GALGOTIAS UNIVERSITY
Programme Structure 2023-24

School/Dept.	DEECE	Program Name	B.Tech. EEE

semester	I								
S. No.	Course Code	Course Title	L	T	P	S	Credits	Hours	Type
1	C1UC122B	Engineering Mathematics-I	3	0	1		4	5	AEC
2	E2UC102C	Programming for Problem Solving – C	2	0	1	1	4	5	SEC
3	G2UA120B	Basic Electrical & Electronics Engineering	3	0	1	0	4	5	SEC
4	C1UD124B	Semi-conductor and Opto Electronic Devices	3	0	1		4	5	SEC
5	G3UB101B	Engineering Design and Prototyping	3	0	1		4	5	SEC
6	C1UB120T	Environmental Impact Analysis	2	0	0	0	0	2	VAC
			Total				20		

semester	II								
S. No.	Course Code	Course Title	L	T	P	S	Credits	Hours	Type
1	C1UB129T	Chemical and Biological Materials	3	0	0		3	3	VAC
2	C1UC222B	Engineering Mathematics-II	3	0	1		4	4	AEC
3	G2UC101B	Introduction to Digital Systems	2	0	1		3	5	SEC
4	E2UC201C	OOPS	2	0	1	1	4	5	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	2	VAC
			Total				20		

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
4	G2UC302T	Signals and Systems	3	0	0		3	3	SEC
5	G2UC303T	Electromagnetic Field Theory	3	0	0		3	3	SEC
6	K1UC320B	Communication Competency & Aptitude Building-1	1	0	1		2	3	VAC
			Total				20		

semester	IV	Program				Dr. Mohammad		
S. No.	Course Code	Course Title	L	T	P	S	Credits	Hours	Type
1	C1UC420T	Probability and Stochastic Processes	3	0	0		3	3	AEC
2	G2UB407T	Control Systems	3	0	0		3	3	SEC
3	G2UB402B	Electrical Machine-I	3	0	1		4	5	SEC
4	G2UB406T	Fundamentals of Power Systems	3	0	0		3	4	SEC
5	G2UB405C	Electrical Measurement and Instrumentation	3	0	1	1	5	5	SEC
6	O1UA421B	Communication Competency & Aptitude Building-2	1	0	1		2	3	VAC
			Total				20		

semester	V								
S. No.	Course Code	Course Title	L	T	P	S	Credits	Hours	Type
1	G2UB501B	Electrical Machine-II	3	0	1		4	5	SEC
2	G2UB502T	Power System Analysis	3	0	0		3	3	SEC
3	G2UB503C	Power Electronics	3	0	1	1	5	5	SEC
4	G2UB504B	Microcontroller and Embedded System	3	0	1		4	5	SEC

5	E2UC521B	Python and Data Structures	3	0	1		4	5	AEC
			Total				20		

semester		**VI**							
S. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**S**	**Credits**	**Hours**	**Type**
1	O1UA602B	Campus 2 Corporate Training	1	0	1		2	3	VAC
2	G2UC502C	Digital Signal Processing	3	0	1	1	5	5	SEC
3	******	Program Elective-I	3	0	0		3	3	SEC
4	******	Program Elective-II	3	0	0		3	3	SEC
5	BEE01T4001	Sensors and Actuators	3	0	0		3	3	SEC
6	G2UB604C	Electric Drives	3	0	1		4	5	SEC
			Total				20		

semester		**VII**							
S. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**S**	**Credits**	**Hours**	**Type**
1	******	Program Elective-III	3	0	0		3	3	SEC
2	******	Program Elective-IV	3	0	0		3	3	SEC
3	******	Open Elective-I	3	0	0		3	3	AEC
4	******	Open Elective-II	3	0	0		3	3	AEC
5	BEE02P4007	Industrial Internship (Min. 4 weeks)	0	0	0	1	1	0	SEC
6	BEE02P4008	Capstone Design Phase-I	0	0	0	7	7	0	SEC
			Total				20		

semester		**VII**							
S. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**S**	**Credits**	**Hours**	**Type**
1	BEE02P4006	Capstone Design phase - II	0	0	0	20	20	0	SEC
			Total				20		
		Total Credits of All Semesters	**160**						

