Galgotias University

School of Computer Applications and Technology

B.Sc (Hons. with Research) Computer Science (Game Design and Development)

Semester 1							
S No.	**Name of the Course**	**L**	**T**	**P**	**S**	**C**	**H**
1	Open Elective-I	3	0	0	0	3	3
2	Discrete Mathematics	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
	Total Credits	**15**	**0**	**1**	**1**	**18**	**22**
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
	Total Credits	**18**	**0**	**4**	**1**	**23**	**29**
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	Design and Analysis of Algorithms	3	0	1	0	4	5
4	Python Programming	3	0	1	1	5	8
5	Foundations of Computer Graphics	3	0	0	0	3	3
	Total Credits	**14**	**0**	**4**	**1**	**18**	**27**
Semester IV							
Sl 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	Theory of Computation	3	0	0	0	3	3
4	Computer Networks	3	0	1	0	4	5
5	Java Programming	3	0	1	1	5	8
6	Computer Animation: Algorithms and Techniques	3	0	1	0	4	5
	Total Credits	**14**	**0**	**3**	**2**	**22**	**33**
Semester V							
Sl No	**Name of the Course**	**L**	**T**	**P**	**S**	**C**	**H**
1	Entrepreneurship	3	0	0	0	3	3
2	Mobile Application Development	3	0	1	1	5	8
3	Software Engineering	3	0	1	1	5	8
4	Professional Readiness	1	0	1	0	2	3
5	Minor Project	0	0	0	0	5	0
6	Internship (Summer)	0	0	0	0	4	0
	Total Credits	**13**	**0**	**4**	**1**	**24**	**22**
Semester VI							
Sl No	**Name of the Course**	**L**	**T**	**P**	**S**	**C**	**H**
1	Capstone Project	0	0	0	0	15	0
	Total Credits	**0**	**0**	**0**	**0**	**15**	**0**
Semester VII							
SN	**Name of the Course**	**L**	**T**	**P**	**S**	**C**	**H**
1	Research Methodology	2	0	0	0	2	2
2	Optimization Techniques	3	0	0	0	3	3
3	Advanced Data Structures and Algorithms	3	0	1	0	4	5
4	Elective -III	2	0	1	0	3	4
5	Research Project-I	0	0	0	8	8	8
	Total Credits	**13**	**0**	**3**	**4**	**20**	**22**
Semester VIII							
Sl No	**Name of the Course**	**L**	**T**	**P**	**S**	**C**	**H**
1	Colloquium	0	0	0	0	5	10
2	Research Project -II	0	0	0	0	15	20

	Total Credits	**0**	**0**	**0**	**0**	**20**	**30**
List of Vocatioanl-I for Semester- I							
SN	**Name of the Course**	**L**	**T**	**P**	**S**	**C**	**H**
1	Introduction to Web Technology	3	0	1	0	4	5
2	Office Automation Tools	3	0	1	0	4	5
Open Elective-I & II for I & II sem							
SN	**Name of the Course**	**L**	**T**	**P**	**S**	**C**	**H**
1	Environmental Literature	3	0	0	0	3	3
2	Linear Algebra	3	0	0	0	3	3
3	Understanding India	3	0	0	0	3	3
4	Report Writing	3	0	0	0	3	3
5	Environmental Studies	3	0	0	0	3	3
6	Introduction to Japanese language and culture-I	3	0	0	0	3	3
8	Introduction to Japanese language and culture-II	3	0	0	0	3	3
9	Maths and Puzzles	3	0	0	0	3	3
List of Vocatioanl-II for Semester- II							
1	Full Stack Development using React and Node JS	3	0	1	0	4	5
2	Introduction to System Administration	3	0	1	0	4	5
3	Fundamentals of Prompt Engineering and Generative AI	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, Nutrition and Hygiene	2	0	0	0	2	2
2	First Aid and Health	2	0	0	0	2	2