

Gautam Buddha University
School of Engineering
Department of Electrical Engineering
5 Year Integrated B.Tech.+M.Tech./MBA Programme (Electrical Engineering) Batch 2019
onwards

SEMESTER-I					Course Type
S. No.	Subject Code	Courses	L-T-P	Credit	
THEORY					
1.	PH102	Engineering Physics	3-1-0	4	C
2.	MA101	Engineering Mathematics-I	3-1-0	4	C
3.	ME101	Engineering Mechanics	2-1-0	3	C
4.	CS101	Computer Programming-I	2-0-0	2	SEC
5.	EE102	Electrical Technology	2-1-0	3	C
6.	EN101	English Proficiency	2-0-0	2	AECC
7.	BS101	Human Values & Buddhist Ethics	2-0-0	2	AECC
PRACTICALS/PROJECT					
8.	PH104	Engineering Physics Lab	0-0-2	1	C
9.	ME102	Engineering Workshop	0-0-3	2	C
10.	CS181	Computer Programming Lab-I	0-0-2	1	SEC
11.	EE104	Electrical Technology Lab	0-0-2	1	C
12.	GP	General Proficiency	-	NC	
Total				25	
Total Contact Hours			29		

SEMESTER-II					Course Type
S. No.	Subject Code	Courses	L-T-P	Credit	
THEORY					
1.	CY101	Engineering Chemistry	3-1-0	4	C
2.	MA102	Engineering Mathematics-II	3-1-0	4	C
3.	ES101	Environment Studies	2-1-0	3	AECC
4.	CS102	Computer Programming-II	2-0-0	2	SEC
5.	EC101	Basic Electronics	2-1-0	3	C
6.	EN102	Professional Communication	2-0-0	2	AECC
7.		Open Elective	2-0-0	2	OEI
PRACTICALS/PROJECT					
8.	CY103	Engineering Chemistry Lab	0-0-2	1	C
9.	EC181	Basic Electronics Lab	0-0-2	1	C
10.	CE103	Engineering Graphics	0-0-3	2	C
11.	CS182	Computer Programming Lab-II	0-0-2	1	SEC
12.	GP	General Proficiency	-	NC	
Total				25	
Total Contact Hours			29		

15th BOS – July 19th 2019, Electrical Engineering Department, School of Engineering

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SEMESTER-III					Course Type
S. No.	Subject Code	Courses	L-T-P	Credit	
		THEORY			
1.	MA201	Engineering Mathematics-III	3-1-0	4	C
2.	EE201	Electrical Engineering Materials	2-0-0	2	C
3.	EE203	Network Theory	3-0-0	3	C
4.	EE221	Electrical Measurement and Measuring Instruments	3-0-0	3	C
5.	EE207	Electrical Machine-I	3-0-0	3	C
6.		GE	3-0-0	3	E-GE1
		PRACTICALS/PROJECT			
7.	EE233	Network Theory Lab	0-0-3	2	C
8.	EE211	Electrical Machine-I Lab	0-0-3	2	C
9.	EE231	Electrical Measurement and Measuring Instruments Lab	0-0-3	2	C
10.	GP	General Proficiency	-	NC	
		Total		24	
		Total Contact Hours	27		

GE: Generic Elective should be relevant subject selected from relevant department

- CS205 Data Structure and Algorithms
- EC202 Analog communication
- Or any other relevant subject offered

SEMESTER-IV					Course Type
S. No.	Subject Code	Courses	L-T-P	Credit	
		THEORY			
1.	MA202	Numerical and Statistical Analysis	3-1-0	4	C
2.	EE202	Measurement and Instrumentation	2-0-0	2	C
3.	EE204	Electromagnetic Field Theory	2-0-0	2	C
4.	EE226	Signals and Systems	3-0-0	3	C
5.	EE208	Power System-I	3-0-0	3	C
6.	EE210	Electrical Machine-II	3-0-0	3	C
		PRACTICALS/PROJECT			
7.	EE218	MATLAB Programming Lab	0-0-3	2	SEC
8.	EE214	Electrical Machine-II Lab	0-0-3	2	C
9.	EE216	Measurement and Measuring Instruments Lab	0-0-2	1	C
10.	GP	General Proficiency	-	NC	
		Total		22	
		Total Contact Hours	27		

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SEMESTER-V					Course Type
S. No.	Subject Code	Courses	L-T-P	Credit	
		THEORY			
1.	EE301	Power System-II	3-0-0	3	C
2.	EE303	Electronic Devices & Circuits	3-0-0	3	C
3.	EE305	Control System-I	3-0-0	3	C
4.	EE307	Communication System	3-0-0	3	C
5.	EE309	Power Electronics	3-0-0	3	C
6.		Open Elective	3-0-0	3	OE2
		PRACTICALS/PROJECT			
7.	EE313	Control System Lab	0-0-3	2	C
8.	EE317	Electronic Devices & Circuits Lab	0-0-3	2	C
9.	EE319	Power Electronics Lab	0-0-3	2	C
10.	GP	General Proficiency	-	NC	
		Total		24	
		Total Contact Hours	27		

