Programme Matrix for BCA

Semester – 1

Title of the Paper	Credits
Discrete Structures	3
Problem Solving Techniques	3
Data Structures	3
Problem Solving Techniques Lab using C	2
Data Structures Lab	2
Open Elective OE1 – Accounting for Everyone / Business Organization	3
Indian Languages	3
English	3
Skill Enhancement Course – Digital Fluency	2
Yoga	1
Health & Wellness	1
Total Credits ::	26

Semester – 2

Title of the Paper	Credits
Computer Architecture	3
Object Oriented Programming using Java	3
Database Management System	3
Java Lab	2
DBMS Lab	2
Open Elective OE2 – Basics of Management / Retail Operations	3
Indian Languages	3
English	3
Environmental Science	2
Physical Education	1
NCC/NSS/CL….	1
Total Credits ::	26

Semester – 3

Title of the Paper	Credits
Operating Systems	3
Computer Networks	3
Python Programming	3
Computer Networks Lab	2

Python Programming Lab	2
Open Elective - OE3	3
Indian Languages	3
English	3
Skill Enhancement Course – Computer Assembly & Repair	2
Physical Education	1
NCC/NSS/CL….	1
Total Credits ::	26

Semester – 4

Title of the Paper	Credits
Software Engineering	3
Artificial Intelligence	3
Internet Technologies	3
Artificial Intelligence Lab	2
Internet Technologies Lab	2
Open Elective – OE4	3
Indian Languages	3
English	3
The Constitution of India	2
Physical Education	1
NCC/NSS/CL….	1
Total Credits ::	26

Semester – 5

Title of the Paper	Credits
Design and Analysis of Algorithm	3
Data Analytics	3
Web Programming	3
Data Analytics Lab	2
Web Programming Lab	2
Vocational Course1 – Quantitative Techniques	3
Elective -1	3
Skill Enhancement Course – Cyber Crime, Cyber Law and Intellectual Property Right	2
Physical Education	1
NCC/NSS/CL….	1
Total Credits ::	23

Semester – 6

Title of the Paper	Credits
Theory of Computation	3
Machine Learning	3
Mobile Application Development	3
Machine Learning lab	2
Mobile Application Development lab	2
Vocational Course2 – Electronic Content Design	3
Elective -2	3
Professional Communication	2
Physical Education	1
NCC/NSS/CL….	1
Total Credits ::	23

Semester – 7

Title of the Paper	Credits
Cloud Computing	3
Internet of Things	3
Internship	2
Cloud Computing lab	2
Internet of Things lab	2
Vocational Course 3 – Technical Writing	3
Elective - 3	3
Research Methodology	3
Total Credits ::	21

Semester – 8

Title of the Paper	Credits
Block Chain Technologies	3
Cryptography and System Security	3
Block Chain Technologies lab	2
Vocational Course 4 – Project Management	3
Elective - 4	3
Research Project	6
Total Credits ::	20