



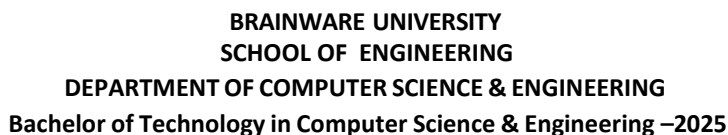
BRAINWARE UNIVERSITY
SCHOOL OF ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
Bachelor of Technology in Computer Science & Engineering –2025

SEMESTER – I

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total Marks	Credits	Course Type
						CIA	TEE			
1	BHS00001	English for Technical Communication	3	0	0	40	60	100	3	HSMC
2	BHS00004	Understanding Harmony and Ethical Human Conduct	2	0	0	40	60	100	2	HSMC
3	BBS00010	Engineering Chemistry	3	1	0	40	60	100	4	BSC
4	BBS00005	Calculus	3	0	0	40	60	100	3	BSC
5	BES00006	Programming for Problem Solving	3	1	0	40	60	100	4	ESC
6	BBS09020	Engineering Chemistry Lab	0	0	2	40	60	100	1	BSC
7	BES09012	Programming for Problem Solving Lab	0	0	2	40	60	100	1	ESC
8	BES09015	Workshop and Manufacturing Practices	0	0	3	40	60	100	1.5	ESC
9	BHS00010	Design Thinking	1	0	0	20	30	50	1	ESC
10	BAU00002	Environmental Sciences*	2*	0	0	50*	0	50*	0	AUC*
TOTAL			15+2*	2	7	340+50*	510	850+50*	20.5	

SEMESTER – II

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total Marks	Credits	Course Type
						CIA	TEE			
1	BHS07008	Effective Communication and Soft Skills	2	0	2	40	60	100	3	HSMC
2	BBS00015	Semiconductor Physics	3	1	0	40	60	100	4	BSC
3	BBS00002	Algebra and Vector Calculus	3	0	0	40	60	100	3	BSC
4	BES00002	Basic Electrical and Electronics Engineering	3	1	0	40	60	100	4	ESC
5	BES07010	Data Structure and Algorithms	3	0	2	40	60	100	4	ESC
6	BBS09022	Semiconductor Physics Lab	0	0	2	40	60	100	1	BSC
7	BES09008	Basic Electrical and Electronics Engineering Lab	0	0	2	40	60	100	1	ESC
8	BES09014	Engineering Graphics and Design Lab	0	0	3	40	60	100	1.5	ESC
9	BAU00004	Yoga and Sports*	2*	0	0	0	0	0	0	AUC*
TOTAL			14+2*	2	11	320	480	800	21.5	



Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total Marks	Credits	Course Type
						CIA	TEE			
1	BBS00014	Probability and Statistics	3	0	0	40	60	100	3	BSC
2	BES00007	Python Programming	3	1	0	40	60	100	4	ESC
3	BTS30101	Computer Organization and Architecture	3	1	0	40	60	100	4	PCC
4	BTS30102	Database Management Systems	3	1	0	40	60	100	4	PCC
5	BES09013	Python Programming Lab	0	0	2	40	60	100	1	ESC
6	BTS39103	Computer Organization and Architecture Lab	0	0	2	40	60	100	1	PCC
7	BTS39104	Database Management Systems Lab	0	0	2	40	60	100	1	PCC
8	BTS38101	Mini Project - I	0	0	0	40	60	100	2	PROJ
9	BAU00001	Constitution of India*	2*	0	0	50*	0	50*	0	AUC*
TOTAL			12+2*	3	6	320+50*	480	800+50*	20	

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total Marks	Credits	Course Type
						CIA	TEE			
1	BES09019	Practical Computing and AI Tools for Engineers	0	0	2	40	60	100	1	ESC
2	BBS00008	Discrete Mathematics	3	0	0	40	60	100	3	BSC
3	BTS40105	Operating Systems	3	0	0	40	60	100	3	PCC
4	BTS40106	Design and Analysis of Algorithms	3	0	0	40	60	100	3	PCC
5	BTS40107	Object Oriented Programming	3	0	0	40	60	100	3	PCC
6	BTS40108	Formal Language and Automata Theory	3	0	0	40	60	100	3	PCC
7	BTS49109	Operating Systems Lab	0	0	2	40	60	100	1	PCC
8	BTS49110	Design and Analysis of Algorithms Lab	0	0	2	40	60	100	1	PCC
9	BTS49111	Object Oriented Programming Lab	0	0	2	40	60	100	1	PCC
10	BTS48102	Mini Project - II	0	0	0	40	60	100	2	PROJ
TOTAL			15	0	8	400	600	1000	21	

