GALGOTIAS UNIVERSITY
Programme Structure 2023-24

B. Tech in Electronics and Communication Engineering

Semester I

S. No.	Course Code	Course Title	L	T	P	S	Credits	Hours	Type
1	C1UC122B	Engineering Mathematic-I	3	0	1		4	5	AEC
2	E2UC102C	Programming for Problem Solving – C	2	0	1	1	4	4	SEC
3	G2UA120B	Basic Electrical & Electronics Engineering	3	0	1	0	4	5	SEC
4	C1UD121B	Semi-conductor Physics	3	0	1		4	5	SEC
5	G3UB101B	Engineering Graphics & Introduction to Digital Fabrication	3	0	1		4	5	SEC
6	C1UB120T	Environmental Impact Analysis	2	0	0	0	0	2	VAC

Semester II

S. No.	Course Code	Course Title	L	T	P	S	Credits	Hours	Type
1	C1UB124T	Biology for Engineers	3	0	0		3	3	VAC
2	C1UC222B	Engineering Mathematic-II	3	0	1		4	5	AEC
3	G2UC101B	Introduction to Digital Systems	2	0	1	0	3	4	SEC
4	E2UC201C	OOPS	2	0	1	1	4	4	SEC
5	C1UC224T	Discrete Mathematics	3	0	0		3	3	AEC
6	O1UA104B	Communication Skills for Engineers	2	0	1		3	4	VAC
7	L1UB120T	Yoga	2	0	0	0	0	3	VAC

Semester III

S. No.	Course Code	Course Title	L	T	P	S	Credits	Hours	Type
1	C1UC321T	Functions of Complex Variables and Transforms	3	0	0		3	3	AEC
2	G2UC301C	Electronic Devices and Circuits	3	0	1	1	5	5	SEC
3	G2UB301B	Network Analysis and Synthesis	3	0	1		4	5	SEC
5	G2UC302T	Signals and Systems	3	0	0		3	3	SEC
6	G2UC303T	Electromagnetic Field Theory	3	0	0		3	3	SEC

7	K1UC320B	Communication Competency & Aptitude Building -1	1	0	1		2	3	VAC

Semester IV									
S. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**S**	**Credits**	**Hours**	**Type**
1	C1UC420T	Probability and Stochastic Process	3	0	0		3	3	AEC
2	G2UA401B	Integrated Circuits	3	0	0		3	3	SEC
3	G2UA402T	Analog and Digital Communication	3	0	1		4	5	SEC
4	G2UA401C	Microcontrollers and Embedded System	3	0	1	1	5	5	SEC
5	G2UA405T	Antenna and Wave Propagation	3	0	0		3	3	SEC
6	O1UA421B	Communication Competency & Aptitude Building -II	1	0	1		2	3	VAC

Semester V									
S. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**S**	**Credits**	**Hours**	**Type**
1	G2UC501B	Microwave Engineering	3	0	1		4	5	SEC
2	G2UC502C	Digital Signal Processing	3	0	1	1	5	5	SEC
3	**********	Program Elective-I	3	0	0		3	3	SEC
4	G2UC503T	Wireless and Mobile Communication	3	0	0		3	3	SEC
5	**********	Open Elective-1	3	0	0		3	3	VAC
6	K1UC523L	Communication Competency & Aptitude Building -1	1	0	1		2	3	VAC

Semester VI									
S. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**S**	**Credits**	**Hours**	**Type**
1	O1UA602B	Campus to Corporate Training	1	0	1		2	3	VAC
2	G2UC606C	VLSI Design	3	0	1		4	5	SEC
3	**********	Program Elective-II	3	0	0		3	3	SEC
4	G2UC602T	Advanced Communication Systems	3	0	1	1	5	5	SEC
5	**********	Program Elective-III	3	0	0		3	3	SEC
6	G2UC605T	Communication Network	3	0	0		3	3	SEC

Semester VII									

S. No.	Course Code	Course Title	L	T	P	S	Credits	Hours	Type
1	********	Program Elective-IV	3	0	0		3	3	SEC
2	********	Program Elective-V	3	0	0		3	3	SEC
3	********	Open Elective -2	3	0	0		3	3	VAC
4	********	Open Elective -3	3	0	0		3	3	VAC
5	********	Industrial internship	0	0	0	1	1	0	SEC
6	BECE9998	Capstone Design - I	0	0	8		7	0	SEC

Semester VIII									
S. No.	Course Code	Course Title	L	T	P	S	Credits	Hours	Type
1	BECE9997	Capstone Design - II	0	0	20		20	0	SEC

Elective Basket

IoT									
S. No.	Course Code	Course Title	L	T	P	S	Credits	Hours	Type
1	******	Introduction to IoT and its Applications	3	0	0		3	3	SEC
2	******	Automation and Robotics	3	0	0		3	3	SEC
3	******	Deep Learning Algorithms	3	0	0		3	3	SEC
4	******	Object Oriented Programming	3	0	0		3	3	SEC
5	******	Virtual Reality	3	0	0		3	3	SEC
6	******	Raspberry Pi and its applications	3	0	0		3	3	SEC
7	******	Introduction to Arduino programming and its applications	3	0	0		3	3	SEC
8	******	Cloud Computing	3	0	0		3	3	SEC
9	******	Python Programming	3	0	0		3	3	SEC

Biomedical Engineering and Healthcare									
S. No.	Course Code	Course Title	L	T	P	S	Credits	Hours	Type
1	******	Medical Imaging	3	0	0	0	3	3	SEC
2	******	Bio-signal processing	3	0	0	0	3	3	SEC
3	******	Medical Image Processing	3	0	0	0	3	3	SEC
4	******	Biomedical Sensors and Measurement Devices	3	0	0	0	3	3	SEC
5	******	Biomaterials and Artificial Organs	3	0	0	0	3	3	SEC
6	******	Assist Devices	3	0	0	0	3	3	SEC
7	******	Soft Computing	3	0	0	0	3	3	SEC
8	******	Hospital Engineering and Informatics Systems	3	0	0	0	3	3	SEC

S. No.	Course Code	Course Title	L	T	P	S	Credits	Hours	Type
9	******	Bio-Chemistry	3	0	0	0	3	3	SEC

VLSI									
S. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**S**	**Credits**	**Hours**	**Type**
1	******	ASIC Design	3	0	0	0	3	3	SEC
2	******	CAD Algorithms for VLSI Physical Design	3	0	0	0	3	3	SEC
3	******	Digital VLSI Design	3	0	0	0	3	3	SEC
4	******	Digital System Design using VHDL	3	0	0	0	3	3	SEC
5	******	SoC Design	3	0	0	0	3	3	SEC
6	******	System Verilog	3	0	0	0	3	3	SEC
7	******	Low Power VLSI Design	3	0	0	0	3	3	SEC
8	******	VLSI Technology	3	0	0	0	3	3	SEC
9	******	VLSI Testing	3	0	0	0	3	3	SEC
10	******	MEMS	3	0	0	0	3	3	SEC
11	******	Memory Design and Testing	3	0	0	0	3	3	SEC
12	******	MOS Transistor Theory	3	0	0	0	3	3	SEC