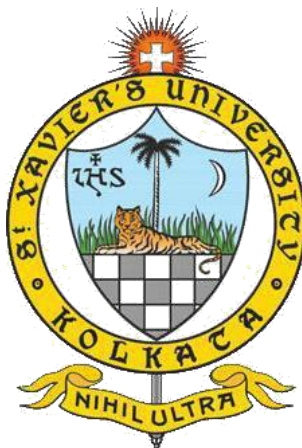


St. Xavier's University, Kolkata



**Curriculum for
B. Tech. in Computer Science and Engineering (CSE)**

Semester I						
S.No	Course Type	Course Title	Hours per week			Credits
			L	T	P	
1.	BSC	Physics	3	1	2	5
2.	BSC	Mathematics-I	3	1	0	4
3.	ESC	Basic Electrical Engineering	2	0	4	4
4.	ESC	Engineering Graphics & Design	1	0	4	3
5.	ESC	Programming for Problem Solving	3	0	2	4
6.	HSMC	Communicative English	2	0	2	3
Total			30			23

Semester II						
S.No	Course Type	Course Title	Hours per week			Credits
			L	T	P	
1.	BSC	Chemistry	3	1	2	5
2.	BSC	Mathematics-II	3	1	0	4
3.	ESC	Workshop	1	0	4	3
4.	PCC	Data Structure and Algorithms	3	0	4	5
5.	HSMC	Universal Human Values: Understanding Harmony and Ethical Human Conduct	2	1	0	3
6.	HSMC	Design Thinking	0	0	2	1
Total			27			21

Semester III						
S.No	Course Type	Course Title	Hours Per Week			Credits
			L	T	P	
1.	BSC	Mathematics-III	2	0	0	2
2.	ESC	Analog Electronic Circuits	3	1	2	5
3.	ESC	Digital Electronics	3	0	4	5
4.	PCC	IT Workshop: Sci Lab	1	0	4	3
5.	HSMC	Organizational Behavior	3	0	0	3
6.	HSMC	Humanities-I	3	0	0	3
Total			27			22

Semester IV						
S.No	Course Type	Course Title	Hours Per Week			Credits
			L	T	P	
1.	PCC	Computer Organization & Architecture	3	0	2	4
2.	PCC	Design & Analysis of Algorithms	3	0	2	4
3.	PCC	Object Oriented Programming using Java	3	0	4	5
4.	PCC	Web Technology	3	0	4	5
5.	MC	Environmental Sciences	-	-	-	0
6.	HSMC	Humanities II	3	0	0	3
Total			27			21

Semester V						
S.No	Course Type	Course Title	Hours Per Week			Credits
			L	T	P	
1.	ESC	Digital Signal Processing	3	1	2	5
2.	PCC	Discrete Mathematics	3	1	0	4
3.	PCC	Software Engineering	3	0	2	4
4.	PCC	Computer Networks	3	0	2	4
5.	PCC	Operating Systems	3	0	2	4
6.	PCC	Microcontroller and Embedded System	2	0	2	3
7.	MC	Constitution of India / Introduction to Indian Knowledge System	0	0	0	0
Total			29			24

Semester VI						
S.No	Course Type	Course Title	Hours Per Week			Credits
			L	T	P	
1.	PCC	Automata & Compiler Design	3	1	0	4
2.	PCC	Introduction to Database Systems	3	0	4	5
3.	PEC	Artificial Intelligence / Robotics	3	0	4	5
4.	PEC	Cloud Computing / Mobile Computing	2	0	2	3
5.	OEC	Statistical Analysis using Python / Bioinformatics	1	0	4	3
Total			27			20

Semester VII						
S.No	Course Type	Course Title	Hours Per Week			Credits
			L	T	P	
1.	BSC	Biology	2	1	0	3
2.	PCC	Information Security	3	1	2	5
3.	OEC	Machine Learning / Basic Quantum Computing	3	0	2	4
4.	PROJ	Project-I	0	0	12	6
5.	PROJ	*Internship/*NPTEL MOOC Course	0	0	0	4
Total			26			22

Semester VIII						
S.No	Course Type	Course Title	Hours Per Week			Credits
			L	T	P	
1.	PEC	Dataware Housing and Data Mining/Internet of Things / Deep Learning	3	0	2	4
2.	OEC	Numerical Analysis and Optimization Technique / Advanced Computational Mathematics	2	1	2	4
3.	PROJ	Project-II	0	0	12	6
4.	PROJ	Technical Seminar	0	0	0	2
5.	PROJ	General Viva Voce	0	0	0	2
Total			22			18

