

Jaypee University, Anoopshahr

**Bachelor of Technology (B.Tech)
Computer Science and Engineering**

Course Curriculum

(Applicable to batch admitted in 2023)



**Department of Computer Science Engineering
& Information Technology**

February 2023

(Based on AICTE Model Curriculum 2023)

JAYPEE UNIVERSITY ANOOPSHAHR

4 year B. Tech. degree Course - CSE w.e.f. 2023-24 Batch

First Semester								
Sr. No.	University Type	Course		Contact Hours				Credits
		Code	Name	L	T	P	Total	
1	Core	23B11MA 111	Mathematics I	3	1	0	4	4
2	Core	23B11PH 111	Physics-I	3	1	0	4	4
3	Core	23B11CI 111	Software Development Fundamentals-I	3	1	0	4	4
4	Core	23B11HS 111	English*	2	0	0	2	2
5	Core	23B17PH 171	Physics Lab-1	0	0	2	2	1
6	Core	23B17CI 171	Software Development Lab-I	0	0	4	4	2
7	Core	23B17ME 111	Engineering Drawing and Design	0	0	3	3	1.5
Total							23	18.5
*English Literature content will be given as suggestive reading								
Second Semester								
Sr. No.	University Type	Course		Contact Hours				Credits
		Code	Name	L	T	P	Total	
1	Core	23B11MA211	Mathematics-II	3	1	0	4	4
2	Core	23B11PH 201	Physics-II	3	1	0	4	4
3	Core	23B11CI 212	Electrical Science I	3	1	0	4	4
4	Core	23B11CI 213	Software Development Fundamentals-II	3	1	0	4	4
5	Core	23B17PH 271	Physics Lab-II	0	0	2	2	1
6	Core	23B17CI 271	Electrical Science Lab-I	0	0	2	2	1
7	Core	23B17CI 272	Software Development Lab-II	0	0	2	2	1
8	Qualifying	23B17HS 211	Life Skills & Professional Communication Lab*	0	0	2	2	0
9	Core	23B17ME 212	Workshop	0	0	3	3	1.5
Total							27	20.5

Third Semester								
Sr. No.	University Type	Course		Contact Hours				Credits
		Code	Name	L	T	P	Total	
1	Core	23B11CI311	Theoretical Foundations of Computer Science	3	1	0	4	4
2	Core	23B11CI312	Database Systems and Web	3	1	0	4	4
3	Core	23B11CI313	Data Structures	3	1	0	4	4
4	Core	23B17CI371	Data Structures Lab	0	0	4	4	2
5	Core	23B17CI372	Database Systems and Web Lab	0	0	2	2	1
6	Core	23B11CI314	Electrical Science -II	3	1	0	4	4
7	Core	23B17CI373	Electrical Science Lab-II	0	0	2	2	1
8	Core	2311HS311	Economics	2	1	0	3	3
	Total		Total				27	23
Fourth Semester								
Sr.No	University Type	Course		Contact Hours				Credits
		Code	Name	L	T	P	Total	
1	Core	XXXX	HSS Elective - 1	2	1	0	3	3
2	Core	23B11CI 412	Probability and Random Processes	3	1	0	4	4
3	Core	23B11CI413	Digital Systems	3	1	0	4	4
4	Core	23B11CI414	Algorithm & Problem Solving	3	0	0	3	3
5	(Qualifying)	23B11GE411	Environmental Science	3	0	0	3	0
6	Core	23B17CI 471	Digital Systems Lab	0	0	2	2	1
7	Core	23B17CI 472	Algorithms and Problem Solving Lab	0	0	2	2	1
8	Core	23B11HS 411	Universal Human Values*	2	1	0	3	3
	Total						24	19

Fifth Semester								
Sr.No	University Type	Course		Contact Hours				Credits
		Code	Name	L	T	P	Total	
1	Core	XXXX	HSS Elective-2	3	0	0	3	3
2	Core	23B11CI511	Computer Organisation and Architecture	3	1	0	4	4
3	Elective	XXXX	Discipline Elective - 1(#)	3	0	0	3	3
4	Elective	XXXX	Science Elective	3	0	0	3	3
5	Core	23B19CI591	Minor Project – 1	0	0	4	4	2
6	Core	23B17CI571	Computer Organisation and Architecture Lab	0	0	2	2	1
7	Core	23B17CI572	Operating Systems and Systems Programming Lab	0	0	2	2	1
8	Core	23B17CI573	Open Source Software lab	0	0	2	2	1
9	Core	23B11CI512	Operating Systems and Systems Programming	3	1	0	4	4
10	Core	23B17CI 574	Information Security Lab	0	0	2	2	1
11	(Qualifying)	23B11GE 511	Indian Constitution & Traditional Knowledge	3	0	0	3	0 (Qualifying)
Total							32	23

