

(Approved by AICTE, Delhi /Approved by Govt of Maharashtra DTE) Email: <a href="mailto:principalengg\_ytc@yes.edu.in">principalengg\_ytc@yes.edu.in</a>, Web: <a href="mailto:www.yes.edu.in">www.yes.edu.in</a> NH-4, wadhe, Satara, Tele Fax-02162-271238/39/9172220775



# Faculty of Engineering Department of Computer Science and Engineering

### Academic Year 2023-24

## **Semester –III (Second Year)**

## **Structure of Course**

Course	Course Code	Course Title		Veak ching	ly Hrs	E	valuatio	n Sch	eme	Credit
Category	Code		L	T	P	CA	MSE	ESE	Total	
	BTBS301	Engineering Mathematics – III	3	1	-	20	20	60	100	4
	BTCOC302	Discrete Mathematics	3	1	-	20	20	60	100	4
	BTCOC303	Data Structures	3	1	-	20	20	60	100	4
	BTCOC304	Computer Architecture & Organization	3	1	-	20	20	60	100	4
	BTCOC305	Elective –I  (a) Object - oriented  Programming in C++  (b) Object Oriented  Programming in Java	3	1	-	20	20	60	100	4
	BTCOL306	Data Structures Lab & Object Oriented Programming Lab	-	-	4	60	-	40	100	2
	BTCOS307	Seminar – I	-		4	60	-	40	100	2
	BTES211P	Field Training / Internship / Industrial Training Evaluation	-	-	-	-	-	-	-	Audit
		TOTAL	15	5	8	220	100	380	700	24



(Approved by AICTE, Delhi /Approved by Govt of Maharashtra DTE)
Email: principalengg\_yto@yes.edu.in. Web: www.yes.edu.in NH-4, wadhe, Satara, Tele Fax-02162-271238/39/9172220775



#### Faculty of Engineering Department of Computer Science and Engineering

COs	Engineering Mathematics -III (BTBS301)
BTBS301_1	Apply the various techniques of Laplace transform to find the solutions of special, periodic & Heaviside's functions.
BTBS301_2	Apply the Inverse Laplace transform to applications of higher order linear differential equation using appropriate techniques.
BTBS301_3	Compute the Fourier transform of various functions and their applications to engineering problems.
BTBS301_4	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.
BTBS301_5	Analyze conformal mappings, transformations and perform contour integration of complex functions in the study of signal processing.

AVG	2.6	1.6	1	1	1					- F/13			1	1
BTBS301_5	2	1	1			-11 3							1	1
BTBS301_4	2	1	1		1								1	1
BTBS301_3	3	2	1											
BTBS301_2	3	2		1	1								1	
BTBS301_1	3	2	1	1										
CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2

Correlation level 1,2,3 as defined below:

1 – Slight

2 - Moderate

3 – High

**Course Coordinator** 



Computer Science & Engg.

Vision of department: To lead in technical, quality education, innovation, research for development of sustainable & inclusive technology

Mission of department: 1. To create ambience of academic excellence through state of art infrastructure. 2. To create student-centric pedagogy that will lead to employability.3. To create a software engineering professional with knowledge of multidisciplinary fields, can provide innovative products & service to society.4. To train and motivate the students for lifelong learning, employability, and entrepreneurship





(Approved by AICTE, Delhi /Approved by Govt of Maharashtra DTE)
Email: principalengg yto@yes.edu.in. Web: www.yes.edu.in
NH-4, wadhe,Satara,Tele Fax-02162-271238/39/9172220775



# Faculty of Engineering Department of Computer Science and Engineering

COs	Discrete Mathematics (BTCOC302)
BTCOC302_1	To understand propositional logic and operations on set, functions, relation, graph tree, algrbraic systems
BTCOC302_2	To solve problems using operations on sets, functions, relations, counting techniques and generating function
BTCOC302_3	Apply various algorithms and use of graphs, trees as tools to visualize and solve problems.
BTCOC302_4	Summarize various properties of algebraic systems using one or two operations ,Boolean algebra

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
BTCOC302.1		3										1	2	
BTCOC302.2	3										1			2
BTCOC302.3				3										1
BTCOC302.4	3	3		2						1	1	1	2	15-3
AVG	3	3		2.5						1	1	1	2	1.5

Correlation level 1,2,3 as defined below:

1 - Slight

2 – Moderate

3 - High

**Course Coordinator** 



H.O.D.

