



GRBT20 - COURSE STRUCTURE
I B.Tech – I Semester

S. No.	Course Category	Course code	Subject Title	Hours			Credits	Internal	External	Total
				L	T	P				
1	BSC		Mathematics - I	3	0	0	3	30	70	100
2	HSMC		Communicative English - I	3	0	0	3	30	70	100
3	BSC		Applied Physics	3	0	0	3	30	70	100
4	ESC		Introduction to Electronics Engineering	3	0	0	3	30	70	100
5	ESC		Problem Solving & Programming in C	3	0	0	3	30	70	100
6	BSC		Applied Physics Laboratory	0	0	3	1.5	50	50	100
7	ESC		Electronic Engineering workshop	0	0	3	1.5	50	50	100
8	ESC		Problem Solving & Programming in C Lab	0	0	3	1.5	50	50	100
9	MC		Environmental Science	2	0	0	0	100*	0	100
TOTAL				17	0	9	19.5	400	500	900
BSC = 7.5 ESC = 9 HSMC = 3										

 Dr M Sailaja University Nominee	 Dr P Rajesh Kumar Subject Expert	 Mr S Surya Sankar Industrial Exper
 Dr B Srinivas Raja Chairman - BoS	 Dr SVRK Rao BoS Member - Internal	 Dr Sandip Swarnakar BoS Member - Internal
 Mr Biswaranjan Bariçk BoS Member - Internal	 Mr G Vinod BoS Member - Internal	 Mrs M Sarita Devi BoS Member - Internal



GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY GUNTUR

(AUTONOMOUS)

Approved by AICTE, Accredited by NBA & NAAC 'A' Grade, Recognized under 2(f) and 12(b) of UGC, Permanently Affiliated to JNTUK, Kakinada

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

4 Years B.Tech. (Electronics and Communication Engineering) Course Structure: (2019-20)

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		PCC	Electronic Devices and Circuits	3	1	0	3	30	70	100
2		PCC	Network Analysis	3	1	0	3	30	70	100
3		PCC	Switching Theory and Logic Design	3	1	0	3	30	70	100
4		PCC	Signals and Systems	3	1	0	3	30	70	100
5		BSC	Mathematics-III	3	1	0	3	30	70	100
6		PCC	Programming with Java Lab	0	0	3	1.5	50	50	100
7		PCC	Electronic Devices and Circuits Lab	0	0	3	1.5	50	50	100
8		PCC	Network Analysis Lab	0	0	3	1.5	50	50	100
9		SOC	English for career	0	1	2	2	-	50	50
TOTAL				15	6	11	21.5	300	550	850
BSC 3	PCC 16.5	SOC 2								

Dr. M. Sailaja
(University Nominee)

Dr. P. Rajesh Kumar
(Subject Expert)

Mr. S. Surya Shankar
(Industrial Expert)

Dr. B. Srinivas Raja
(Chairman, BOS)

Dr. S. V. R. K. Rao
(Member, BOS)

Dr. A.V. Pratap Kumar
(Member, BOS)

Mr. Biswaranjan Barik
(Member, BOS)

Mrs. R. Jyothi
(Member, BOS)

Mr. G. V. Vinod
(Member, BOS)



GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY GRBT-19

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING


4 Years B.Tech. (Electronics and Communication Engineering) Course Structure: (2019-20)

II YEAR II SEMESTER

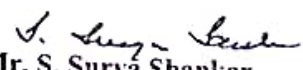
Sl. No.	Course Code	Course Category	Subject Title	Periods per-week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1		PCC	Electronic Circuit Analysis	3	1	0	3	30	70	100
2		PCC	Analog Communications	3	1	0	3	30	70	100
3		ESC	Random Variable and Stochastic Process	3	1	0	3	30	70	100
4		PCC	Electromagnetic Waves And Transmission Lines	3	1	0	3	30	70	100
5		HSS	Managerial Economics And Financial Analysis	3	1	0	3	30	70	100
6		PCC	Electronic Circuit Analysis Lab	0	0	3	1.5	50	50	100
7		PCC	Analog Communication Lab	0	0	3	1.5	50	50	100
8		PCC	Switching Theory and Logic Design Lab	0	0	3	1.5	50	50	100
9		SOC	Programming with Python Lab	0	1	2	2	-	50	50
10		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							