Sixth Semester								
Sr. No	Course			Contact Hours				Credits
	University Type	Code	Name	L	T	P	Total	
1	Core	23B11CI 611	Computer Networks and Internet of Things	3	0	0	3	3
2	Elective	XXXX	Discipline Elective – 2(##)	3	0	0	3	3
3	Elective	XXXX	Discipline Elective – 3(###)	3	0	0	3	3
4	Elective	XXXX	Open Elective - 1	3	0	0	3	3
	Audit	XXXX	Selected Value Added Course (*)	2	0	0	2	0
5	Core	23B17CI671	Computer Networks and Internet of Things Lab	-	-	2	2	1
6	Core	23B19CI691	Minor Project-2	--	--	4	4	2
7	Core	23B11C612	Software Engineering OR Artificial Intelligence	3	1	-	4	4
8	Core	23B17CI672	Software Engineering Lab OR Artificial Intelligence Lab	0	0	2	2	1
9	Core	XXXX	HSS Elective - 3	2	1	-	3	3
10	Qualifying	18B19GE691	Industrial Training (\$)*	0	0	0	0	0
Total							27/29	23
Seventh Semester								
Sr. No.	Course			Contact Hours				Credits
	University Type	Code	Name	L	T	P	Total	
1	Elective	XXXX	Discipline Elective – 4	3	0	0	3	3
2	Elective	XXXX	Discipline Elective – 5	3	0	0	3	3
3	Elective	XXXX	Discipline Elective – 6	3	0	0	3	3
4	Elective	XXXX	Open Elective – 2	3	0	0	3	3
5	Core	23B19CI 791	Major Project Part-1	0	-	8	8	4
Total							20	16
Students will submit summer training report and via at the end of semester.								

Eighth Semester								
Sr. No.	Type	Course		Contact Hours				Credits
		Code	Name	L	T	P	Total	
1	Elective	XXXX	Discipline Elective - 7	3	0	0	3	3
2	Elective	XXXX	Discipline Elective - 8	3	0	0	3	3
3	Elective	XXXX	Open Elective -3	3	0	0	3	3
4	Core	23B19CI 891	Major Project Part-2	3	0	0	3	3
				0	-	16	16	8
Total							25	17

Total Credits for B. Tech. -160

Faculty

Faculty In charge

COE

Assoc. Dean

Dep. Registrar

Vice Chancellor

Discipline Electives -1			
S.No	Subject Names	Codes	
1	Fundamentals of Machine learning	23B1ACI531	
2	Fundamentals of Computer security	23B1ACI532	
3	Introduction to Big data and Data Analytics	23B1ACI533	
4	Object Oriented Analysis and Design using Java	23B1ACI534	
5	Image Processing and Computer Vision	23B1ACI535	
6	Automata Theory and its applications	23B1ACI536	

Discipline Electives -II			
S.No	Subject Names	Codes	
1	Sensor Technology & Android Programming	23B1ACI631	
2	Fundamentals of Distributed and Cloud Computing	23B1ACI632	
3	Introduction to Large Scale Database Systems	23B1ACI633	
4	Web Technology and Cyber Security	23B1ACI634	
5	Introduction to Compiler Design	23B1ACI635	
6	Sensor Technology & Android Programming	23B1ACI636	
7	Fundamentals of Distributed and Cloud Computing	23B1ACI637	
Discipline Elective -III			
S.No	Subject Names	Codes	
1	Cloud based Enterprise Systems	23B1ACI731	
2	Introduction to Blockchain Technology	23B1ACI732	
3	Big Data Ingestion	23B1ACI733	
4	Fundamentals of Soft Computing	23B1ACI734	
5	Open source software development	23B1ACI735	
6	Concepts of Graph theory	23B1ACI736	
7	Cloud based Enterprise Systems	23B1ACI737	

Discipline Elective-IV			
S.No	Subject Names	Codes	
1	Advanced Block chain : A game theoretic view	23B1ACI831	
2	Big Data with Hadoop and Spark	23B1ACI832	
3	Introduction to Deep Learning	23B1ACI833	
4	Cryptography and its Applications	23B1ACI834	
5	Information Retrieval and Semantic Web	23B1ACI835	

Selected value Added Course			
S.No	Subject Names	Codes	
1	Java Programming	23B1VCI641	
2	Problem Solving using C and C++	23B1VCI642	
3	Non-linear Data Structures & problem solving	23B1VCI643	
4	Game Development: Fundamentals and practices	23B1VCI644	
5	Front End Programming	23B1VCI645	

HSS Elective IV Semester			
S.No	Subject Names	Codes	
1	Organization & Marketing Management	23B1AHS411	
2	Entrepreneurship & Small Business Management	23B1AHS412	
3	International Business	23B1AHS413	

HSS Elective-V Semester			
S.No	Subject Names	Codes	
1	Financial Management	23B1AHS511	
2	Consumer Psychology	23B1AHS512	

3	Industrial Psychology	23B1AHS513	
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HSS Elective VI Semester

S.No	Subject Names	Codes	
1	Human Resource Management	23B1AHS611	
2	Security Analysis & Portfolio Management	23B1AHS612	
3	Project Management	23B1AHS613	