Yashoda Shiskshan Prsarak Mandal's
Yashoda Technical Campus
Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC
NH-4, Wadhe, Satara 415011
Email : principalengg_ytc@yes.edu.in Call: 02162-271238/39 Mob. 9172220775
Faculty of Engineering

Department of Electronics and Telecommunication

Academic Year 2023-24

Semester –V (Third Year)

Structure of Course

Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
PCC 5	BTETC501	Electromagnetic Field Theory	3	1	-	20	20	60	100	4
PCC 6	BTETC502	Digital Signal Processing	3	1	-	20	20	60	100	4
PCC 7	BTETC503	Analog Communication	3	1	-	20	20	60	100	4
PEC 2	BTETPE504	Group A	3	1	-	20	20	60	100	4
OEC 1	BTETOE505	Group B	3	1	-	20	20	60	100	4
LC	BTETL506	Digital Signal Processing Lab & Analog Communication Lab	-	-	4	60	-	40	100	2
Project	BTETM507	Mini Project – 1	-	-	4	60	-	40	100	2
Internship	BTETP408	Internship – 2 Evaluation	-	-	-	-	-	-	-	Audit
Total			15	5	8	220	100	380	700	24

BTETPE504 Program Elective 2 (Group A)	BTETOE505 Open Elective 1 (Group B)
(A) Analog Circuits	(A) Control System Engineering
(B) Embedded System Design	(B) Artificial Intelligence and Machine learning
(C) Digital System Design	(C) Optimization Techniques
(D) Automotive Electronics	(D) Project Management and Operation Research
(E) Mixed Signal Design	(E) Augmented, Virtual and Mixed Reality
(F) Power Electronics	(F) Open Source Technologies

Vision:
To be an excellent technological hub in the field of Electronics and Telecommunication Engineering ensuring state of the art knowledge transfer through teaching and research activities to meet educational, societal, ethical need of the nation.

Mission:
M1: To provide cutting edge platform to explore innovative, creative and entrepreneurial leadership qualities among the students.
M2: To be hungry for academic excellence through innovative procedure.
M3: To inculcate teleadership quality and ethical values.
M4: To accept/ face technological challenges through the continuous efforts in collaboration with industry.

Yashoda Shikshan Prsarak Mandal's
Yashoda Technical Campus
Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC
NH–4, Wadhe, Satara 415011
Email : principalengg_ytc@yes.edu.in Call: 02162–271238/39 Mob. 9172220775
Faculty of Engineering

Department of Electronics and Telecommunication

Course Title: EFT

BTETC501_1	Understand characteristics and wave propagation on high frequency transmission lines
BTETC501_2	Carryout impedance transformation on TL
BTETC501_3	Use sections of transmission line sections for realizing circuit elements
BTETC501_4	Characterize uniform plane wave
BTETC501_5	Calculate reflection and transmission of waves at media interface
BTETC501_6	Analyze wave propagation on metallic waveguides in modal form
BTETC501_7	Understand principle of radiation and radiation characteristics of an antenna

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BTETC501_1	2	2	2	2	1	1	2						2	1	1
BTETC501_2	2	2	2	2	1	1	2						2	1	1
BTETC501_3	2	2	2	2	1	1	2						2	1	1
BTETC501_4	2	2	2	2	1	1	2						3	1	1
BTETC501_5	2	2	1	-	2										
BTETC501_6	2	2	1	2	-										
BTETC501_7	2	2													
AVG	2	2	1.8	2	1.2	1	2						2.25	1	1

Correlation level defined 1,2,3 as below

1-Slight   2-Modrate 3-High

Course Coordinator   **HOD**

Yashoda Shiskshan Prsarak Mandal's
Yashoda Technical Campus
Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC
NH–4, Wadhe, Satara 415011
Email : principalengg_ytc@yes.edu.in Call: 02162–271238/39 Mob. 9172220775
Faculty of Engineering

Department of Electronics and Telecommunication

Course Title: DSP

BTETC502.1	Understand use of different transforms and analyze the discrete time signals and systems.
BTETC502.2	Realize the use of LTI filters for filtering different real-world signals.
BTETC502.3	Capable of calibrating and resolving different frequencies existing in any signal.
BTETC502.4	Design and implement multistage sampling rate converter
BTETC502.5	Design of different types of digital filters for various applications.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BTETC502.1	3	3	-	-	-	-	-	-	-	-	-	2			
BTETC502.2	3	2	-	-	-	-	-	-	-	-	-	2			
BTETC502.3	3	2	-	-	2	-	-	-	-	-	-	2			
BTETC502.4	3	1	1	-	-	-	-	-	-	-	-	1			
BTETC502.5	3	2	-	-	-	-	-	-	-	-	-	2			
Avg	3	2	.2	-	.4	-	-	-	-	-	-	1.8			

