

**JIIT NOIDA**  
**Bachelor of Science (B. Sc.) (Honours / Honours with Research)**  
**in**  
**Computer Science program**  
**(For students of 2022-26 batch)**

**First Semester**

S. N.	Course Code	Course	Contact hours				Credit
			L	T	P	Total	
1.	22B21MA111	Major 1 (Introduction to Programming using C)	3	0	0	3	3
2.	22B25MA111	Major 1 (Introduction to Programming using C-LAB)	0	0	2	2	1
3.	22B21MA112	Major 2 (Computer System Architecture)	3	1	0	4	4
4.	22B21MA113	Minor 1 (Discrete Mathematical Structures)	3	1	0	4	4
5.	15B11PH111	Multi-disciplinary-1 (Physics-1)	3	1	0	4	4
6.	22B28HS111	AEC1 (English)	1	0	2	3	2
7.	22B12HS111	SEC1 (Life Skills and Effective Communications)	1	0	2	3	2
8.	22B28MA111	VAC1 (Multimedia and Animation Workshop)	1	0	2	3	2
<b>TOTAL</b>			<b>15</b>	<b>3</b>	<b>8</b>	<b>26</b>	<b>22</b>

**Second Semester**

S. N.	Course Code	Course	Contact hours				Credit
			L	T	P	Total	
1.	23B51CS121	Major 3 (Object Oriented Programming using C++)	3	0	0	3	3
2.	23B51CS521	Major 3 (Object Oriented Programming using C++-LAB)	0	0	2	2	1
3.	23B21MA111	Major 4 (Data Structures)	3	0	0	3	3
4.	23B25MA111	Major 4 (Data Structures -LAB)	0	0	2	2	1
5.	23B21MA112	Minor 2 (Calculus)	3	1	0	4	4
6.	15B11PH211	Multi-disciplinary-2 (Physics-2)	3	1	0	4	4
7.	23B12BT111	AEC2 (Environmental Science)	2	0	0	2	2
8.	23B56CS123	SEC2 (OOAD Project Based Learning)	0	0	4	4	2
9.	23B58CS125	VAC2 (Unix Workshop)	1	0	2	3	2
<b>TOTAL</b>			<b>15</b>	<b>2</b>	<b>10</b>	<b>27</b>	<b>22</b>

### Third Semester

S.N.	Course Code	Course	Contact hours				Credit
			L	T	P	Total	
1.	23B21MA211	Major 5 (Operating Systems)	3	0	0	3	3
2.	23B25MA211	Major 5 (Operating Systems-Lab)	0	0	2	2	1
3.	23B21MA212	Major 6 (Web Technology)	3	0	0	3	3
4.	23B25MA212	Major 6 (Web Technology-LAB)	0	0	2	2	1
5.	15B11MA302	Minor 3 (Probability and Statistics)	3	1	0	4	4
6.	23B25HS211	Multi-disciplinary-3(Communication Skills Lab)	0	0	2	2	1
7.	23B21HS211	AEC3 (English Literature)	2	0	0	2	2
8.	23B51CS211	SEC3 (Web Development-Project Based Learning)	0	0	4	4	2
9.	23B51CS212	VAC3 (Competitive Programming Workshop)	1	0	2	3	2
		<b>TOTAL</b>	<b>12</b>	<b>1</b>	<b>12</b>	<b>25</b>	<b>19</b>

### Fourth Semester

S. N.	Course Code	Course	Contact Hours				Credits
			L	T	P	Total	
1.	24B51CS241	Major 7 (Open Source Programming)	3	0	0	3	3
2.	24B55CS242	Major 7 (Open Source Programming-Lab)	0	0	2	2	1
3.	24B51CS243	Major 8 (Data Base Management System)	3	0	0	3	3
4.	24B55CS244	Major 8 (Data Base Management System-Lab)	0	0	2	2	1
5.	24B21MA211	Major 9 (Design and Analysis of Algorithms)	3	0	0	3	3
6.	24B25MA211	Major 9 (Design and Analysis of Algorithms-Lab)	0	0	2	2	1
7.	24B21MA212	Minor 4 (Linear Algebra)	3	1	0	4	4
8.	24B21HS211	AEC4 (Sustainable Development)	2	0	0	2	2
9.	24B55CS245	SEC4 (Open Source- Project Based Learning)	0	0	6	6	3
		<b>TOTAL</b>	<b>14</b>	<b>1</b>	<b>12</b>	<b>27</b>	<b>21</b>

