

I YEAR I SEMESTER

Sl. No.	Course Code	Course Category	Subject Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	201HB101	BSC	Mathematics-I	3	0	0	3	30	70	100
2	201HB102	HSMC	Communicative English	3	0	0	3	30	70	100
3	201HB103a	BSC	Applied Physics	3	0	0	3	30	70	100
4	201CS104	ESC	Problem Solving & Programming in C	3	0	0	3	30	70	100
5	201EC105	ESC	Introduction to Electronics Engineering	3	0	0	3	30	70	100
6	201HB196	MS	Environmental science	2	0	0	0	100	0	100
7	201HB111a	BSC	Applied Physics Laboratory	0	0	3	1.5	50	50	100
8	201CS112	ESC	Problem Solving & Programming in C Laboratory	0	0	3	1.5	50	50	100
9	201ME113a	ESC	Electronic Engineering Workshop	0	0	3	1.5	50	50	100
TOTAL				17	0	09	19.5	400	500	900
BSC-7.5 ESC-9 HSMC-3										

NH-16, Chaitanya Knowledge City, Rajahmundry

I YEAR - II SEM (GRBT20) (4 SEM)[illegible]

II YEAR I SEMESTER

Sl. No.	Course Code	Course Category	Subject Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	201HB301	BSC	Mathematics-III	3	1	0	3	30	70	100
2	201EC302	PCC	Electronic Devices and Circuits	3	1	0	3	30	70	100
3	201EC303	PCC	Network Analysis	3	1	0	3	30	70	100
4	201EC304	PCC	Switching Theory and Logic Design	3	1	0	3	30	70	100
5	201EC305	PCC	Signals and Systems	3	1	0	3	30	70	100
6	201CS311	PCC	Programming with Java Lab	0	0	3	1.5	50	50	100
7	201EC312	PCC	Electronic Devices and Circuits Lab	0	0	3	1.5	50	50	100
8	201EE313	PCC	Network Analysis Lab	0	0	3	1.5	50	50	100
9	201HB381	SOC	English for career	1	0	2	2	-	-	-
TOTAL				16	5	11	21.5	300	500	800
BSC 3	PCC 16.5	SOC 2								

II YEAR II SEMESTER

Sl. No.	Course Code	Course Category	Subject Title	Periods per week			Credits	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	201EC401	PCC	Electronic Circuit Analysis	3	1	0	3	30	70	100
2	201EC402	PCC	Analog Communications	3	1	0	3	30	70	100
3	201EC403	ESC	Random Variable and Stochastic Process	3	1	0	3	30	70	100
4	201EC404	PCC	Electromagnetic Waves And Transmission Lines	3	1	0	3	30	70	100
5	201EC405	HSS	Managerial Economics And Financial Analysis	3	1	0	3	30	70	100
6	201EC411	PCC	Electronic Circuit Analysis Lab	0	0	3	1.5	50	50	100
7	201EC412	PCC	Analog Communication Lab	0	0	3	1.5	50	50	100
8	201EC413	PCC	Switching Theory and Logic Design Lab	0	0	3	1.5	50	50	100
9	201CS481A	SOC	Programming with Python Lab	0	1	2	2	-	50	50
10	201CE491	MC	Constitution of India	2	0	0	-	30	70	100
TOTAL				17	6	11	21.5	330	620	950
HSS 3	PCC 13.5	ESC 3	SOC 2							

III YEAR - I SEMESTER COURSE STRUCTURE (GRBT20)

S. No.	Course Code	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	201EC501	PC	Linear and Digital IC Applications	3	1	0	3	30	70	100
2	201EC502	PC	Digital Communications	3	1	0	3	30	70	100
3	201EC503	PC	Antenna and Wave Propagation	3	1	0	3	30	70	100
4	201EC564A	PE	Professional Elective-1 a. Electronic Measurements and Instrumentation	3	1	0	3	30	70	100
	201EC564B		b. Control Systems							
	201EC564C		c. Computer Architecture & Organization							
	201EC564D		d. Artificial Neural Networks							
5	201CE565a	OE	Open Elective – 1 a. Environmental pollution & control	3	1	0	3	30	70	100
	201EE565a		b. Fundamentals of Utilization of Electrical Energy							
	201ME565a		c. Robotics							
	201EC565a		d. Microprocessor and its interfacing							
	201CS565a		e. Foundations of operating systems							
	201PT565a		f. Fundamentals of Petroleum Engineering							
	201MM565a		g. Elements of Mining Technology							
	201AM565a		h. Basic automobile Engineering							
	201MB565a		i. Principles of Management							
6	201HB591	MC	Quantitative Aptitude and Reasoning	2	0	0	-	30	70	100
7	201EC511	PC	Linear and Digital IC Applications Lab	0	0	3	1.5	50	50	100
8	201EC512	PC	Digital Communications Lab	0	0	3	1.5	50	50	100
9	201EC581	SOC	Analog and Digital Circuit Design Using Multisim	1	0	2	2	-	50	50
10	201EC531		Internship (Mandatory) after second year (to be evaluated during V semester)	0	0	0	1.5	100	-	100
			Total				21.5	380	570	950
			Honors / Minor courses (The hours distribution can be 3-0-2 or 3-1-0 also)	4	0	0	4			