#MOOCs to earn additional credits for optional Honours/Minor Degree



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SEMESTER – V

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total Marks	Credits	Course Type
						CIA	TEE			
1	BTS50112	Computer Networks	3	0	0	40	60	100	3	PCC
2	BTS50113	Distributed System	3	0	0	40	60	100	3	PCC
3	BTS50114	Compiler Design	3	1	0	40	60	100	4	PCC
4	BHS00009	General Proficiency and Workplace Communication	2	0	0	40	60	100	2	HSMC
5	BTS57201	Professional Elective Course - I	2	0	2	40	60	100	3	PEC
6	BTS59116	Computer Networks Lab	0	0	2	40	60	100	1	PCC
7	BTS59117	Distributed System Lab	0	0	2	40	60	100	1	PCC
8	BTS59118	Compiler Design Lab	0	0	2	40	60	100	1	PCC
9	BTS58103	Mini Project – III	0	0	0	40	60	100	2	PROJ
TOTAL			13	1	8	360	540	900	20	
<i>#MOOCs to earn additional credits for optional Honours/Minor Degree</i>										

Professional Elective Course – I

Course Code	Course Name	Hours per week			Credits	Credit Hours
		L	T	P		
BTS57201	A. Artificial Intelligence	2	0	2	3	4
	B. Image Processing	2	0	2	3	4
	C. Cloud Computing	2	0	2	3	4



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SEMESTER – VI

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total Marks	Credits	Course Type
						CIA	TEE			
1	BTS60119	Machine Learning	3	0	0	40	60	100	3	PCC
2	BTS60120	Data Mining and Data Warehousing	3	0	0	40	60	100	3	PCC
3	BTS60121	Internet of Things	3	0	0	40	60	100	3	PCC
4	BTS67202	Professional Elective Course – II	2	0	2	40	60	100	3	PEC
5	BTS60301	Open Elective Course – I	3	0	0	40	60	100	3	OEC
6	BTS69122	Machine Learning Lab	0	0	3	40	60	100	1.5	PCC
7	BTS69123	Data Mining and Data Warehousing Lab	0	0	3	40	60	100	1.5	PCC
8	BTS68104	Mini Project – IV	0	0	0	40	60	100	2	PROJ
TOTAL			14	0	8	320	480	800	20	
#MOOCs to earn additional credits for optional Honours/Minor Degree										

Professional Elective Course – II

Course Code	Course Name	Hours per week			Credits	Credit Hours
		L	T	P		
BTS67202	A. Big Data and Analytics	2	0	2	3	4
	B. Soft Computing	2	0	2	3	4
	C. Deep Learning	2	0	2	3	4

Open Elective Course – I

Course Code	Course Name	Hours per week			Credits	Credit Hours
		L	T	P		
BTS60301	A. Software Project Management	3	0	0	3	3
	B. Organisational Behaviour	3	0	0	3	3
	C. MOOC*	3	0	0	3	3

*MOOC/Equivalent MOOC approved by BoS Chair (Evaluation scheme as per Blended Learning and MOOCs Policy)



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SEMESTER – VII

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total Marks	Credits	Course Type
						CIA	TEE			
1	BTS70124	Software Engineering	3	0	0	40	60	100	3	PCC
2	BTS70125	System Software and Administration	3	0	0	40	60	100	3	PCC
3	BTS77203	Professional Elective Course – III	2	0	2	40	60	100	3	PEC
4	BTS70302	Open Elective Course – II	3	0	0	40	60	100	3	OEC
5	BTS70303	Open Elective Course – III	3	0	0	40	60	100	3	OEC
6	BTS79126	Software Engineering Tools and Techniques Lab	0	0	2	40	60	100	1	PCC
7	BTS78105	Internship	0	0	0	40	60	100	2	PROJ
8	BTS78106	Minor Project	0	0	0	40	60	100	4	PROJ
TOTAL			14	0	4	320	480	800	22	
#MOOCs to earn additional credits for optional Honours/Minor Degree										

Professional Elective Course – III

Course Code	Course Name	Hours per week			Credits	Credit Hours
		L	T	P		
BTS77203	A. Data and Internet Security	2	0	2	3	4
	B. Quantum Computing	2	0	2	3	4
	C. Pattern Recognition	2	0	2	3	4

Open Elective Course – II

Course Code	Course Name	Hours per week			Credits	Credit Hours
		L	T	P		
BTS70302	A. Entrepreneurship Basics	3	0	0	3	3
	B. Cyber law and Ethics	3	0	0	3	3
	C. MOOC*	3	0	0	3	3

Open Elective Course – III

Course Code	Course Name	Hours per week			Credits	Credit Hours
		L	T	P		
BTS70303	A. Financial Management	3	0	0	3	3
	B. Engineering Economics	3	0	0	3	3
	C. MOOC*	3	0	0	3	3

*MOOC/Equivalent MOOC approved by BoS Chair (Evaluation scheme as per Blended Learning and MOOC Policy)



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SEMESTER – VIII

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total Marks	Credits	Course Type
						CIA	TEE			
1	BTS88107	Major Project	0	0	0	40	60	100	16	PROJ
2	BTS88108	Grand Viva – Voce	0	0	0	0	100	100	4	PROJ
TOTAL			0	0	0	40	160	200	20	