TECNIA INSTITUTE OF ADVANCED STUDIES

Grade "A"

Department of Information Communication and Technology (ICT)

Bachelor of Computer Application (BCA)

GGSIPU w. e. f. as on 2021-22 Onwards

Course per-semester

FIRST SEMESTER

Code No.	Paper	Course	L	T/P	Credits
BCA 101	Discrete Mathematics	Core Course Theory	3	1	4
BCA 103	Programming Using 'C' Language	Core Course Theory	3	1	4
BCA 105#	Fundamentals of Computers & IT	Core Course Theory	3	1	4
BCA 107#	Web Technologies	Core Course Theory	3	1	4
BCA 109	Technical Communication	Ability Enhancement Course	3	1	4
BCA 103	Practical – I 'C' Prog. Lab	Core Course Practical	0	4	2
BCA 105#	Practical – II IT Lab	Core Course Practical	0	4	2
BCA 107#	Practical-III Web Tech Lab	Core Course Practical	0	4	2
BCA 101	Bridge Course in Mathematics	Mandatory for Students from Non Mathematics background	2	0	0

SECOND SEMESTER

Code No.	Paper	Course	L	T/P	Credits
BCA 102	Applied Mathematics	Core Course Theory	3	1	4
BCA 104	Web based Programming	Core Course Theory	3	1	4
BCA 106	Data Structure And Algorithm Using 'C'	Core Course Theory	3	1	4
BCA 108#	Database Management System	Core Course Theory	3	1	4
BCA 110	Environment Studies	Ability Enhancement Course	2	0	2
BCA 136	Statistical Analysis using Excel	Skill Enhancement Course	0	4	2
BCA 172	Practical-IV WBP Lab	Core Course Practical	0	4	2
BCA 174	Practical – V DS Lab	Core Course Practical	0	4	2
BCA 176#	Practical – VI DBMS Lab	Core Course Practical	0	4	2

THIRD SEMESTER

Code No.	Paper	Course Type	L	T/P	Credits
BCA 201	Computer Network	Core Course Theory	3	1	4
BCA 203	Computer Organization and Architecture	Core Course Theory	3	1	4
BCA 205#	Object Oriented Programming with C++	Core Course Theory	3	1	4
BCA 207	Human Values and Ethics	Ability Enhancement Course	2	0	2
BCAT 211T#	Basics of Python Programming	Discipline Specific Elective	4	0	4
BCAP 211#	Basics of Python Programming Lab	Discipline Specific Elective	0	2	1
BCA 221	Principles of Management & Organizational Behaviour	Generative Elective	3	1	4
BCA 239	Cyber Ethics	Skill Enhancement Course	2	0	2
BCA 271#	Practical – VII C++ Lab #	Core Course Practical	0	4	2

FOURTH SEMESTER

Code No.	Paper	Course Type	L	T/P	Credits
BCA 202	Java Programming	Core Course Theory	3	1	4
BCA 204	Software Engineering	Core Course Theory	3	1	4
BCA 202	Java Programming	Core Course Theory	3	1	4
BCA 206	Introduction to Management & Entrepreneurship Development	Ability Enhancement Course	3	1	4
BCAT 212	Introduction to Data Science	Discipline Specific Elective	4	0	4
BCAP 212	Introduction to Data ScienceLab.	Discipline Specific Elective	0	2	1
BCAT 212	Introduction to Data Science	Discipline Specific Elective	4	0	4
BCA 224	Principles of Accounting	Generative Elective	3	1	4
BCA 232	Personality Development Skills	Skill Enhancement Course	2	0	2
BCA 272	Practical –XII Java Lab	Core Course Practical	0	4	2
BCA 274	Practical – IX SE Lab	Core Course Practical	0	4	2

FIFTH SEMESTER

Code No.	Paper	Course Type	L	T/P	Credits
BCA 301	Operating System & Linux Programming	Core Course Theory	3	1	4
BCA 303	Computer Graphics	Core Course Theory	3	1	4
BCA 305	Cloud Computing	Core Course Theory	3	1	4
BCA 307	Minor Project	Ability Enhancement Course	0	8	4
BCAT 313	Machine Learning with Python	Discipline Specific Elective	4	0	4
BCAP 313	Machine Learning with Python Lab.	Discipline Specific Elective	0	2	1
BCA 331	**Summer Training Project	Skill Enhancement Course	0	0	2
BCA 371	Practical – X Linux - OS Lab	Core Course Practical	0	4	2
BCA 373	Practical – XI CG Lab	Core Course Practical	0	4	2

SIXTH SEMESTER

Code No.	Paper	Course Type	L	T/P	Credits
BCA 302	Data Ware Housing & Data Mining	Core Course Theory	3	1	4
BCA 304#	E- Commerce	Core Course Theory	3	1	4
BCA 306	Internet of Things	Core Course Theory	3	1	4
BCA 308	***Major Project	Ability Enhancement Course	----	12	6
BCAT 314	Deep Learning with Python	Discipline Specific Elective	4	0	4
BCAP 314	Deep Learning with Python Lab.	Discipline Specific Elective	0	2	1
BCA 332	Seminar/ Conference Presentation	Skill Enhancement Course	0	0	2
BCA 372	Practical – XII IOT Lab	Core Course Practical	0	4	2
BCA374	NSS / NCC / Cultural clubs / Technical Society/ Technical club$	Mandatory	-	-	2

Implemented from Academic Session 2021-22.