

Jaypee University, Anoopshahr

B.Tech. (CSE) Course Curriculum



Applicable to batches Admitted during (2018-2022, 2019-23, 2020-24, 2021-25, 2022-26)

As per AICTE model curriculum-2018

Faculty of Engineering and Technology

March 2018

Curriculum for B.Tech. Programme (CSE)

I Semester (B1)

Sr. No.	Category	Course		Contact Hours				Credits	Course Type Univ.
		Code	Name	L	T	P	Total		
1	HSS	18B11HS111	English	2	0	0	2	2	Core
2	Basic Sc.	18B11PH111	Physics	3	1	0	4	4	Core
3	Basic Sc.	18B11MA111	Mathematics - I	3	1	0	4	4	Core
4	Engg. Sc.	18B11EC111	Basic Electrical Engineering	3	1	0	4	4	Core
5	HSS	18B17HS171	English Language Lab	0	0	2	2	1	Core
7	Basic Sc.	18B17PH171	Physics Lab	0	0	2	2	1	Core
8	Engg. Sc.	18B17EC171	Electrical Engineering Lab	0	0	2	2	1	Core
9	Engg. Sc.	18B17ME171	Engineering Graphics & Design Lab#	0	1	4	5	3	Core
Total				10	3	12	25	20	

*3 week Induction Training Programme at the beginning of the Semester

#1 hour Tutorial and 4 hours of Lab

II Semester (B2)

Sr. No.	Category	Course		Contact Hours				Credits	Course Type Univ.
		Code	Name	L	T	P	Total		
1	HSS	18B11HS211	Organizational Behaviour	3	0	0	3	3	Core
2	Basic Sc.	18B11CH211	Engineering Chemistry	3	1	0	4	4	Core
3	Basic Sc.	18B11MA211	Mathematics - II	3	1	0	4	4	Core
4	Engg. Sc.	18B11CI211	Programming for Problem Solving	3	0	0	3	3	Core
5	Engg. Sc.	18B11ME211	Engineering Mechanics	3	1	0	4	4	Core
6	Engg. Sc.	18B17ME271	Workshop Practices Lab	0	0	6	6	3	Core
7	Basic Sc.	18B17CH271	Engineering Chemistry Lab	0	0	2	2	1	Core
8	Engg. Sc.	18B17CI271	Computer Programming Lab	0	0	4	4	2	Core
9	Mandatory	18B19GE291	Environmental Sciences	2	0	0	2	0	Qualifying
Total				17	3	12	32	24	

#1 hour Lecture and 4 hours of Lab

III Semester (B3)

Sr. No.	Category	Course		Contact Hours				Credits	Course Type Univ.
		Code	Name	L	T	P	Total		
1	HSS	18B11HS311	Finance & Accounting	3	0	0	3	3	Core
2	Basic Sc.	18B11MA311	Mathematics - III	3	1	0	4	4	Core
3	Basic Sc.	18B11CH311	Biology for Engineers	3	0	0	3	3	Core
4	Engg. Sc.	18B11EC311	Electronic Devices and Circuits	2	1	0	3	3	Core
5	Core	18B11CI312	Computer Organization and Architecture	3	1	0	4	4	Core
6	Core	18B11CI311	Data Structure & Algorithms	3	1	0	4	4	Core
7	Engg. Sc.	18B17EC371	Devices & Circuits Lab	0	0	2	2	1	Core
8	Core	18B17CI371	Data Structure & Algorithms Lab	0	0	2	2	1	Core
9	Core	18B17CI372	Web Technology lab	0	0	2	2	1	Core
10	Mandatory	18B19GE391	Indian Constitution*	1	0	0	1	0	Qualifying
Total				18	4	6	28	24	

(*) Course having 0 credit and are mandatory to pass.

IV Semester (B4)

Sr. No.	Category	Course		Contact Hours				Credits	Course Type Univ.
		Code	Name	L	T	P	Total		
1	HSS	18B11HS411	Professional Practice Law & Ethics	3	0	0	3	3	Core
2	Core	18B11CI411	Database Management Systems	3	1	0	4	4	Core
3	Core	18B11CI412	Design and Analysis of Algorithms	3	1	0	4	4	Core
4	Core	18B11CI413	Object Oriented Programming	3	1	0	4	4	Core
5	Core	18B11EC313	Digital Electronics	3	1	0	4	4	Core
6	Core	18B17CI471	Database Systems Lab	0	0	2	2	1	Core
7	Core	18B17CI472	Algorithms Lab	0	0	4	4	2	Core
8	Core	18B17CI473	Object Oriented Programming Lab	0	0	2	2	1	Core
9	Core	18B17EC373	Digital Electronics Lab	0	0	2	2	1	Core
10	Mandatory	18B19GE491	Essence of Indian Traditional Knowledge*	1	0	0	1	0	Qualifying
Total				16	4	10	30	24	

(*) Course having 0 credit and are mandatory to pass.