Programme Elective Basket

School/Dept.		**DEECE**	**Program**				**B.Tech. EEE**		
Elective Basket		**Instrumentation and Control Engineering**							
S. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**S**	**Credits**	**Hours**	**Type**
1	G2UB611T	Advanced Control System	3	0	0	0	3	3	SEC
2	G2UB612T	Industrial Automation and Control	3	0	0	0	3	3	SEC
3	G2UB613T	Industrial Instrumentation and Automation	3	0	0	0	3	3	SEC
4	G2UB614T	Power System Operation and Control	3	0	0	0	3	3	SEC
5	G2UB615T	Digital Control	3	0	0	0	3	3	SEC
6	G2UB616T	Automation and Robotics	3	0	0	0	3	3	SEC
7	G2UB617T	Introduction to PLC and SCADA	3	0	0	0	3	3	SEC

Elective Basket		**Power Engineering**							
S. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**S**	**Credits**	**Hours**	**Type**
1	G2UB621T	Power System Equipments	3	0	0	0	3	3	SEC
2	G2UB601T	Power Quality	3	0	0	0	3	3	SEC
3	G2UB622T	FACTS and HVDC	3	0	0	0	3	3	SEC
4	G2UB623T	Energy Storage Systems	3	0	0	0	3	3	SEC
5	G2UB623T	Electrical and Hybrid Vehicle	3	0	0	0	3	3	SEC
6	G2UB624T	Modeling and Analysis of Electrical Machines	3	0	0	0	3	3	SEC
7	G2UB625T	Hydrogen Energy	3	0	0	0	3	3	SEC

8	G2UB626T	Smart grid cyber-security	3	0	0	0	3	3	SEC
9	G2UB627T	Energy efficient system.	3	0	0	0	3	3	SEC
10	G2UB628T	Introduction to Microgrid	3	0	0	0	3	3	SEC
11	G2UB629T	Power Plant Engineering	3	0	0	0	3	3	SEC
12	G2UB620T	Power System Deregulation	3	0	0	0	3	3	SEC

Elective Basket		**Energy Engineering**							
S. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**S**	**Credits**	**Hours**	**Type**
1	G2UB630T	Energy Assessment and Audit	3	0	0	0	3	3	SEC
2	G2UB631T	Utilization of Electrical Energy and Traction System	3	0	0	0	3	3	SEC
3	G2UB632T	Power Electronics applications in Renewable Energy	3	0	0	0	3	3	SEC
4	G2UB633T	Special Electrical Machine	3	0	0	0	3	3	SEC
5	G2UB634T	Energy Modelling Simulation Using MATLab	3	0	0	0	3	3	SEC

Elective Basket		**Renewable Energy Engineering**							
S. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**S**	**Credits**	**Hours**	**Type**
1	G2UB635T	Solar PV Techniques & Installation	3	0	0	0	3	3	SEC
2	G2UB601T	Renewable Energy	3	0	0	0	3	3	SEC
3	G2UB636T	Energy Storage Systems for EV	3	0	0	0	3	3	SEC
4	G2UB637T	Waste to Energy	3	0	0	0	3	3	SEC
5	G2UB638T	Impact of Energy Systems on Environments	3	0	0	0	3	3	SEC
6	G2UB639T	Energy Scenario and its Policy	3	0	0	0	3	3	SEC
7	G2UB602T	Battery Management System	3	0	0	0	3	3	SEC

Elective Basket		**Processing and Computing Techniques**							
S. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**S**	**Credits**	**Hours**	**Type**
1	G2UB640T	Machine learning	3	0	0	0	3	3	SEC
2	G2UB641T	Image Processing using MATLAB	3	0	0	0	3	3	SEC
3	G2UB642T	Introduction to Scilab and its applications	3	0	0	0	3	3	SEC
4	G2UB643T	Human Computer Interface	3	0	0	0	3	3	SEC
5	G2UB645T	Soft Computing	3	0	0	0	3	3	SEC
6	G2UB646T	Neural Networks and Fuzzy Control	3	0	0	0	3	3	SEC
7	G2UB647T	Deep Learning Algorithms	3	0	0	0	3	3	SEC
8	G2UB648T	Cloud Computing	3	0	0	0	3	3	SEC
9	G2UB649T	Neural Networks and Deep Learning Algorithms	3	0	0	0	3	3	SEC

Elective Basket		**IoT Technology**							
S. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**S**	**Credits**	**Hours**	**Type**
1	G2UB651T	Introduction to IoT and its Applications	3	0	0	0	3	3	SEC
2	G2UB652T	Virtual Reality	3	0	0	0	3	3	SEC
3	G2UB653T	Raspberry Pi and its applications	3	0	0	0	3	3	SEC
4	G2UB654T	Introduction to Arduino programming and its applications	3	0	0	0	3	3	SEC