Computer Science & Engg.

YSPM'S Yashoda Technical Campus, Salare

Vision of department: To lead in technical, quality education, innovation, research for development of sustainable & inclusive technology for the society.

Mission of department: 1. To create ambience of academic excellence through state of art infrastructure. 2. To create student-centric pedagogy that will lead to employability.3. To create a software engineering professional with knowledge of multidisciplinary fields, can provide innovative products & service to society.4. To train and motivate the students for lifelong learning, employability, and entrepreneurship



(Approved by AICTE, Delhi /Approved by Govt of Maharashtra DTE)
Email: principalengg\_vtc@yes.edu.in, Web: www.yes.edu.in NH-4, wadhe, Satara, Tele Fax-02162-271238/39/9172220775



## Faculty of Engineering Department of Computer Science and Engineering

COs	Data Structures (BTCOC303)
BTCOC303_1	Define data structures like array, stack, queues and linked list.
BTCOC303_2	Explain insertion, deletion and traversing operations on data structures and identify the asymptotic notations to find the complexity of an algorithm.
BTCOC303_3	Analyze various searching and sorting techniques
BTCOC303_4	Choose appropriate data structure while designing the algorithms and Design advance data structures

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
BTCOC303_1	3												2	
BTCOC303 2	3	2	2	2									-	2
BTCOC303 3	3	2	2	2										2
BTCOC303_4	3	3	3	3									2	
AVG	3	2.3	2.3	2.3									2	2

Correlation level 1,2,3 as defined below:

1 - Slight

2 - Moderate

3 - High

**Course Coordinator** 

Computer Science & Engg. YSPM'S Yashoda Technical Campus, Satara

Vision of department: To lead in technical, quality education, innovation, research for development of sustainable & inclusive technology for the society

Mission of department: 1. To create ambience of academic excellence through state of art infrastructure. 2. To create student-centric pedagogy that will lead to employability.3. To create a software engineering professional with knowledge of multidisciplinary fields, can provide innovative products & service to society.4. To train and motivate the students for lifelong learning, employability, and entrepreneurship





(Approved by AICTE, Delhi /Approved by Govt of Maharashtra DTE)
Email: principalengg\_yte@yes.edu.in, Web: www.yes.edu.in NH-4, wadhe, Satara, Tele Fax-02162-271238/39/9172220775



### Faculty of Engineering Department of Computer Science and Engineering

COs	Computer Architecture & Organization (BTCOC304)
BTCOC304_1	Discuss the basic concepts and structure of computers.
BTCOC304_2	Understand concepts of register transfer logic and Instruction set
BTCOC304_3	Discuss Computer Arithmetic and understand arithmetic co-processor
BTCOC304_4	Explain different types of addressing modes and memory organization

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
BTCOC304_1	3													
BTCOC304_2	1	3	3	3	3	,								
BTCOC304_3	3	2	1	3	1									
BTCOC304_4	3	3	2	2	3									
AVG	2.5	2.67	2	2.667	2.33							TIME		

Correlation level 1,2,3 as defined below:

1 – Slight

2 - Moderate

3 - High

**Course Coordinator** 



H.O.D. Computer Science & Engg. YSPM'S Yashoda Technical Campus, Satare

Vision of department: To lead in technical, quality education, innovation, research for development of sustainable & inclusive technology

for the society.

Mission of department: 1. To create ambience of academic excellence through state of art infrastructure. 2. To create student-centric Mission of department: 1. To create sincents of academic of pedagogy that will lead to employability. 3. To create a software engineering professional with knowledge of multidisciplinary fields, can provide innovative products & service to society. 4. To train and motivate the students for lifelong learning, employability, and entrepreneurship





(Approved by AICTE, Delhi /Approved by Govt of Maharashtra DTE)
Email: principalengg\_ytc@yes.edu.in, Web: www.yes.edu.in
NH-4, wadhe,Satara,Tele Fax-02162-271238/39/9172220775



