

**JIIT NOIDA**  
**Bachelor of Science (B. Sc.) (Honours / Honours with Research)**  
**in**  
**Computer Science program**  
**(For students of 2023-27 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	4	4	2
3	22B21MA113	Minor 1 (Discrete Mathematical Structures)	3	1	0	4	4
4	23B21PH111	Multi-disciplinary-1 (Optics and Electromagnetism)	3	0	0	3	3
5	22B28HS111	AEC1 (English)	1	0	2	3	2
6	22B12HS111	SEC1 (Life Skills and Effective Communications)	2	0	2	4	3
7	22B28MA111	VAC1 (Multimedia and Animation Workshop)	1	0	2	3	2
8	23B66CS114	VAC2 (Introduction to Digital Technologies)	2	0	0	2	2
<b>TOTAL</b>			<b>15</b>	<b>1</b>	<b>10</b>	<b>26</b>	<b>21</b>

**Second Semester**

S. N.	Course Code	Course	Contact hours				Credit
			L	T	P	Total	
1	23B21MA111	Major 2 (Data Structures)	3	0	0	3	3
2	23B25MA111	Major 2 (Data Structures Lab)	0	0	4	4	2
3	23B21MA112	Minor 2 (Calculus)	3	1	0	4	4
4	23B21PH112	Multi-disciplinary-2 (Modern Physics)	3	0	0	3	3
5	23B12BT111	AEC2 (Environmental Science)	2	0	0	2	2
6	24B28MA111	SEC2 (Objected Oriented Programming using C++)	2	0	2	4	3
7	23B58CS125	VAC3 (Unix Workshop)	1	0	2	3	2
<b>TOTAL</b>			<b>14</b>	<b>1</b>	<b>8</b>	<b>23</b>	<b>19</b>

### Third Semester

S. N.	Course Code	Course	Contact hours				Credit
			L	T	P	Total	
1	23B21MA211	Major 3 (Operating System)	3	1	0	4	4
2	23B25MA211	Major 3 (Operating System Lab)	0	0	2	2	1
3	22B21MA112	Major 4 (Computer System Architecture)	3	1	0	4	4
4	15B11MA302	Minor 3(Probability and Statistics)	3	1	0	4	4
5	20B11BMM12	Multi-disciplinary-3(Social Media & Digital Marketing)	3	0	0	3	3
6	23B21HS211	AEC3 (English Literature)	2	0	0	2	2
7	24B52CS231	SEC3 (Web Technologies)	2	0	2	4	3
<b>TOTAL</b>			<b>16</b>	<b>3</b>	<b>4</b>	<b>23</b>	<b>21</b>

### Fourth Semester

S. N.	Course Code	Course	Contact hours				Credit
			L	T	P	Total	
1	24B51CS241	Major 5 (Open Source Programming)	3	0	0	3	3
2	24B55CS242	Major 5 (Open Source Programming-Lab)	0	0	2	2	1
3	24B51CS243	Major 6 (Data Base Management System)	3	1	0	4	4
4	24B55CS244	Major 6 (Data Base Management System-Lab)	0	0	2	2	1
5	24B21MA211	Major 7 (Design and Analysis of Algorithms)	3	0	0	3	3
6	24B25MA211	Major 7 (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
<b>TOTAL</b>			<b>14</b>	<b>2</b>	<b>6</b>	<b>22</b>	<b>19</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>

**Total Credits:****120**

**Seventh Semester**

S. N.	Course Code	Course	Contact hours				Credit
			L	T	P	Total	
1	xxxxxxxxxx	Major 15 (Introduction to Deep Learning)	3	1	0	4	4
2	xxxxxxxxxx	Major 16 (Research Methodology)	3	1	0	4	4
3	xxxxxxxxxx	Major 17 (Internet of Things: Design and Development)	3	0	0	3	3
4	xxxxxxxxxx	Major 17 (Internet of Things: Design and Development-Lab)	0	0	2	2	1
5	xxxxxxxxxx	Major 18 (Computer Security)	3	0	0	3	3
6	xxxxxxxxxx	Major 18 (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 19 (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:****160**