Dr. M. Sailaja

(University Nominee)


Dr. P. Rajesh Kumar

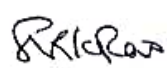
(Subject Expert)


Mr. S. Surya Shankar

(Industrial Expert)


Dr. B. Srinivasa Raja

(Chairman, BOS)


Dr. S. V. R. K. Rao

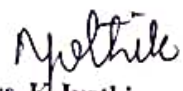
Member, BOS)

Dr. A.V. Pratap Kumar


(Member, BOS)


Mr. Biswaranjan Barik

(Member, BOS)


Mrs. K. Jyothi

(Member, BOS)

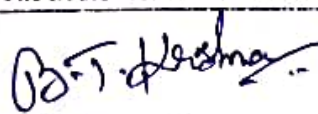

Mr. G. V. Vinod

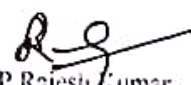
(Member, BOS)

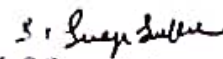


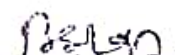
III YEAR - I SEMESTER COURSE STRUCTURE (GRBT20)

S. No.	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
			L	T	P		Int.	Ext.	Total
1	PC	Linear and Digital IC Applications	3	0	0	3	30	70	100
2	PC	Digital Communications	3	0	0	3	30	70	100
3	PC	Antenna and Wave Propagation	3	0	0	3	30	70	100
4	OE	Open Elective - 1	3	0	0	3	30	70	100
5	PE	Professional Elective-I	3	0	0	3	30	70	100
		a. Electronic Measurements and Instrumentation							
		b. Control Systems							
		c. Computer Architecture Organization							
6	PC	Linear and Digital IC Applications Lab	0	0	3	1.5	50	50	100
7	PC	Digital Communications Lab	0	0	3	1.5	50	50	100
8	SAC	Analog and Digital Circuit Design Using Multisim	0	1	2	2	-	50	50
9		Internship (Mandatory) after second year (to be evaluated during V semester)	0	0	0	1.5	100	-	100
10	MC	Quantitative Aptitude and Reasoning	2	0	0	-	30	70	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			


Dr. B T Krishna
(University Nominee)

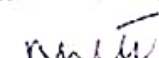

Dr. P. Rajesh Kumar
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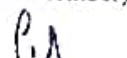

Mr. S. Surya Sankar
(Industrial Expert)

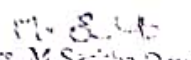

Dr. B. Srinivas Raja
(Chairman, BOS)


Dr. S. V. R. K. Rao
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Dr. Biswarangan Sarik
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Mrs. K. Jyothi
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Mr. G. V. Vinod
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Mrs. M. Saritha Devi
(BOS Member)



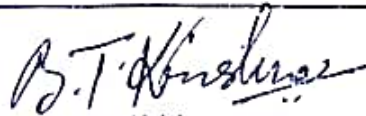
GODAVARI INSTITUTE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

NH-16, Chaitanya Knowledge City, Rajahmundry

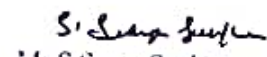
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

III YEAR – II SEMESTER COURSE STRUCTURE (GRBT20)

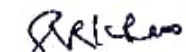
S. No.	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
			L	T	P		Int.	Ext.	Total
1	PC	Microprocessors and Microcontrollers	3	1	0	3	30	70	100
2	PC	Digital Signal Processing	3	1	0	3	30	70	100
3	PC	Microwave & Optical Communication Engineering	3	1	0	3	30	70	100
4	OE	Open Elective – 2	3	1	0	3	30	70	100
5	PE	Professional Elective-2 Radar Engineering Mobile & Cellular Communication Digital Image Processing VLSI Design	3	1	0	3	30	70	100
6	PC	Microwave & Optical Communication Engineering Lab	0	0	3	1.5	50	50	100
7	PC	Microprocessors and Microcontrollers Lab	0	0	3	1.5	50	50	100
8	PC	Digital Signal Processing Lab	0	0	3	1.5	50	50	100
9	SAC	ARM based / Arduino based Programming	0	1	2	2	-	50	50
10	MC	IPR and Patents	2	0	0	-	30	70	100
TOTAL						21.5	330	570	950
Honors /Minor courses (The hours distribution can be 3-0-2 or 3-1-0 also)			4	0	0	4			
Internship (Mandatory) 2 Months during summer vacation									