III YEAR – II SEMESTER COURSE STRUCTURE (GRBT20)

S. No.	Course Code	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	201EC601	PC	Microprocessors and Microcontrollers	3	1	0	3	30	70	100
2	201EC602	PC	Digital Signal Processing	3	1	0	3	30	70	100
3	201EC603	PC	Microwave & Optical Communication Engineering	3	1	0	3	30	70	100
4	201EC664A	PE	Professional Elective-2 Radar Engineering	3	1	0	3	30	70	100
	201EC664B		Mobile & Cellular Communication							
	201EC664C		Digital Image Processing							
	201EC664D		VLSI Design							
5	201CE665a	OE	Open Elective – 2 a. Solid Waste Management	3	1	0	3	30	70	100
	201EE665b		b. Concepts of power system engineering							
	201ME665c		c. Introduction to MEMS							
	201EC665d		d. IoT and its Applications							
	201CS665e		e. Fundamentals of Databases							
	201PT665f		f. Basic Concepts in petroleum drilling Engineering							
	201MM665g		g. Open Pit Slope analysis and design							
	201AM665h		h. Hybrid and electric vehicles							
	201MB665i		i. Operations Management							
6	201MB691	MC	IPR and Patents	2	0	0	-	30	70	100
7	201EC611	PC	Microwave & Optical Communication Engineering Lab	0	0	3	1.5	50	50	100
8	201EC612	PC	Microprocessors and Microcontrollers Lab	0	0	3	1.5	50	50	100
9	201EC613	PC	Digital Signal Processing Lab	0	0	3	1.5	50	50	100
10	201EC681	SAC	ARM based / Arduino based Programming	0	1	2	2	-	50	50
TOTAL							21.5	330	620	950
Honors/Minor courses (The hours distribution can be 3-0-2 or 3-1-0also)				4	0	0	4			
Internship (Mandatory) 2 Months during summer vacation										

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IV YEAR - I SEMESTER COURSE STRUCTURE (GRBT20)

S. No.	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
			L	T	P		Int.	Ext.	Total
1	PE	Professional Elective – 3 Wireless Sensor Networks Software Defined Radio Cognitive Radio Information Theory and Coding	3	1	0	3	30	70	100
2	PE	Professional Elective – 4 Embedded System Design Real time operating systems Digital Signal Processors and Architecture Soft Computing Techniques	3	1	0	3	30	70	100
3	PE	Professional Elective – 5 Internet of Things and Cloud Computing Digital IC Design using CMOS Computer Networks Pattern Recognition & Machine Learning	3	1	0	3	30	70	100
4	OE	Open Elective – 3	3	0	0	3	30	70	100
5	OE	Open Elective – 4	3	0	0	3	30	70	100
6	HSSE	UHV – 2	3	0	0	3	30	70	100
7	SAC	VLSI Lab	1	0	2	2	-	50	100
8	Industrial Internship	Internship 2 Months (Mandatory) after third year (to be evaluated during VII semester)	0	0	0	3	100	-	100
TOTAL						23	280	470	750
Honors / Minor courses (The hours distribution can be 3-0-2 or 3-1-0)			4	0	0	4			

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IV YEAR - II SEMESTER COURSE STRUCTURE (GRBT20)

S. No.	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
			L	T	P		Int.	Ext.	Total
1	Major Project	Project Project work, seminar and internship in Industry	0	0	4	12	60	140	200
Total						12	60	140	200

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
LIST OF OPEN ELECTIVE SUBJECTS (GRBT20)

III B.Tech – I Sem	III B.Tech – II Sem
1. Fundamentals of Utilization of Electrical Energy 2. Robotics 3. Microprocessors and Microcontrollers (ECE) 4. Fundamentals of Petroleum Engineering 5. Elements of Mining Technology 6. Basic Automobile Engineering 7. Environmental Pollution & Control	1. Concepts of Power System Engineering 2. Introduction to MEMS 3. IoT and its Applications (ECE) 4. Basic Concepts in Drilling Engineering 5. Open Pit Slope Analysis and Design 6. Hybrid and Electric Vehicles 7. Solid Waste Management

IV B.Tech - I Sem	IV B.Tech - I Sem
1) Fundamentals of Smart Grid Technologies 2) Nano Technology and its Applications 3) Embedded Systems (ECE) 4) Introduction to Petroleum Production Engineering 5) Dimensional Stone Mining 6) Modern Vehicle Technology 7) Global Environmental Problems & Policies	1) Basics of Electrical Measurements and Instrumentation 2) Introduction to Operations Research 3) Digital Image Processing (ECE) 4) Basic concepts in petroleum reservoir engineering 5) Remote Sensing & GIS in Mining 6) Alternative Energy Resources for Automotives 7) Urban Transportation Planning