## Fifth Semester

S. N.	Course Code	Course	Contact hours				Credit
			L	T	P	Total	
1.	24B51CS351	Major 10 (Artificial Intelligence and Machine Learning)	3	0	0	3	3
2.	24B55CS352	Major 10 (Artificial Intelligence and Machine Learning-Lab)	0	0	2	2	1
3.	24B51CS353	Major 11 (Distributed and Parallel Computing)	3	0	0	3	3
4.	24B51CS354	Major 12 (Computer Networks)	3	1	0	4	4
5.	24B55CS355	Major 12 (Computer Networks-Lab)	0	0	2	2	1
6.	24B21MA311	Minor 5 (Number Theory and Cryptography)	3	1	0	4	4
7.	24B27MA311	Summer Internship	0	0	8	8	4
		<b>TOTAL</b>	<b>12</b>	<b>2</b>	<b>12</b>	<b>26</b>	<b>20</b>

## Sixth Semester

S. N.	Course Code	Course	Contact hours				Credit
			L	T	P	Total	
1.	25B51CS361	Major 13 (Cloud Computing)	3	0	0	3	3
2.	25B55CS362	Major 13 (Cloud Computing-Lab)	0	0	2	2	1
3.	24B21MA313	Major 14(Fundamentals of Soft Computing)	3	1	0	4	4
4.	25B51CS363	Major 15 (Java Programming)	3	0	0	3	3
5.	25B55CS364	Major 15 (Java Programming-Lab)	0	0	2	2	1
6.	25B51CS365	Major 16 (Software Engineering)	3	0	0	3	3
7.	25B55CS366	Major 16 (Software Engineering-Lab)	0	0	2	2	1
8.	24B21MA312	Minor 6 (Operations Research)	3	1	0	4	4
		<b>TOTAL</b>	<b>15</b>	<b>2</b>	<b>6</b>	<b>23</b>	<b>20</b>

## Seventh Semester

S. N.	Course Code	Course	Contact hours				Credit
			L	T	P	Total	
1.	XXXXXXXXXX	Major 17 (Introduction to Deep Learning)	3	1	0	4	4
2.	XXXXXXXXXX	Major 18 (Research Methodology)	3	1	0	4	4
3.	XXXXXXXXXX	Major 19 (Internet of Things: Design and Development)	3	0	0	3	3
4.	XXXXXXXXXX	Major 19 (Internet of Things: Design and Development-Lab)	0	0	2	2	1
5.	XXXXXXXXXX	Major 20 (Computer Security)	3	0	0	3	3
6.	XXXXXXXXXX	Major 20 (Computer Security-Lab)	0	0	2	2	1
7.	XXXXXXXXXX	Minor 7 (Numerical Techniques)	3	0	0	3	3
8.	XXXXXXXXXX	Minor 7 (Numerical Techniques Lab)	0	0	2	2	1
		<b>TOTAL</b>	<b>15</b>	<b>2</b>	<b>6</b>	<b>23</b>	<b>20</b>

## Eighth Semester

S. N.	Course Code	Course	Contact hours				Credit
			L	T	P	Total	
1.	XXXXXXXXXX	Major 21 (Introduction to Blockchain Technologies)	3	1	0	4	4
2.	XXXXXXXXXX	Minor 8 (Data Science)	3	1	0	4	4
3.	XXXXXXXXXX	Dissertation	0	0	24	24	12
		<b>TOTAL</b>	<b>6</b>	<b>2</b>	<b>24</b>	<b>32</b>	<b>20</b>

**Total Credits: 164**