Correlation level defined 1,2,3 as below

1-Slight   2-Modrate 3-High

Course Coordinator   **HOD**

Yashoda Shiskshan Prsarak Mandal's
Yashoda Technical Campus
Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC
NH–4, Wadhe, Satara 415011
Email : principalengg_ytc@yes.edu.in Call: 02162-271238/39 Mob. 9172220775
Faculty of Engineering

Department of Electronics and Telecommunication

Course Title: ACOM

BTETC503_1	Understand and identify the fundamental concepts and various components of analog communication system , compare and constrants the strenthness & weakness of various communication system
BTETC503_2	Understand the concepts of modulation and demodulation techquenics and design circuits to generate modulated and demodulated wave
BTETC503_3	Equip students with various issues related to analog communication such as modulation ,demodulation ,transmitters and receivers and noise performance
BTETC503_4	Understand the consept of modulation and demodulation techiquens of Angle ,Frequency and Phase
BTETC503_5	Explain signal to noise ratio ,noise figure ,noise temperature for signal and cascaded stages in communication system

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BTETC503_1	3	2				2				2			2		2
BTETC503_2	3	2	3			2				2			2		2
BTETC503_3	3					2				2			2		2
BTETC503_4	3					2				2			2		2
BTETC503_5	3					2				2			3		2
AVG	3	2	3			2				2			2.2		2

Correlation level defined 1,2,3 as below

1-Slight   2-Modrate 3-High

Course Coordinator   **HOD**

Yashoda Shikshan Prsarak Mandal's
Yashoda Technical Campus
Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC
NH–4, Wadhe, Satara 415011
Email : principalengg_ytc@yes.edu.in Call: 02162–271238/39 Mob. 9172220775
Faculty of Engineering

Department of Electronics and Telecommunication

Course Title: ACOM

BTETPE504A_1	Understand the characteristics of IC and Op-Amp and identify the internal structure.
BTETPE504A_2	Understand and identify various manufacturing techniques.
BTETPE504A_3	Derive and determine various performances-based parameters and their significance for Op-Amp.
BTETPE504A_4	Verify parameters after exciting IC by any stated method.
BTETPE504A_5	Analyze and identify the closed loop stability considerations and I/O limitations.
BTETPE504A_6	Analyze and identify linear and nonlinear applications of Op-Amp.
BTETPE504A_7	Understand and verify results (levels of V & I) with hardware implementation
BTETPE504A_8	Implement hardwired circuit to test performance and application for what it is being designed.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BTETPE504A_1	3	3	3	2	2				1		1	1	2	1	1
BTETPE504A_2	3	3	3	2	1				1		1	1	2	1	1
BTETPE504A_3	3	3	3	2	2				1		1	1	2	1	1
BTETPE504A_4	3	3	2	2	1				1		1	1	2	1	1
BTETPE504A_5	3	3	2	2	2				2		2	1	2	1	1
BTETPE504A_6	3	3	2	2	1				2		2	1	2	1	1
BTETPE504A_7	2	3	2	2	2				2		2	1	2	1	1
BTETPE504A_8	2	3	2	2	2				2		1	2	1	1	1
AVG	**3**	**3**	**2.6**	**2**	**1.6**				**1.2**		**1.2**	**1**	**2**	**1**	**1**

Correlation level defined 1,2,3 as below

1-Slight   2-Modrate 3-High

Course Coordinator   **HOD**

Yashoda Shiskshan Prsarak Mandal's
Yashoda Technical Campus
Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC
NH–4, Wadhe, Satara 415011
Email : principalengg_ytc@yes.edu.in Call: 02162–271238/39 Mob. 9172220775
Faculty of Engineering

Department of Electronics and Telecommunication

Course Title: CSE

BTETC505A_1	Understand the modeling of linear-time-invariant systems using transfer function and state-space representations.
BTETC505A_2	Understand the concept of stability and its assessment for linear-time invariant systems.
BTETC505A_3	Design simple feedback controllers.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BTETOE505A _1	2	2	2	2	1	1	2						2	1	1
BTETOE505A _2	2	2	2	2	1	1	2						2	1	1
BTETOE505A _3	2	2	2	2	1	1	2						2	1	1
AVG	2	2	2	2	1	1	2						2	1	1

