



Gokaraju Rangaraju Institute of Engineering and Technology

(Autonomous)

Bachupally, Kukatpally, Hyderabad – 500 090, India. (040) 6586 4440

ELECTRONICS AND COMMUNICATION ENGINEERING

I B.Tech(ECE)						I Semester					
Catego ry	Subject code	Name of subject	Credits			Total credi ts	Hours			Tota l Hou rs	Total Mar ks
			L	T	P		L	T	P		
BS	GR17A10 01	Linear Algebra and Single Variable Calculus	2	1		3	2	2		4	100
BS	GR17A10 02	Advanced Calculus	2	1		3	2	2		4	100
BS	GR17A10 08	Engineering Chemistry	2	1		3	2	2		4	100
HS	GR17A10 05	English	2	1		3	2	2		4	100
ES	GR17A10 18	Basic Electrical Engineering	2	1		3	2	2		4	100
ES	GR17A10 09	Computer Programming	2	1		3	2	2		4	100
ES	GR17A10 26	IT Workshop			2	2			4	4	75
BS	GR17A10 30	Engineering Chemistry lab			2	2			4	4	75
ES	GR17A10 27	Computer Programming lab			2	2			4	4	75
Total			1 2	6	6	24	1 2	1 2	1 2	36	825

I B.Tech(ECE)						II Semester					
Catego ry	Subject code	Name of subject	Credits			Total credi ts	Hours			Tota l Hou rs	Total Mar ks
			L	T	P		L	T	P		
BS	GR17A10 03	Transform Calculus and Fourier Series	2	1		3	2	2		4	100
BS	GR17A10 04	Numerical Methods	2	1		3	2	2		4	100
BS	GR17A10 07	Engineering Physics	2	1		3	2	2		4	100
ES	GR17A10 10	Data Structures	2	1		3	2	2		4	100

ES	GR17A10 23	Engineering Graphics	1		2	3	1		4	5	100
ES	GR17A10 19	Fundamentals of Electronics Engineering	2	1		3	2	2		4	100
HS	GR17A10 24	Business Communicatipon and Soft Skills			2	2			4	4	75
ES	GR17A10 25	Engineering Workshop			2	2			4	4	75
BS	GR17A10 29	Engineering Physics lab			2	2			4	4	75
Total			1 1	5	8	24	1 1	1 0	1 6	37	825

II B.Tech(ECE)						I Semester					
Catego ry	Subject code	Name of subject	Credits			Total credi ts	Hours			Tota l Hou rs	Total Mar ks
			L	T	P		L	T	P		
PC	GR17A20 47	Electrical Circuits	2	1		3	2	2		4	100
PC	GR17A20 48	Electronic Circuit Analysis	3	1		4	3	2		5	100
PC	GR17A20 49	Signals and Systems	3	1		4	3	2		5	100
PC	GR17A20 50	Probability Theory and Stochastic Processes	2	1		3	2	2		4	100
PC	GR17A20 43	Digital Electronics	3	1		4	3	2		5	100
PC	GR17A20 51	Electronics Circuits Analysis Lab			2	2			4	4	75
PC	GR17A20 52	Signals and Systems Lab			2	2			4	4	75
PC	GR17A20 53	Digital Electronics Lab			2	2			4	4	75
Total			1 3	5	6	24	1 3	1 0	1 2	35	725
MC	GR17A20 02	Value Education and Ethics					2	2		4	100
MC	GR17A21 06	Gender sensitization Lab			2	2			2	2	75

II B.Tech(ECE)						II Semester					
Catego ry	Subject code	Name of subject	Credits			Total credi ts	Hours			Tota l Hou rs	Total Mark s
			L	T	P		L	T	P		

PC	GR17A2054	Electromagnetic Theory and Transmission Lines	3	1		4	3	2		5	100
PC	GR17A2055	Microcontrollers	3	1		4	3	2		5	100
PC	GR17A2056	Analog Communications	2	1		3	2	2		4	100
PC	GR17A2057	Analog Electronics	3	1		4	3	2		5	100
PC	GR17A2058	Special functions and Complex variables	2	1		3	2	2		4	100
PC	GR17A2059	Microcontrollers Lab			2	2			4	4	75
PC	GR17A2060	Analog Communications Lab			2	2			4	4	75
PC	GR17A2061	Analog Electronics Lab			2	2			4	4	75
Total			13	5	6	24	13	10	12	35	725
MC	GR17A2001	Environmental Science			2	2			2	2	100