#### **Faculty of Engineering** Department of Computer Science and Engineering

COs	Object Oriented Programming in Java(BTCOC305)
BTCOC305_1	To write, compile, run, and test simple object-oriented Java programs.
BTCOC305_2	Read and make elementary modifications to Java programs that solve real-world problems
BTCOC305_3	Validate input in a Java program.
BTCOC305_4	Identify and fix defects and common security issues in code

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
BTCOC305B_1	3												2	
BTCOC305B_2		2		2					2		2			2
BTCOC305B_3					1								2	2
BTCOC305B_4			2						2		2			
AVG	3	2	2	2	1				2		2		2	2

Correlation level 1,2,3 as defined below:

1 – Slight

2 – Moderate

3 – High

**Course Coordinator** 



H.O.D.

Computer Science & Engg. YSPM'S Yashoda Technical Campus, Satara

Vision of department: To lead in technical, quality education, innovation, research for development of sustainable & inclusive technology

Mission of department: 1. To create ambience of academic excellence through state of art infrastructure. 2. To create student-centric pedagogy that will lead to employability.3. To create a software engineering professional with knowledge of multidisciplinary fields, can provide innovative products & service to society.4. To train and motivate the students for lifelong learning, employability, and





(Approved by AICTE, Delhi /Approved by Govt of Maharashtra DTE) Email: principalengg yto@yes.edu.in, Web: www.yes.edu.in NH-4, wadhe, Satara, Tele Fax-02162-271238/39/9172220775



### **Faculty of Engineering** Department of Computer Science and Engineering

COs	Data Structures Lab & Object Oriented Programming Lab (BTCOL306)
BTCOL306_1	Learn to implement various data structures like stack, queue, tree and Linked ist
BTCOL306_2	Implement various searching and sorting techniques.
BTCOL306_3	Learn To write, compile, run, and test object-oriented Java programs.
BTCOL306_4	Implement Java programs that solve real-world problems

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
BTCOS306_1	3		2		1									3
BTCOS306_2		3		1								3		3
BTCOS306_3	3	3	2		1									3
BTCOS306_4			-	1								3		3
AVG	3	3	2	1	1							3		3

Correlation level 1,2,3 as defined below:

1 - Slight

2 - Moderate

3 - High



H.O.D. Computer Science & Engg.

YSPM'S Yashoda Technical Campus, Satara

Vision of department: To lead in technical, quality education, innovation, research for development of sustainable & inclusive technology for the society

Mission of department: 1. To create ambience of academic excellence through state of art infrastructure. 2. To create student-centric pedagogy that will lead to employability.3. To create a software engineering professional with knowledge of multidisciplinary fields, can provide innovative products & service to society.4. To train and motivate the students for lifelong learning, employability, and entrepreneurship





(Approved by AICTE, Delhi /Approved by Govt of Maharashtra DTE) Email: principalengg yto@yes.edu.in. Web: www.yes.edu.in NH-4, wadhe, Satara, Tele Fax-02162-271238/39/9172220775



### Faculty of Engineering Department of Computer Science and Engineering

COs	Seminar – I (BTCOS307)							
BTCOS307_1	Identify and Analyze recent topics of any domain							
BTCOS307_2	Enhance technical writing skills							
	Identify an engineering problem, analyze it and propose a work plan to solve it.							
BTCOS307_4	Communicate with professional technical presentation skills and Apply modern documentation tools to write the report							

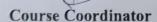
CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
BTCOS307_1										1			1	
BTCOS307_2										2		2		1
BTCOS307_3	2						2	2						
BTCOS307_4										3		2		2
AVG	2						2	2		2		2	1	1.5

#### Correlation level 1,2,3 as defined below:

1 - Slight

2 - Moderate

3 - High





Computer Science & Engg. YSPM'S Yashoda Technical Campus, Satara

Vision of department: To lead in technical, quality education, innovation, research for development of sustainable & inclusive technology

for the society.

Mission of department: 1. To create ambience of academic excellence through state of art infrastructure. 2. To create student-centric pedagogy that will lead to employability 3. To create a software engineering professional with knowledge of multidisciplinary fields, can provide innovative products & service to society.4. To train and motivate the students for lifelong learning, employability, and entrepreneurship