Correlation level defined 1,2,3 as below

1-Slight   2-Modrate 3-High

Course Coordinator   **HOD**

Yashoda Shiskshan Prsarak Mandal's
Yashoda Technical Campus
Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC
NH–4, Wadhe, Satara 415011
Email : principalengg_ytc@yes.edu.in Call: 02162–271238/39 Mob. 9172220775
Faculty of Engineering

Department of Electronics and Telecommunication

Academic Year 2023-24

Semester –VI (Third Year)

Structure of Course

Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
PCC 8	BTETC601	Antennas and Wave Propagation	3	1	-	20	20	60	100	4
PCC 9	BTETC602	Digital Communication	3	1	-	20	20	60	100	4
PEC 3	BTETPE603	Group A	3	1	-	20	20	60	100	4
OEC 2	BTETOE604	Group B	3	1	-	20	20	60	100	4
HSSMC	BTHM605	Employability and Skill Development	3	-	-	20	20	60	100	3
LC	BTETL606	Digital Communication Lab & Professional Elective Course 3 Lab	-	-	4	60	-	40	100	2
Project	BTETM607	Mini Project – 2	-	-	4	60	-	40	100	2
Internship	BTETP608 (Internship – 3)	Field Training / Internship/Industrial Training (minimum of 4 weeks which can be completed partially in third semester and fourth semester or in at one time).	-	-	-	-	-	-	-	Audit (evaluation will be in VII Sem.)
Total			15	4	8	220	100	380	700	23

BTETPE603 Program Elective 3 (Group A)	BTETOE604 Open Elective 2 (Group B)
(A) Microprocessors and Microcontrollers	(A) IoT and Industry 4.0
(B) CMOS Design	(B) Deep Learning
(C) Nano Electronics	(C) Computer Network
(D) Advanced Digital Signal Processing	(D) Industrial Drives and Control
(E) Information Theory and Coding	(E) Robotics Design
(F) VLSI Signal Processing	(F) Patents and IPR
(G) VLSI Design & Technology	(G) Acoustic Engineering

Vision:
 To be an excellent technological hub in the field of Electronics and Telecommunication Engineering ensuring state of the art knowledge transfer through teaching and research activities to meet educational, societal, ethical need of the nation.

Mission:
M1: To provide cutting edge platform to explore innovative, creative and entrepreneurial leadership qualities among the students.
M2: To be hungry for academic excellence through innovative procedure.
M3: To inculcate teleadership quality and ethical values.
M4: To accept/ face technological challenges through the continuous efforts in collaboration with industry.

Yashoda Shiskshan Prsarak Mandal's
Yashoda Technical Campus
Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC
NH–4, Wadhe, Satara 415011
Email : principalengg_ytc@yes.edu.in Call: 02162–271238/39 Mob. 9172220775
Faculty of Engineering

Department of Electronics and Telecommunication

Course Title: AWP

BTETC601_1	Formulate the wave equation and solve it for uniform plane wave.
BTETC601_2	Analyze the given wire antenna and its radiation characteristics.
BTETC601_3	Identify the suitable antenna for a given communication system.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BTETC601_1	3	3	3	2	1	1	1						2	1	1
BTETC601_2	3	2	2	2		1							2	1	1
BTETC601_3	3	2	2	2	1		1						2	1	1
AVG	3	2.333	2.333	2	1	1	1						2	1	1

Correlation level defined 1,2,3 as below

1-Slight   2-Modrate 3-High

Course Coordinator   **HOD**

Yashoda Shiskshan Prsarak Mandal's

Yashoda Technical Campus

Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC

NH–4, Wadhe, Satara 415011

Email : principalengg_ytc@yes.edu.in Call: 02162–271238/39 Mob. 9172220775

Faculty of Engineering

Department of Electronics and Telecommunication

Course Title: DCOM

BTETC602_1	Analyze the performance of a baseband and pass band digital communication system in terms of error rate and spectral efficiency.
BTETC602_2	Perform the time and frequency domain analysis of the signals in a digital communication system.
BTETC602_3	Select the blocks in a design of digital communication system.
BTETC602_4	Analyze Performance of spread spectrum communication system.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BTETC602_1	3	3	2	2	1	1	2						2	1	1
BTETC602_2	3	3	2	2	1	1	2						2	1	1
BTETC602_3	3	3	2	2	1	1	2						2	1	1
BTETC602_4	3	2	2	2	1		1						2	1	1
AVG	3	3	2	2	1	1	2						2	1	1