III B.Tech(ECE)			I Semester								
Group	Sub-Code	Name Of Subject	Credits			Total credits	Hours			Total Hours	Total Marks
			L	T	P		L	T	P		
PC	GR17A3042	Antennas and Wave Propagation	2	1		3	2	2		4	100
PC	GR17A3041	Digital Communications	3	1		4	3	2		5	100
PC	GR17A3043	VLSI Design	3	1		4	3	2		5	100
Open Elective 1			2	1		3	2	2		4	100
Professional Elective 1			3	1		4	3	2		5	100
PE	GR17A3104	Linear Control Systems									
PE	GR17A3109	Modeling and Simulation of Communication Systems									
PE	GR17A2063	Database Management Systems									
PC	GR17A3045	Digital Communications Lab			2	2			4	4	75
PC	GR17A3044	VLSI Design Lab			2	2			4	4	75
PC	GR17A3100	Advanced English Communication Skills Lab			2	2			4	4	75
Total			13	5	6	24	13	10	12	35	725

III B.Tech(ECE)			II Semester							
Group	Sub-Code	Name Of Subject	Credits			Total credits	Hours			Total Marks
			L	T	P		L	T	P	
HS	GR17A2104	Managerial Economics and Financial Analysis	2	1		3	2	2		100
PC	GR17A3048	Microwave Engineering	3	1		4	3	2		100
PC	GR17A3046	Digital Signal Processing	3	1		4	3	2		100
Open Elective 2			2	1		3	2	2		100
Professional Elective 2			3	1		4	3	2		100
PE	GR17A2077	Computer Networks								
PE	GR17A3110	Information Theory and Coding								
PE	GR17A3113	Principles of Software Engineering								
PC	GR17A3049	Digital Signal Processing Lab			2	2			4	75
PC	GR17A2072	Object Oriented Programming through Java Lab			2	2			4	75
PC	GR17A3101	Industry Oriented Mini Project			2	2			4	75
Total			13	5	6	24	13	10	12	725

IV B.Tech(ECE)			I Semester							
Group	Sub-Code	Name Of Subject	Credits			Total credits	Hours			Total Marks
			L	T	P		L	T	P	
PC	GR17A3102	Management Science	3	1		4	3	2		100
PC	GR17A4060	Cellular Mobile Communications	2	1		3	2	2		100
PC	GR17A4154	Embedded Systems Design	3	1		4	3	2		100
Open Elective 3			2	1		3	2	2		100
Professional Elective 3			3	1		4	3	2		100
PE	GR17A4059	Electronic Measurements and Instrumentation								
PE	GR17A4072	Digital Signal Processors and Architectures								
PE	GR17A4150	Modern Control Systems								

PC	GR17A4066	Microwave Engineering Lab			2	2			4	4	75
PC	GR17A4068	Embedded Systems Design Lab			2	2			4	4	75
PC	GR17A4067	Communication Protocols Lab			2	2			4	4	75
Total			13	5	6	24	13	10	12	35	725

IV B.Tech(ECE)			II Semester								
Group	Sub-Code	Name Of Subject	Credits			Total credits	Hours			Total Hours	Total Marks
			L	T	P		L	T	P		
PC	GR17A4069	Digital Image Processing	2	1		3	2	2		4	100
Professional Elective 4			3	1		4	3	2		5	100
PE	GR17A4070	Radar Systems									
PE	GR17A4061	Optical Communications									
PE	GR17A4063	Wireless Communication and Networks									
Professional Elective 5			2	1		3	2	2		4	100
PE	GR17A4151	Principles of cloud Computing									
PE	GR17A4152	Audio and Video Engineering									
PE	GR17A4153	Radio Navigational Aids									
PC	GR17A4076	Digital Image Processing Lab			2	2			4	4	75
SPW	GR17A4142	Comprehensive Viva Voce			1	1			2	2	100
SPW	GR17A4143	Seminar			1	1			2	2	100
SPW	GR17A4144	Major Project			10	10			14	14	200
Total			7	3	4	24	7	6	22	35	775