Open Elective (OE2): Course offered from other school

SEMESTER-VI					Course Type
S. No.	Subject Code	Courses	L-T-P	Credit	
		THEORY			
1.	EE302	Electric Drives	3-0-0	3	C
2.	EE304	Switchgear and Protection	3-0-0	3	C
3.	EE306	Digital Electronics	3-0-0	3	C
4.	EE308	Control System-II	3-0-0	3	C
5.	EE310	Digital Signal Processing	3-0-0	3	C
6.	CE318	Disaster Management	2-0-0	2	E-GE2
		PRACTICALS/PROJECT			
7.	EE322	Switchgear and Protection Lab	0-0-3	2	C
8.	EE344	Digital Electronics Lab	0-0-3	2	C
9.	EE366	Electric Drives Lab	0-0-3	2	C
10.	GP	General Proficiency	-	NC	
		Total		23	
		Total Contact Hours	25		

GE: Generic Elective should be relevant subject selected from relevant department

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SEMESTER-VII					Course Type
S. No.	Subject Code	Courses	L-T-P	Credit	
THEORY					
1.	MA406/ MA507/ MA402/ ME401	Operation Research/ Optimization Techniques/ Modelling & Simulation/ Power Plant Engineering	3-1-0	4	E-GE3
2.	EE401	Microprocessor & Microcontroller	3-0-0	3	C
3.	EE571	Power System Analysis and Control	3-0-0	3	C
4.		Elective-I	3-0-0	3	EDSE1
5.		Elective-II	3-0-0	3	EDSE2
6.		Elective-III	3-0-0	3	EDSE3
PRACTICALS/PROJECT					
7.	EE591	Power System Lab	0-0-3	2	C
8.	EE499	Microprocessor & Microcontroller Lab	0-0-3	2	C
9.	EE597	Seminar	0-0-3	2	SEC
10.	GP	General Proficiency	-	NC	
		Total		25	
		Total Contact Hours	27		

SEMESTER-VIII (Specialization in M. Tech. PS/PED/I&C)					Course Type
S. No.	Subject Code	Courses	L-T-P	Credit	
		Total		23	
		M. Tech. II semester curriculum			

SUMMER SEMESTER (AFTER VIII SEMESTER)					Course Type
S. No.	Subject Code	Courses	L-T-P	Credit	
1.	EE600	Summer Project/Industrial Training		2	EDP-1
		Total		2	
		Total Contact Hours			

SEMESTER-IX (Specialization in M. Tech. PS/PED/I&C)					Course Type
S. No.	Subject Code	Courses	L-T-P	Credit	
		Total		22	
		M. Tech. III semester curriculum			

SEMESTER-X (Specialization in M. Tech. PS/PED/I&C)					Course Type
S. No.	Subject Code	Courses	L-T-P	Credit	
		Total		22	
		M. Tech. IV semester curriculum			

Open Elective: Course offered from other school

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Open Elective: Course offered from other school

List of Electives for Integrated B.Tech.+M.Tech./MBA (EE)

Elective-I, II & III

1. EE407: Utilization of Electric Power & SCADA System (Credits:3-0-0)
2. EE423: Transducers in Instrumentation (Credits:3-0-0)
3. EE425: Ultrasonic, Laser and Fiber Optics based Instrumentation (Credits:3-0-0)
4. EE427: Microelectronics Technology (Credits:3-0-0)
5. EE579: Failure Data Organization and Analysis (Credits:3-0-0)
6. EE581: Restructured Power System (Credits:3-0-0)
7. EE575: Renewable & Non-Conventional Energy Sources (Credits:3-0-0)
8. EE585: Power Converters and its Applications (Credits:3-0-0)
9. EE573: Power System Transients (Credits:3-0-0)
10. EE551: Introduction to MEMS (Credits:3-0-0)
11. EE543: Embedded System (Credits:3-0-0)
12. EE531: Advance Instrumentation (Credits:3-0-0)
13. EE535: Optimal Control Theory (Credits:3-0-0)
14. EE533: Advance Process Control (Credits:3-0-0)
15. EE501: Power Electronics Devices and Magnetics (Credits:3-0-0)
16. EE503: Modeling of Electrical Apparatus (Credits:3-0-0)
17. EE505: DC Power Converters (Credits:3-0-0)
18. EE437: Project Engineering & Management (Credits:3-0-0)
19. EE441: Low Power VLSI Circuits & Systems (Credits:3-0-0)
20. EE443: Introduction to VLSI (Credits:3-0-0)
21. EE445: Utilization of Electrical Energy and Traction (Credits:3-0-0)
22. EE453: High Voltage Engineering (Credits:3-0-0)
23. EE455: Computer Application to Electrical Engineering (Credits:3-0-0)
24. EE457: Research Methodology for Electrical Engineering (Credits:3-0-0)
25. EE775: Renewable Energy Sources (Credits:3-0-0)
26. M. Tech. (Power System) Electives; M. Tech. (PED) Electives; M. Tech. (I &C) Electives Courses.

Vsingh *Shabana* *SR*