Vanita Vishram Women's University
School of Science and Technology
Department of Computer Science -- BCA Programme

Semester	Core Course	Discipline Specific Elective (DSE)	Generic Elective (GE)	Ability Enhancement Elective – Skill based (SEC)	Ability Enhancement Compulsory (AEC)
1	Introduction to Computers and Office Applications (ICOA)		Office Applications		Communication Skills in English
	Programming Using C (C)				Basic Mathematics
2	Programming Using C++ (OOPs)		Web Designing		Communication Skills in English
	Operating System with Unix (OS)				Environmental Studies
3	Data Structure (DS)		Graphics & Multimedia	E1 – Mobile Application -1 E2 – Web Application Designing E3 – .Net Technology – 1 E4 – Introduction to cyber Security	
	Database Management System (DBMS)				
	Java Programming				
4	Relational Database Management System (RDBMS)		E-commerce And Cyber Security	E1 – Mobile Application - 2 E2 – Web Application Development - 1 E3 – .Net Technology – 2 E4 - Digital Forensics	
	Software Engineering (SE)				
	Python				
5	Internet of Things (IOT)	**DSE – 1** E1 – Mobile Application – 3 E2 – Web Application Development – 2 E3 – .Net Technology – 3 E4- Blockchain & Cryptocurrency **DSE – 2** E1 – Basics Of Big Data E2 – Fundamental of Cloud Computing E3 - Digital Marketing E4 - Artificial Intelligence (AI)			
	Computer Networks (CN)				
6	Computer Graphics (CG)	**DSE – 1** Seminar-Recent Trends & Technology **DSE – 2** Project based on Electives [E1, E2, E3, E4]			
	Intellectual Property Rights (IPRs)				