

Birla Institute Of Technology, Mesra, Ranchi.
Department of Information Technology

BCA Course Structure

Total Credits = 140

SEMESTER - I

Course Code	Course	Crédit (L-T-P)
BCA 1001	Mathematics-I	4(3-1-0)
BCA 1003	Introduction to Computer Science	4(3-1-0)
BCA 1005	Programming in C	4(3-1-0)
BCA 1007	Environmental Science	3(3-0-0)
BCA 1009	Communication Skills/Technical English	3(3-0-0)
BCA 1006	C Programming Lab.	2(0-0-3)
BCA 1004	IT Lab	2(0-0-3)
	Total	22

SEMESTER - II

Course Code	Course	Crédit (L-T-P)
BCA 2001	Mathematics-II	4(3-1-0)
BCA 2003	Data Structures	4(3-1-0)
BCA 2005	Object Oriented Programming in C++	4(3-1-0)
BCA 2007	Logic Design	4(3-1-0)
BCA 2009	Managerial Economics	3(3-0-0)
BCA 2004	Data Structures	2(0-0-3)
BCA 2006	Object Oriented Programming in C++	2(0-0-3)
	Total	23

SEMESTER - III

Course Code	Course	Credit (L-T-P)
BCA 3001	Discrete Mathematical Structures	4(3-1-0)
BCA 3003	Operating Systems	4(3-1-0)
BCA 3005	Electronic Commerce and Applications	3(3-0-0)
BCA 3007	Programming in JAVA	4(3-1-0)
BCA 3009	Database Management System	4(3-1-0)
BCA 3008	Java Programming Lab.	2(0-0-3)
BCA 3010	Database Management System Lab.	2(0-0-3)
	Total	23

SEMESTER - IV

Course Code	Course	Credit (L-T-P)
BCA 4001	Scientific Computing	4(3-1-0)
BCA 4003	Fundamentals of Management Information System	4(3-1-0)
BCA 4005	Software Engineering Principles	4(3-1-0)
BCA 4007	Computer Architecture	4(3-1-0)
BCA 4009	Computer Graphics and Multimedia	4(3-1-0)
BCA 4002	Scientific Computing Lab.	2(0-0-3)
BCA 4010	Computer Graphics and Multimedia Lab.	2(0-0-3)
	Total	24

SEMESTER - V

Course Code	Course	Credit (L-T-P)
BCA 5001	Probability and Statistics	4(3-1-0)
BCA 5003	Data Communication	4(3-1-0)
BCA 5005	VB. Net Programming	4(3-1-0)
BCA 5007	Internet and Web Technology	4(3-1-0)
BCA 5009	Introduction to Accounting	4(3-1-0)
BCA 5006	VB. Net Programming Lab.	2(0-0-3)
BCA 5008	Web Technology Lab.	2(0-0-3)
	Total	24

SEMESTER - VI

Course Code	Course	Credit (L-T-P)
BCA 6001	Operations Research	4(3-1-0)
BCA 6003	Fundamentals of Computer Algorithms	4(3-1-0)
BCA 6005	Computer Network	4(3-1-0)
BCA 6007	Data Mining and Warehousing	4(3-1-0)
BCA 6010	Elective	4(3-1-0)
BCA 6005	Project	4(0-0-6)
	Total	24

List of Electives

BCA 6011	Fuzzy Logic and Applications
BCA 6013	System Programming
BCA 6015	Distributed Database Systems
BCA 6017	Decision support System
BCA 6019	Distributed Computing
BCA 6021	Software Testing

NOTE: (i) Students are required to choose at least two electives from the same group.

(ii) Students are advised to do their projects on the areas where major electives are chosen