



BRAINWARE UNIVERSITY
SCHOOL OF COMPUTATIONAL & APPLIED SCIENCES
DEPARTMENT OF COMPUTATIONAL SCIENCES
Bachelor of Computer Applications - 2022
(As per UGC CBCS Template)

SEMESTER – I

Course Code	Course Name	Course Type	L – T – P	Credit(s)	Total Marks
HU101	English Communication	AECC-1	1 – 0 – 0	1	50
HU191	English Communication Lab	AECC-1	0 – 0 – 2	1	50
BCAC101	Problem Solving using Computer	DSC-1A	3 – 1 – 0	4	100
BCAC191	Problem Solving using Computer Lab	DSC-1A	0 – 0 – 4	2	100
BCAC102	Computer Hardware & Digital Logic	DSC-2A	3 – 1 – 0	4	100
BCAC192	Computer Hardware & Digital Logic Lab	DSC-2A	0 – 0 – 4	2	100
BCAC103	Mathematics for Computer Science	DSC-3A	5 – 1 – 0	6	100
	Total		25	20	600

SEMESTER – II

Course Code	Course Name	Course Type	L – T – P	Credit(s)	Total Marks
ENV201	Environmental Studies	AECC-2	2 – 0 – 0	2	100
BCAC201	Database Management Systems	DSC-1B	3 – 1 – 0	4	100
BCAC291	Database Management Systems Lab	DSC-1B	0 – 0 – 4	2	100
BCAC202	Data Structures	DSC-2B	3 – 1 – 0	4	100
BCAC292	Data Structures Lab	DSC-2B	0 – 0 – 4	2	100
BCAC203	Discrete Structure	DSC-3B	5 – 1 – 0	6	100
	Total		24	20	600



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SEMESTER – III

Course Code	Course Name	Course Type	L – T – P	Credit(s)	Total Marks
BCAC301	Operating System	DSC-1C	3 – 1 – 0	4	100
BCAC391	Operating System Lab	DSC-1C	0 – 0 – 4	2	100
BCAC302	Programming in JAVA	DSC-2C	3 – 1 – 0	4	100
BCAC392	Programming in JAVA Lab	DSC-2C	0 – 0 – 4	2	100
BCAC303	Numerical Methods	DSC-3C	3 – 1 – 0	4	100
BCAC393	Numerical Methods Lab	DSC-3C	0 – 0 – 4	2	100
BCAS-391	Web Designing Lab	SEC-1	1 – 0 – 2	2	100
	Total		27	20	700

SEMESTER – IV

Course Code	Course Name	Course Type	L – T – P	Credit(s)	Total Marks
BCAC401	Computer System Architecture	DSC-1D	3 – 1 – 0	4	100
BCAC491	Computer System Architecture Lab	DSC-1D	0 – 0 – 4	2	100
BCAC402	Computer Graphics	DSC-2D	3 – 1 – 0	4	100
BCAC492	Computer Graphics Lab	DSC-2D	0 – 0 – 4	2	100
BCAC403	Optimization Techniques	DSC-3D	5 – 1 – 0	6	100
BCAS491	PHP and MySQL Lab	SEC-2	1 – 0 – 2	2	100
	Total		25	20	600



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SEMESTER – V

Course Code	Course Name	Course Type	L – T – P	Credit(s)	Total Marks
BCAE501	A. Internet Technologies B. Artificial Intelligence	DSE-1A	3 – 1 – 0	4	100
BCAE591	A. Internet Technologies Lab B. Artificial Intelligence Lab	DSE-1A	0 – 0 – 4	2	100
BCAE502	A. E-Commerce B. Computer Networks	DSE-2A	3 – 1 – 0	4	100
BCAE592	A. E-Commerce Lab B. Computer Networks Lab	DSE-2A	0 – 0 – 4	2	100
BCAE581	Project-1	DSE-3A	—	6	100
BCAS591	Android Programming Lab	SEC-3	1 – 0 – 2	2	100
	Total		19	20	600

SEMESTER – VI

Course Code	Course Name	Course Type	L – T – P	Credit(s)	Total Marks
BCAE601	A. Software Engineering B. Multimedia	DSE-1B	3 – 1 – 0	4	100
BCAE691	A. Software Engineering Lab B. Multimedia Lab	DSE-1B	0 – 0 – 4	2	100
BCAE602	A. Introduction to Internet of Things (IoT) B. Introduction to Data Sciences	DSE-2B	3 – 1 – 0	4	100
BCAE692	A. Introduction to Internet of Things (IoT) Lab B. Introduction to Data Sciences Lab	DSE-2B	0 – 0 – 4	2	100
BCAE681	Project-2	DSE-3B	—	6	100
BCAS691	R Programming Lab	SEC-4	1 – 0 – 2	2	100
	Total		19	20	600

Total Credits: 120

Total Marks: 3700