Dr. B T Krishna
(University Nominee)


Dr. P. Rajesh Kumar
(Subject Expert)

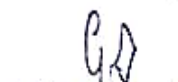

Mr. S. Surya Sankar
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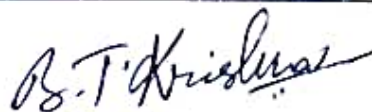

Mrs. K. Jyothi
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Mr. G. V. Vinod
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Mrs. M. Saritha Devi
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IV YEAR - I SEMESTER COURSE STRUCTURE (GRBT20)

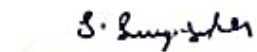
S. No.	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
			L	T	P		Int.	Ext.	Total
1	PE	Professional Elective – 3 Wireless Sensor Networks Software Defined Radio Cognitive Radio Information Theory and Coding	3	1	0	3	30	70	100
2	PE	Professional Elective – 4 Embedded System 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	Verilog /HDL Programming 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			




Dr. B T Krishna
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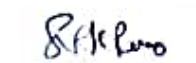
Dr. P. Rajesh Kumar
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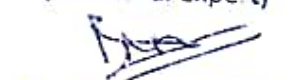
Mr. S. Surya Sankar
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(Chairman, BOS)



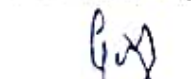
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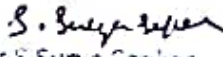


IV YEAR - II SEMESTER COURSE STRUCTURE (GRBT20)

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


Dr. B T Krishna
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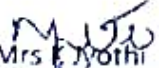

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LIST OF OPEN ELECTIVE SUBJECTS (GRBT20)

III B.Tech – I Sem (Open Elective -1)

SNO	Name of the Branch	Name of the subject
1	Civil	Environmental Pollution & Control
2	EEE	Fundamentals of Utilization of Electrical Energy
3	MECH	Robotics
4	ECE	Microprocessors and its interfacing
5	CSE, CSC, CSM	Foundations of Operating Systems
6	Petroleum	Fundamentals of Petroleum Engineering
7	Mining	Elements of Mining Technology
8	Automobile	Basic Automobile Engineering
9	MBA	Principles of Management

III B.Tech -- II Sem (Open Elective -2)

SNO	Name of the Branch	Name of the subject
1	Civil	Solid Waste Management
2	EEE	Concepts of Power System Engineering
3	MECH	Introduction to MEMS
4	ECE	IoT and its Applications
5	CSE, CSC, CSM	Fundamentals of Databases
6	Petroleum	Basic Concepts In Petroleum Drilling Engineering
7	Mining	Open Pit Slope Analysis and Design
8	Automobile	Hybrid and Electric Vehicles
9	MBA	Operations Management



LIST OF OPEN ELECTIVE SUBJECTS (GRBT20)

IV B.Tech – I Sem (Open Elective -3)

SNO	Name of the Branch	Name of the subject
1	Civil	Building Technology
2	EEE	Fundamentals of smart grid technologies
3	MECH	Nano Technology and its Applications
4	ECE	Introduction to Embedded Systems
5	CSE, CSC, CSM	Information Security
6	Petroleum	Introduction to Petroleum Production Engineering
7	Mining	Mining and Its Importance
8	Automobile	Modern Vehicle Technology
9	MBA	Entrepreneurship for Engineers

IV B.Tech – I Sem (Open Elective -4)

SNO	Name of the Branch	Name of the subject
1	Civil	Safety Engineering
2	EEE	Basics of Electrical Measurements and Instrumentation
3	MECH	Introduction to Operations Research
4	ECE	Fundamentals of Digital Image Processing
5	CSE, CSC, CSM	Human Computer Interaction
6	Petroleum	Basic concepts in petroleum reservoir engineering
7	Mining	Remote Sensing & GIS in Mining
8	Automobile	Alternative Energy Resources for Automotives
9	MBA	Digital Marketing