GOVERNMENT COLLEGE OF ENGINEERING, AMRAVATI

DEPARTMENT OF ELECTRONICS ENGINEERING

Curriculum for Second Year

B. Tech. (Electronics and Telecommunication)

2020-2021

Specialization: Electronics and Telecommunication

PROGRAM OBJECTIVES

PO1: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems

PO2: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences

PO3: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PO12: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

(B) PROGRAM SPECIFIC OUTCOMES (PSOs)

A Graduate of the Electronics and Telecommunication program will be able to:

PSO1: Apply the concepts of Analog and Digital Electronics, Microprocessors, Signal processing and communication engineering in design and implementation of Engineering Systems.

PSO2: Solve complex problems in the field of Electronics and telecommunication using latest hardware and software tools along with analytical and managerial skills

PSO3: Acquire the social and environmental awareness with ethical responsibility to have successful carrier

GOVERNMENT COLLEGE OF ENGINEERING, AMRAVATI.
Department of Electronics Engineering.
Scheme for B. Tech. (Electronics and Telecommunication)

SEMESTER-III

Category	Course Code	Name of the Course	Teaching Scheme					Evaluation Scheme					Credit
								Theory		Practical		Total	
			Theory Hrs/week	Tutorial Hrs/week	Practical Hrs/week	Total	TA	MSE	ESE	ICA	ESE		
BSC	SHU321C *SHU322C	Transform And Statistical Methods *Integral Calculus And Probability	3	1	0	4	10	30	60	---	---	100	4
PCC	ETU321	Electronic Devices and Circuits	3	1	0	4	10	30	60	---	---	100	4
PCC	ETU322	Signals and Systems	3	0	0	3	10	30	60	---	---	100	3
PCC	ETU323	Digital Electronics	3	0	0	3	10	30	60	---	---	100	3
PCC	ETU324	Network Theory	3	1	0	4	10	30	60	---	---	100	4
MC	SHU323	Introduction to Constitution of India	1	--	--	1	20	---	30	---	---	50	--
PCC	ETU325	Electronics Devices and Circuits Lab.	0	0	2	2	---	---	---	25	25	50	1
PCC	ETU326	Signal and Systems Lab.	0	0	2	2	---	---	---	25	25	50	1
PCC	ETU327	Digital Electronics Lab.	0	0	2	2	---	---	---	25	25	50	1
PCC	ETU328	Computer Programming Lab.	0	0	2	2	---	---	---	25	25	50	1
	Total		16	3	8	27	70	150	330	100	100	750	22

TA: Teacher Assessment MSE: Mid Semester Examination ESE: End Semester Examination ICA: Internal Continuous Assessment
ESE Duration for Theory: 2.30Hrs.

*For direct second year admitted students

SST

SEMESTER-IV

Category	Course Code	Name of the Course	Teaching Scheme					Evaluation Scheme					Credit
								Theory		Practical		Total	
			Theory Hrs/week	Tutorial Hrs/week	Practical Hrs/week	Total	TA	MSE	ESE	ICA	ESE		
PCC	ETU421	Probability Theory and Stochastic Processes	3	0	0	3	10	30	60	---	---	100	3
PCC	ETU422	Analog Communication	3	0	0	3	10	30	60	---	---	100	3
PCC	ETU423	Analog Circuits	3	0	0	3	10	30	60	---	---	100	3
PCC	ETU424	Microprocessors and Microcontrollers	3	1	0	4	10	30	60	---	---	100	4
PCC	ETU425	Digital System Design	3	1	0	4	10	30	60	---	---	100	4
MC	*SHU422	Environmental Studies	1	0	0	1	20	---	30	---	---	50	---
PCC	ETU426	Analog Communication Lab.	0	0	2	2	---	---	---	25	25	50	1
PCC	ETU427	Analog Circuits Lab.	0	0	2	2	---	---	---	25	25	50	1
PCC	ETU428	Microprocessors and Microcontrollers Lab.	0	0	2	2	---	---	---	25	25	50	1
	Total		**16**	**2**	**6**	**24**	**70**	**150**	**330**	**75**	**75**	**700**	**20**

TA: Teacher Assessment MSE: Mid Semester Examination ESE: End Semester Examination ICA: Internal Continuous Assessment
ESE Duration for Theory: 2.30Hrs. * ESE Duration for Theory: 1.30Hrs