V Semester (B5)

Sr. No.	Category	Course		Contact Hours				Credits	Course Type Univ.
		Code	Name	L	T	P	Total		
1	OE - I	XXX		3	0	0	3	3	Elective
2	DE - I	XXX		3	0	0	3	3	Elective
3	DE -II	XXX		3	0	0	3	3	Elective
4	Core	18B11CI511	Operating Systems	3	1	0	4	4	Core
5	Core	18B11CI512	Theory of Computation	3	1	0	4	4	Core
6	Core	18B17CI571	Operating Systems Lab	0	0	2	2	1	Core
7	Core	18B17CI572	Advance Programming Lab	0	0	2	2	1	Core
8	Project	18B19CI591	Minor Project-I	0	0	2	2	1	Core
Total				15	2	6	23	20	

VI Semester (B6)

Sr. No.	Category	Course		Contact Hours				Credits	Course Type Univ.
		Code	Name	L	T	P	Total		
1	OE - II	XXX		3	0	0	3	3	Elective
2	DE - III	XXX		3	0	0	3	3	Elective
3	DE - IV	XXX		3	0	0	3	3	Elective
4	Core	18B11CI611	Computer Networks	3	1	0	4	4	Core
5	Core	18B11CI612	Compiler Design	3	1	0	4	4	Core
6	Core	18B17CI671	Computer Networks Lab	0	0	2	2	1	Core
7	Core	18B17CI672	Compiler Design Lab	0	0	2	2	1	Core
8	Project	18B19CI691	Minor project-II	0	0	2	2	1	Core
9	Mandatory	18B19GE691	Industrial Training (\$)*	0	0	0	0	0	Qualifying
Total				15	2	6	23	20	

\$ 6 weeks Industrial Training during summer break after VI th Semester. Evaluation will be done at the start of VII th Semester.

(*) Course having 0 credit and are mandatory to pass.

VII Semester (B7)

Sr. No.	Category	Course		Contact Hours				Credits	Course Type Univ.
		Code	Name	L	T	P	Total		
1	OE - III	XXX		3	0	0	3	3	Elective
2	DE - V	XXX		3	0	0	3	3	Elective
3	DE - VI	XXX		3	0	0	3	3	Elective
5	Project	18B19CI791	Project Part I	0	0	10	10	5	Core
Total				9	0	10	19	14	

VIII Semester (B8)

Sr. No.	Category	Course		Contact Hours				Credits	Course Type Univ.
		Code	Name	L	T	P	Total		
1	OE - IV	XXX		3	0	0	3	3	Elective
2	DE - VII	XXX		3	0	0	3	3	Elective
3	Project	18B19CI891	Project Part II	0	0	16	16	8	Core
Total				6	0	16	22	14	

Total Credits-160

Sr. No.	Category	Credits	Definitions
1	HSS	12	Humanities and Social Sciences
2	Basic Sc.	25	Basic Science Courses
3	Engg. Sc.	24	Engineering Science Courses
4	Core	51	Professional Core Courses
5	OE	12	Open Elective Courses
6	DE	21	Departmental Elective Courses
7	Project	15	Project Work, Seminar, Term Paper, Internship
	Total	160	

S.No.	Open Elective(OE)	Code
1	Numerical Methods	18B1AMA531
2	Communication Systems	18B1AEC735
3	Analysis of Signal & Systems	18B1AEC635
4	Network and Signals	18B1AEC534
5	Discrete Mathematics	18B1AMA431
6	Digital Hardware Design	18B1AEC532
7	Material Science	18B1APH631
8	Embedded System and IOT	18B1AEC636
9	Space Science Technology	24H11PH514
10	Marketing Theory and Practices	21H11BB301
11	Linear Algebra	24H11MA514
12	British and American Drama	24H11BA301
13	Solid State Physics	24H11PH511
14	Number Theory and Fuzzy Logic	24H11MA511
15	Entrepreneurship and Job Creation	24H11GE301
16	Nuclear and Particle Physics	24H11PH512
17	Microprocessor	18B1AEC536
18	Business Intelligence & Analytics	18B1ABB734
19	Skills for Employability	24H11BB611
20	Advanced Programming Practices	24B1ACI836

S.No	Departmental Elective (DE)	Code
1	Information Retrieval and Data Mining	18B1ACI531
2	Principle of Programming Languages	18B1ACI532
3	Software Engineering	18B1ACI533
4	Cloud Computing	18B1ACI534
5	Advance Computer Architecture	18B1ACI535
6	Soft Computing	18B1ACI631
7	Microprocessors and Controllers	18B1ACI632
8	Distributed and Parallel Computing	18B1ACI633
9	Artificial Intelligence	18B1ACI634
10	Embedded Systems & Design	18B1ACI635
11	Cryptography and Network Security	18B1ACI636
12	Mobile Computing	18B1ACI731
13	Machine Learning	18B1ACI732
14	Image Processing	18B1ACI733
15	Graph Algorithms and Applications	18B1ACI734
16	Computer Graphics and Applications	18B1ACI735
17	Software Construction	18B1ACI736

18	Natural Language Processing	18B1ACI831
19	Advance Data Structure	18B1ACI832
20	Multimedia Computing	18B1ACI833
21	Introduction to Data Science	18B1ACI834
22	Internet of Things	18B1ACI835
23	Web and Mobile Application Development	24B1ACI737
24	Web Application development	24B1ACI536
25	Cyber Security	24B1ACI738

Faculty

Faculty-Incharge

**Controller of
Exam**

**Assoc. Dean
Academics**

Dy. Registrar

Vice-Chancellor