



Yashoda Shikshan Prsarak Mandals

## 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 –III (Second Year)

### Structure of Course

<b>Semester III</b>										
Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
BSC	BTBS301	Engineering Mathematics – III	3	1	-	20	20	60	100	4
PCC 1	BTETC302	Electronic Devices & Circuits	3	1	-	20	20	60	100	4
PCC 2	BTETC303	Digital Electronics	3	1	-	20	20	60	100	4
ESC	BTES304	Electrical Machines and Instruments	3	1	-	20	20	60	100	4
LC	BTETL305	Electronic Devices & Circuits Lab	-	-	2	60	-	40	100	1
LC	BTETL306	Digital Electronics Lab	-	-	2	60	-	40	100	1
Seminar	BTETS307	Seminar I	-	-	4	60	-	40	100	2
Internship	BTES211P	Internship – 1 Evaluation	-	-	-	-	-	-	-	Audit
<b>Total</b>			<b>12</b>	<b>4</b>	<b>8</b>	<b>260</b>	<b>80</b>	<b>360</b>	<b>700</b>	<b>20</b>

#### 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 leadership 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: Engineering Mathematics III

<b>BTBS301_1</b>	Solve higher order linear differential equation using appropriate techniques for modeling and analyzing electrical circuits.
<b>BTBS301_2</b>	Solve problems related to Fourier transform, Laplace transform and applications to Communication systems and Signal processing.
<b>BTBS301_3</b>	Obtain Interpolating polynomials, numerically differentiate and integrate functions, numerical solutions of differential equations using single step and multi-step iterative methods used in modern scientific computing.
<b>BTBS301_4</b>	Perform vector differentiation and integration, analyze the vector fields and apply to Electromagnetic fields.
<b>BTBS301_5</b>	Analyze conformal mappings, transformations and perform contour integration of complex functions in the study of electrostatics and signal processing.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BTBS301_1	2					2				2			2		2
BTBS301_2	3					2				2			2		2
BTBS301_3	3					2				2			2		2
BTBS301_4	3					2				2			2		2
BTBS301_5	3					2				2			2		2
<b>Avg.</b>	<b>2.8</b>					<b>2</b>				<b>2</b>			<b>2</b>		<b>2</b>

Correlation level defined 1,2,3 as below

1-Slight 2-Modrate 3-High

### Course Coordinator

### HOD

#### 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 leadership quality and ethical values.  
M4: To accept/ face technological challenges through the continuous efforts in collaboration with industry.



**Department of Electronics and Telecommunication**

**Course Title: EDC**

<b>BTETC302_1</b>	Comply and verify parameters after exciting devices by any stated method.
<b>BTETC302_2</b>	Implement circuit and test the performance.
<b>BTETC302_3</b>	Analyze BJT, JFET and MOSFET for various applications.
<b>BTETC302_4</b>	Analyze Feedback amplifiers and oscillators.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>BTETC302_1</b>	3	3	2	2	2				1	1	2	2	2	1	2
<b>BTETC302_2</b>	3	3	2	2	1				1	1	1	1	2	1	2
<b>BTETC302_3</b>	3	2	2	2	2				1	1	2	2	2	1	2
<b>BTETC302_4</b>	3	3	3	2	2				2	2	2	2	2	1	2
<b>AVG</b>	<b>3</b>	<b>2.75</b>	<b>2.25</b>	<b>2</b>	<b>1.75</b>				<b>1.25</b>	<b>1.25</b>	<b>1.75</b>	<b>1.75</b>	<b>2</b>	<b>1</b>	<b>2</b>

Correlation level defined 1,2,3 as below

1-Slight 2-Modrate 3-High

**Course Coordinator**

**HOD**

**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 leadership 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: DE

<b>BTETC303_1</b>	Use the basic logic gates and various reduction techniques of digital logic circuit in detail.
<b>BTETC303_2</b>	Design combinational and sequential circuits.
<b>BTETC303_3</b>	Design and implement hardware circuit to test performance and application.
<b>BTETC303_4</b>	Understand the architecture and use of VHDL for basic operations and Simulate using simulation software.

CO to PO Mapping	PO 1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>BTETC303_1</b>	2	2	2									2	1	1	1
<b>BTETC303_2</b>		2		1								2	1	1	1
<b>BTETC303_3</b>	2	1	1	1								2	1	1	1
<b>BTETC303_4</b>	1			2								2	1	2	1
<b>AVG</b>	<b>1.67</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>								<b>2</b>	<b>1</b>	<b>1.2</b>	<b>1</b>

Correlation level defined 1,2,3 as below

1-Slight 2-Modrate 3-High

**Course Coordinator**

**HOD**

**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 leadership 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: EMI

<b>BTES304_1</b>	The ability to formulate and then analyze the working of any electrical machine using mathematical model under loaded and unloaded conditions.
<b>BTES304_2</b>	The skill to analyze the response of any electrical machine.
<b>BTES304_3</b>	The ability to troubleshoot the operation of an electrical machine.
<b>BTES304_4</b>	The ability to select a suitable measuring instrument for a given application.
<b>BTES304_5</b>	The ability to estimate and correct deviations in measurements due to the influence of the instrument and due to the accuracy of the instrument.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>BTES304_1</b>	2	2	2									2	1	1	1
<b>BTES304_2</b>		2		1								2	1	1	1
<b>BTES304_3</b>	2	1	1	1								2	1	1	1
<b>BTES304_4</b>	1			2								2	1	2	1
<b>BTES304_5</b>		1		2								2	1	1	1
<b>AVG</b>	<b>1.67</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>								<b>2</b>	<b>1</b>	<b>1.2</b>	<b>1</b>

Correlation level defined 1,2,3 as below

1-Slight 2-Modrate 3-High

**Course Coordinator**

**HOD**

**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 leadership quality and ethical values.  
M4: To accept/ face technological challenges through the continuous efforts in collaboration with industry.