Correlation level defined 1,2,3 as below

1-Slight   2-Modrate 3-High

Course Coordinator   **HOD**

Yashoda Shiskshan Prsarak Mandal's
Yashoda Technical Campus
Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC
NH–4, Wadhe, Satara 415011
Email : principalengg_ytc@yes.edu.in Call: 02162–271238/39 Mob. 9172220775
Faculty of Engineering

Department of Electronics and Telecommunication

Course Title: MPMC

BTETPE603A_1	Students get ability to conduct experiments based on interfacing of devices to or interfacing to real world applications.
BTETPE603A_2	Students get ability to interface mechanical system to function in multidisciplinary system like in robotics, Automobiles.
BTETPE603A_3	Students can learn use of hardware and software toold and identify and formulate control and monitoring systems using microprocessors
BTETPE603A_4	Learn use of microcontroller hardware and software tools and develop interfacing to real world devices.
BTETPE603A_5	Graduates will learn importnce of microcontroller in designing embedded application and will be able to design real time controllers using microcontroller-based system.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BTETPE603A)_1	3	2		1	2		1			1		2	3	2	2
BTETPE603A)_2	3	2	2	1	1		1			1		2	3	2	2
BTETPE603A)_3	3	2	3	2	1	1	2			1		2	3	2	2
BTETPE603A)_4	3	2	3	2	2	2	2			1		2	3	2	2
BTETPE603A)_5	3	2	3	2	2	2	2			1		2	3	2	2
AVG	3	2	2.75	1.6	1.6	1.6666667	1.6			1		2	3	2	2

Correlation level defined 1,2,3 as below

1-Slight   2-Modrate 3-High

Course Coordinator   **HOD**

Yashoda Technical Campus

Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC
NH–4, Wadhe, Satara 415011
Email : principalengg_ytc@yes.edu.in Call: 02162–271238/39 Mob. 9172220775

Faculty of Engineering

Department of Electronics and Telecommunication

Course Title: CN

BTETOE604C _1	To master the terminology and concepts of the OSI reference model and the TCP-IP reference model.
BTETOE604C _2	To master the concepts of protocols, network interfaces, and design/performance issues in local area networks and wide area networks.
BTETOE604C _3	Identify the suitable antenna for a given communication system.
BTETOE604C _4	To be familiar with wireless networking concepts.
BTETOE604C _5	To be familiar with network tools and network programming.
BTETOE604C _6	For a given requirement (small scale) of wide-area networks (WANs), local area networks (LANs) and Wireless LANs (WLANs) design it based on the market available component.
BTETOE604C _7	For a given problem related TCP/IP protocol developed the network programming.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BTETOE604C_1	3	3	3	2	1	1	1						2	1	1
BTETOE604C_2	3	2	2	2		1							2	1	1
BTETOE604C_3	3	2	2	2	1		1						2	1	1
BTETOE604C_4	2	2	3		1		1						2	1	1
BTETOE604C_5	3	2	2	2			1						2	1	1
BTETOE604C_6	2	2	3		1		1						2	1	1
BTETOE604C_7	3	3	3	2			1						2	1	1
AVG	3	2.333	2.333	2	1	1	1						2	1	1

Correlation level defined 1,2,3 as below

1-Slight   2-Modrate 3-High

Course Coordinator   **HOD**

Yashoda Shiskshan Prsarak Mandal's
Yashoda Technical Campus
Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC
NH–4, Wadhe, Satara 415011
Email : principalengg_ytc@yes.edu.in Call: O2162–271238/39 Mob. 9172220775
Faculty of Engineering

Department of Electronics and Telecommunication

Course Title: ESD

BTHM605_1	Have skills and preparedness for aptitude test.
BTHM605_2	Be equipped with essential communication skills(writing, verbal and non-verbal)
BTHM605_3	Master the presentation skill and be ready for facing interview.
BTHM605_4	Build team and lead it for problem solving.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BTETPE603A)_1	3	2		1	2		1			1		2	3	2	2
BTETPE603A)_2	3	2	2	1	1		1			1		2	3	2	2
BTETPE603A)_3	3	2	3	2	1	1	2			1		2	3	2	2
BTETPE603A)_4	3	2	3	2	2	2	2			1		2	3	2	2
AVG	3	2	2.7	1.6	1.6	1.6	1.6			1		2	3	2	2

Correlation level defined 1,2,3 as below

1-Slight   2-Modrate 3-High

Course Coordinator   **HOD**