration with Samatrix

Semester - I			Semester - II		
Course Code	Course Name	Credits	Course Code	Course Name	Credits
BCA101A	Fundamentals of Computer Systems	3	BCA112A	Environmental Studies	2
BCA102A	Programming Fundamentals using C-I	4	BCA113B	Operating System	4
BCA104A	Digital Electronics	3	BCA114B	Database Management System	3
BCA105B	Communication Skills	3	BCA115B	Computer Architecture	4
BCA106A	Office Automation Tools Lab	2	BCA116A	Programming Fundamentals using C-II	4
BCA107A	Programming Fundamentals using C-I Lab	2	BCA118B	Database Management System Lab	2
BCA108B	Communication Skills Lab	2	BCA119A	Programming Fundamentals using C-II Lab	2
BCA166A	Designing Lab(Photoshop and CorelDraw)	2	BCA120B	HTML Lab	2
BCA110A	Digital Electronics Lab	2	BCA121A	UNIX and Shell Programming Lab	2
BCA111A	Seminar	2			
BCADS101 (Data Science Specialization)	Overview of Data Science and Foundation of Data Analysis	3	BCADS102 (Data Science Specialization)	Data Analysis Using Python	3
	Total	28		Total	28

Semester - III			Semester - IV		
Course Code	Course Name	Credits	Course Code	Course Name	Credits
BCA135B	Computer Network	3	BCA171A	Soft Skills	2
BCA123A	Programming in PHP	3	BCA133A	Programming in Java	4
BCA125A	Data Structures and Algorithms using C	4	BCA134A	Programming in Python	3
BCA126A	Programming Fundamentals using C++	4	BCA169A	Data Science & Analytics	3
BCA128A	PHP Lab	2	BCA136A	Programming in Java Lab	2
BCA129A	Data Structure and Algorithm using C Lab	2	BCA137A	Programming in Python Lab	2
BCA130A	Programming Fundamentals using C++ Lab	2	BCA170A	Data Science & Analytics Lab	2
BCA167A	Multimedia Lab (Audio/Video editing tools, Flash, Dreamweaver)	2	BCADS105 (Data Science Specialization)	Foundation of Machine Learning and Pattern Recognition	3
BCADS103 (Data Science Specialization)	Probabilistic Modeling and Reasoning	3	BCADS106 (Data Science Specialization)	Data Visualization using Tableau or other advance-Tools & Techniques	3
BCADS104 (Data Science Specialization)	R Programming for Data Science and Analysis	3	BCADS109 (Data Science Specialization)	Project	4
	Total	28		Total	28

Semester - V			Semester - VI		
Course Code	Course Name	Credits	Course Code	Course Name	Credits
BCA132A	Introduction to Accounting and Economics	3	BCA165A	Industrial Training/Internship/Project Presentation	28
BCA141A	Android Applications Development	3			
BCA142A	Information Security and Cyber Law	4			
BCA143A	Advance Java	4			
BCA145A	Android Applications Development Lab	2			
BCA146A	Advance Java Lab	2			
BCA138A	Introduction to PL/SQL Lab	2			
BCA147A	Project	2			
BCADS107 (Data Science Specialization)	Big Data Analytics with Hadoop	3			
BCADS108 (Data Science Specialization)	Scala for Data Science	3			
	Total	28			