Yashoda Shikshan Prsarak Mandals

## 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 –IV (Second Year)

### Structure of Course

Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
PCC 3	BTETC401	Network Theory	3	1	-	20	20	60	100	4
PCC 4	BTETC402	Signals and Systems	3	1	-	20	20	60	100	4
HSSMC	BTHM403	Basic Human Rights	3	-	-	20	20	60	100	3
BSC	BTBS404	Probability Theory and Random Processes	3	-	-	20	20	60	100	3
PEC 1	BTETPE405	(A) Numerical Methods and Computer Programming	3	1	-	20	20	60	100	4
		(B) Data Compression & Encryption								
		(C) Computer Organization and Architecture								
		(D) Introduction to MEMS								
		(E) Python Programming								
LC	BTETL406	Network Theory Lab & Signals and Systems Lab	-	-	4	60	-	40	100	2
Seminar	BTETS407	Seminar II	-	-	4	60	-	40	100	2
Internship	BTETP408 (Internship – 2)	Field Training /Internship/Industrial Training (minimum of 4 weeks which can be completed partially in third semester and fourth semester or in at onetime).	-	-	-	-	-	-	-	Audit (evaluation will be in V Sem.)
<b>Total</b>			<b>15</b>	<b>3</b>	<b>8</b>	<b>220</b>	<b>100</b>	<b>380</b>	<b>700</b>	<b>22</b>

#### 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 leadership quality and ethical values.
- M4: To accept/ face technological challenges through the continuous efforts in collaboration with industry.



Yashoda Shiksha 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: Network Theory

<b>BTETC401_1</b>	Apply knowledge of mathematics to solve numerical based on network simplification and it will be used to analyze the same.
<b>BTETC401_2</b>	Design passive filters and attenuators theoretically and practically. To apply knowledge for design of active filters as well as digital filters and even extend this to advanced adaptive filters.
<b>BTETC401_3</b>	Identify issues related to transmission of signals, analyze different RLC networks.
<b>BTETC401_4</b>	Find technology recognition for the benefit of the society.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BTETC401_1	2	2										2	2		
BTETC401_2	1	1	2									2	2		1
BTETC401_3		1		1								2	2	1	1
BTETC401_4		1				1						2	2	2	1
<b>AVG</b>	<b>1.5</b>	<b>1.25</b>	<b>2</b>	<b>1</b>		<b>1</b>						<b>2</b>	<b>2</b>	<b>1.5</b>	<b>1</b>

Correlation level defined 1,2,3 as below

1-Slight 2-Moderate 3-High

**Course Coordinator**

**HOD**

**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 leadership quality and ethical values.
- M4: To accept/ face technological challenges through the continuous efforts in collaboration with industry.



Yashoda Shikshan Prsarak Mandals

## 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: BHR

<b>BTHM403_1</b>	Students will be able to understand the history of human rights
<b>BTHM403_2</b>	Students will learn to respect others caste, religion, region and culture.
<b>BTHM403_3</b>	Students will be aware of their rights as Indian citizen.
<b>BTHM403_4</b>	Students will be able to understand the importance of groups and communities in the society.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BTHM403_1	2	2	2	2								2	2		
BTHM403_2			2	2								2	2		1
BTHM403_3	2		2	2								2	2	1	1
BTHM403_4		2		2								1	2	2	1
<b>AVG</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>								<b>1.75</b>	<b>2</b>	<b>1.5</b>	<b>1</b>

Correlation level defined 1,2,3 as below

1-Slight 2-Modrate 3-High

**Course Coordinator**

**HOD**

**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 leadership 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: PTRP

<b>BTBS404 _1</b>	Understand representation of random signals
<b>BTBS404 _2</b>	Investigate characteristics of random processes
<b>BTBS404 _3</b>	Make use of theorems related to random signals
<b>BTBS404 _4</b>	To understand propagation of random signals in LTI systems

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BTBS404 _1	2	2	2	2								2	2		
BTBS404 _2			2	2								2	2		1
BTBS404 _3	2		2	2								2	2	1	1
BTBS404 _4		2		2								1	2	2	1
AVG	2	2.00	2	2.00								2	2	1	1

Correlation level defined 1,2,3 as below

1-Slight 2-Modrate 3-High

**Course Coordinator**

**HOD**

**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 leadership quality and ethical values.  
M4: To accept/ face technological challenges through the continuous efforts in collaboration with industry.