

**Galgotias University**  
**School of Computer Applications and Technology**  
**Curriculum BCA & BCA IOP 2024-27**

Semester I							
S No.	Name of the Course	L	T	P	S	C	H
1	Open Elective-I	3	0	0	0	3	3
2	Linear Algebra	3	0	0	0	3	3
3	Computer System Organisation	3	0	0	0	3	3
4	Programming for Problem Solving	3	0	1	1	5	8
5	Vocational Elective-I	3	0	1	0	4	5
<b>Total Credits (BCA &amp; BCA Spl)</b>		<b>15</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>18</b>	<b>20</b>

Semester II							
SN	Name of the Course	L	T	P	S	C	H
1	Open Elective-II	3	0	0	0	3	3
2	Probability and Statistics	3	0	0	0	3	3
3	Data Structures	3	0	1	0	4	5
4	Object Oriented Programming using C++	3	0	1	1	5	8
5	Database Management Systems	3	0	1	0	4	5
6	Vocational Elective-II	3	0	1	0	4	5
<b>Total Credits (BCA &amp; BCA Spl)</b>		<b>18</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>23</b>	<b>29</b>

Semester III							
SN	Name of the Course	L	T	P	S	C	H
1	Co-Curricular-I	2	0	0	0	2	2
2	Operating Systems	3	0	1	0	4	5
3	Discrete Mathematics	3	0	0	0	3	3
4	Python Programming	3	0	1	1	5	8
5	Elective-I	3	0	0	0	3	3
6	Specialization Core-I	2	0	1	0		4
<b>Total Credits (BCA &amp; BCA Spl)</b>		<b>14</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>17</b>	<b>27</b>

Semester IV							
SI No	Name of the Course	L	T	P	S	C	H
1	Co-Curricular-II	2	0	0	0	2	2
2	Machine Learning	3	0	1	1	5	8
3	Software Engineering and Testing	3	0	0	0	3	3
4	Computer Networks	3	0	1	0	4	5
5	Java Programming	3	0	1	1	5	8
	Elective-II	3	0	0	0	3	3
6	Specialization Core-II	2	0	1	0		4
	<b>Total Credits (BCA &amp; BCA Spl)</b>	<b>17</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>22</b>	<b>27</b>

Semester V							
SN	Name of the Course	L	T	P	S	C	H
1	Data Science	3	0	0	0	3	3
2	Mobile Application Development	3	0	1	1	5	8
3	Design and Analysis of Algorithms	3	0	1	1	5	8
4	Professional Readiness	0	0	2	0	2	3
5	Minor Project	0	0	0	0	5	0
6	Internship	0	0	0	0	5	0
	<b>Total Credits (BCA &amp; BCA Spl)</b>	<b>10</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>25</b>	<b>24</b>

Semester VI							
SI No	Name of the Course	L	T	P	S	C	H
1	Capstone Project	0	0	0	0	15	15
	<b>Total Credits (BCA &amp; BCA Spl)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>0</b>

	Credits	I	II	III	IV	V	VI
	<b>Total Credits (BCA &amp; BCA Spl)</b>	<b>18</b>	<b>23</b>	<b>17</b>	<b>22</b>	<b>25</b>	<b>15</b>

**Curriculum BCA & BCA IOP (Hons with Research) 2024-28**

Semester VII							
SN	Name of the Course	L	T	P	S	C	H



1	Web Design	3	0	1	0	4	5
2	Office Automation Tools	3	0	1	0	4	5

**List of Vocatioanl-II for Semester- II**

SN	Name of the Course	L	T	P	S	C	H
1	Full Stack Development using React and N	3	0	1	0	4	5
2	System Administration	3	0	1	0	4	5

**Co-Curricular-I & II for III & IV sem**

SN	Name of the Course	L	T	P	S	C	H
1	Food, Nurtician anf Hygine	2	0	0	0	2	2
2	First Aid and Health	2	0	0	0	2	2

**List of Electives-I for Semester- III**

SN	Name of the Course	L	T	P	S	C	H
1	Computer Graphics	3	0	0	0	3	3
2	Internet of Things	3	0	0	0	3	3

**Co-Curricular-I & II for III & IV sem**

SN	Name of the Course	L	T	P	S	C	H
1	Food, Nurtician anf Hygiene	2	0	0	0	2	2
2	First Aid and Health	2	0	0	0	2	2

**List of Electives-II for Semester- V**

SN	Name of the Course	L	T	P	S	C	H
1	Data Mining and Web Algorithms	3	0	0	0	3	3
2	BigData	3	0	0	0	3	3

**Specializations Core-I (III sem)**

SI No	Name of the Electives (Choose one)	L	T	P	S	C	H
1	Data Analysis & Data Visualization	2	0	1	0	3	4

2	Data Analytics	2	0	1	0	3	4
3	Cryptography	2	0	1	0	3	4
4	Non Linear Editing	2	0	1	0	3	4
5	Cloud Computing and Virtualisation	2	0	1	0	3	4

#### Specializations Core-II (IV Sem)

SI No	Name of the Electives (Choose one)	L	T	P	S	C	H
1	Natural Language Processing	2	0	1	0	3	4
2	Advanced Data Analytics	2	0	1	0	3	4
3	Network Security	2	0	1	0	3	4
4	Graphic Designing	2	0	1	0	3	4
5	Advances in Cloud Computing and Virtuali	2	0	1	0	3	4

#### List of Electives-III for Semester- VII

SN	Name of the Course	L	T	P	S	C	H
1	Digital Image Processing	2	0	1	0	3	4
2	R Programming	2	0	1	0	3	4
3	Numerical Methods	2	0	1	0	3	4











