

B.Tech., CSBS



B. Tech. in Computer Science & Business Systems
(For students to be admitted from 2019–20)
Scheme of Study
I Semester (22 Credits)

Course Code	Course Title	Periods of Instruction			Credits
		L	T	P	
MAT133	Discrete Mathematics	3	0	0	3
MAT132	Probability & Statistics	3	0	0	3
CSE106	Fundamentals of Computer Science	2	1	0	3
EEE104	Principles of Electrical Engineering	3	0	0	3
PHY137	Fundamentals of Physics	3	0	0	3
ENG136	Business Communication & Value Science – I	2	1	0	3
CSE107	Fundamentals of Computer Science Laboratory	0	0	2	1
EEE105	Principles of Electrical Engineering Laboratory	0	0	2	1
PHY139	Fundamentals of Physics Laboratory	0	0	2	1
ENG137	Business Communication & Value Science – I Laboratory	0	0	2	1
	Induction Program (Non Credit)				0
	Total	16	2	8	22

II Semester (22 Credits)

Course Code	Course Title	Periods of Instruction			Credits
		L	T	P	
MAT134	Linear Algebra	3	1	0	4
MAT244	Statistical Modeling	3	1	0	4
CSE209	Data Structures & Algorithms	2	1	0	3
EIE219	Principles of Electronics	3	0	0	3
MGT131	Fundamentals of Economics	2	0	0	2
ENG138	Business Communication & Value Science – II	3	0	0	3
CSE210	Data Structures & Algorithms Laboratory	0	0	2	1
EIE220	Principles of Electronics Laboratory	0	0	2	1
ENG139	Business Communication & Value Science – II Laboratory	0	0	2	1
	Environmental Sciences (Non Credit)				0
	Total	16	3	6	22

4 Weeks – Exchange Program among the Participating Institutes

III Semester (22 Credits)

Course Code	Course Title	Periods of Instruction			Credits
		L	T	P	
CSE211	Formal Language and Automata Theory	4	1	0	5
CSE212	Computer Organization & Architecture	3	1	0	4
CSE213	Object Oriented Programming	3	0	0	3
CSE214	Computational Statistics	3	0	0	3

CSE215	Software Engineering	4	0	0	4
CSE216	Object Oriented Programming Laboratory	0	0	2	1
CSE217	Computational Statistics Laboratory	0	0	2	1
CSE218	Software Engineering Laboratory	0	0	2	1
	Indian Constitution (Non-credit)				0
	Total	17	2	6	22

IV Semester (22 Credits)

Course Code	Course Title	Periods of Instruction			Credits
		L	T	P	
CSE308	Operating Systems	3	0	0	3
INT104	Database Management Systems	3	0	0	3
CSE316	Software Design with UML	3	0	0	3
MGT207	Introduction to Innovation, IP Management & Entrepreneurship	3	0	0	3
ENG212	Business Communication & Value Science-III	3	0	0	3
MAT330	Operations Research	2	1	0	3
CS	Operating Systems Laboratory	0	0	2	1
CS	Database Management Systems Laboratory	0	0	2	1
CS	Software Design with UML Laboratory	0	0	2	1
MS	Operations Research Laboratory	0	0	2	1
	Essence of Indian Traditional Knowledge (Non-credit)				0
	Total	17	1	8	22

4 Weeks - Industry Exposure (Optional)

V Semester (22 Credits)

Cluster	Course Title	No of Contact Hours / Week			Credits
		L	T	P	
CSE318	Algorithm Design Strategies & Analysis	3	0	0	3
CSE320	Compiler Design	3	0	0	3
MGT132	Fundamentals of Management for Engineers	3	1	0	4
MGT133	Business Strategy	3	0	0	3
ENG315	Design Thinking	2	1	0	3
	Elective - I	3	1	0	4
CSE319	Algorithm Design Strategies & Analysis	0	0	2	1
CSE321	Compiler Design (LEX & YACC) Laboratory	0	0	2	1
	Total	17	3	4	22

Departmental Electives

INTXXX	Conversational Systems	3	1	0	4
CSEXXX	Cloud, Micro services & Application	3	1	0	4
CSE425	Machine Learning Essentials	3	1	0	4

VI Semester (23 Credits)

Cluster	Course Title	No of Contact Hours / Week			Credits
		L	T	P	
CSEXXX	Computer Networking Principles &	3	0	0	3
INTXXX	Computer System Security	3	1	0	4

INTXXX	Artificial Intelligence & Logical Reasoning	3	0	0	3
MGTXXX	Financial & Cost Accounting	3	1	0	4
ENG316	Business Communication & Value Science - IV	2	1	0	3
	Elective - II	3	1	0	4
CSEXXX	Computer Networking Principles & Components Laboratory	0	0	2	1
INTXXX	Artificial Intelligence & Logical Reasoning Laboratory	0	0	2	1
	Total	17	4	4	23
	Industrial Project (6-8				02

Departmental Electives

CSEXXX	Robotics and Embedded Systems	3	1	0	4
INTXXX	Modern Web Applications	3	1	0	4
INTXXX	Data Mining and Analytics	3	1	0	4