



GALGOTIAS UNIVERSITY



**GALGOTIAS
UNIVERSITY**

**NAAC
GRADE A+**
Accredited University

School of Computer Science and Engineering

Program

**Bachelor of Technology
in
Computer Science and Engineering
(Cloud Computing and Virtualization)**

Curriculum

First Semester B. Tech CSE							
Sl.No.	Course Code	Course Title	L	T	P	S	C
1	101	Calculus and Linear Algebra	3	0	1	0	4
2	102	Introduction of Digital System	3	0	0	0	3
3	103	YOGA	0	0	0	0	0
4	104	Modern Physics / Semiconductor Physics / Condensed matter Physics/Semiconductor and Opto Electro Devices	3	0	1	0	4
5	105	Programming for Problem Solving using C	3	0	1	0	4
6	106	Aptitude Skills	0	0	2	0	2
Total Credits			17				

Second Semester B. Tech CSE							
Sl.No.	Course Code	Course Title	L	T	P	S	C
1	201	Basic Electrical & Electronics Engg.	3	0	1	0	4
2	202	Engineering Design and Prototyping	3	0	1	0	4
3	203	Biology for Engineers / Nano Technology / Alternate Energy / Synthetic Chemistry / Bio-Materials and Implants/Chemical and Biological Materials	3	0	0	0	3
4	204	Environmental Impact Analysis	0	0	0	0	0
5	205	Applied Aptitude Skills	0	0	2	0	2
6	206	Probability and Statistics	3	0	0	0	3
7	207	Discrete Mathematics	3	0	0	0	3
8	208	OOPS Using C++	3	0	1	0	4
Total Credits			23				

Third Semester B. Tech CSE							
Sl.No.	Course Code	Course Title	L	T	P	S	C
1	301	Database Management System	3	0	1	0	4
2	302	Data Structures	3	0	1	0	4
3	303	Java Programming	3	0	1	1	5
4	304	Multivariable Calculus and Differential Equations	3	0	1	0	4
5	305	Computer Organization and Architecture	3	0	0	0	3
6	306	Advanced Aptitude Skills	0	0	2	0	2
7	307	Programming Skills with Computational Maths	0	0	2	0	2
8	308	Design Thinking	1	0	0	0	1
Total Credits			25				

Fourth Semester B. Tech CSE							
Sl.No.	Course Code	Course Title	L	T	P	S	C
1	401	Data Communication and Networking	3	0	1	0	4
2	402	Design and Analysis of Algorithm	3	0	1	1	5
3	403	Operating System	3	0	1	0	4
4	404	Theory of Computation	3	0	0	0	3
5	405	Aptitude Proficiency	0	0	2	0	2
6	406	Fundamentals of Cyber Security	3	0	0	0	3
7	407	Python Programing	1	0	1	0	2
8	408	Understanding Harmony and Ethical Human Conduct	1	0	0	0	1
9	409	Programming Skills with Data Structures	0	0	2	0	2
Total Credits			26				

Fifth Semester B. Tech CSE							
Sl.No.	Course Code	Course Title	L	T	P	S	C
1	501	Machine Learning	3	0	1	1	5
2	502	Software Engineering & Testing	3	0	1	0	4
3	503	Soft Skills & Aptitude Readiness	0	0	2	0	2
4	504	Programming Skills with Algorithmic Design	0	0	2	0	2
5	505	Compiler Design	3	0	1	0	4
6	506	Summer Internship-I	0	0	0	1	1
7	507	Cloud Computing	3	0	1	0	4
8	508	Open Elective-I	3	0	0	0	3
Total Credits			25				

Sixth Semester B. Tech CSE							
Sl.No.	Course Code	Course Title	L	T	P	S	C
1	601	Professional Readiness	0	0	2	0	2
2	602	Programming Skills with Advanced Data Structures	0	0	2	0	2
3	603	Big Data Analytics	3	0	1	0	4
4	604	Deep Learning	3	0	1	1	5
5	605	Cloud Virtualization	3	0	1	0	4
6	606	DevOps & Automation	3	0	1	0	4
7	607	Open Elective-II	3	0	0	0	3
Total Credits			24				

Seventh Semester B. Tech CSE							
Sl.No.	Course Code	Course Title	L	T	P	S	C
1	701	Research Methodology & IPR	3	0	1	0	4
2	702	Summer Internship-II	0	0	0	1	1
3	703	Capstone Project Phase-I	0	0	0	4	4
4	704	Program Specific Elective	3	0	1	0	4
Total Credits			13				
Eighth Semester B. Tech CSE							
Sl.No.	Course Code	Course Title	L	T	P	S	C
1	801	Capstone Project Phase-II	0	0	0	8	8
2	802	Industrial Internship	0	0	0	2	2
Total Credits			10				
Total Program Credits			163				

Open Elective-I						
Sl.No.	Course Code	Course Title	L	T	P	C
1	508	Understanding India	3	0	0	3
2	508	Bio-Safety and Bio-Hazards	3	0	0	3
3	508	Introduction to Construction Technology	3	0	0	3
4	508	Photography	3	0	0	3
5	508	Health and Lifestyle Disorders	3	0	0	3
6	508	Space Science	3	0	0	3
7	508	Food, Nutrition and Health	3	0	0	3
8	508	NGOs and Sustainable Development	3	0	0	3
Open Elective-II						
Sl.No.	Course Code	Course Title	L	T	P	C
1	607	Entrepreneurship	3	0	0	3
2	607	Introductory Agriculture	3	0	0	3
3	607	Introduction to Business Economics	3	0	0	3
4	607	Mathematical Puzzles and Games	3	0	0	3
5	607	Microprocessor & Microcontroller	3	0	0	3
6	607	Digital marketing	3	0	0	3
7	607	Human Resource Management	3	0	0	3
8	607	Electric Vehicle Technology	3	0	0	3
Open Elective Credits			6			

Program Specific Elective						
Sl.No.	Course Code	Course Title	L	T	P	C
1	704	Security and Privacy in Cloud	3	0	1	4
2	704	Fog and Edge Computing	3	0	1	4
3	704	Cloud Application Development	3	0	1	4
Program Specific Elective Credits			4			