



# Yashoda Technical Campus, Satara

(Approved by AICTE, Delhi /Approved by Govt of Maharashtra DTE)

Email: [principalengg\\_ytc@yes.edu.in](mailto:principalengg_ytc@yes.edu.in), Web : [www.yes.edu.in](http://www.yes.edu.in)

NH-4, wadhe, Satara, Tele Fax-02162-271238/39/9172220775



## Faculty of Engineering

### Department of Computer Science and Engineering

## Academic Year 2023-24

### Semester –VII (Final Year)

#### Structure of Course

Course Category	Course Code	Course Title	Weekly Teaching Hrs			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
	BTCOC701	Artificial Intelligence	3	-	-	20	20	60	100	3
	BTCOC702	Cloud Computing	3	-	-	20	20	60	100	3
	BTCOE703	Elective – VI (A) Bioinformatics (B) Distributed System (C) Big Data Analytics	3	-	-	20	20	60	100	3
	BTCOE704	Open Elective – VII (A) Cryptography and Network Security (B) Business Intelligence (C) Block chain Technology	3	-	-	20	20	60	100	3
	BTCOE705	Open Elective – VIII (A) Virtual Reality (B) Deep Learning (C) Design Thinking	3	-	-	20	20	60	100	3
	BTHM706	Foreign Language Studies	-	-	4	-	-	-	-	Audit
	BTCOL707	Artificial Intelligence & Cloud Computing Lab	-	-	4	60	-	40	100	2
	BTCOS708	Project Phase – I	-	-	-	60	-	40	100	2
	BTCOF608	Field Training / Internship / Industrial Training	-	-	-	-	-	-	-	Audit
<b>TOTAL</b>			<b>15</b>	<b>-</b>	<b>8</b>	<b>220</b>	<b>100</b>	<b>380</b>	<b>700</b>	<b>19</b>

**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



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COs	Artificial Intelligence (BTCOC701)
BTCOC701_1	Define the concept of Artificial Intelligence
BTCOC701_2	Solve basic AI based problems. Apply the algorithms to a real-world problem. Understand a wide variety of algorithms.
BTCOC701_3	To enable the students to understand the basic principles of Artificial Intelligence in various applications
BTCOC701_4	To learn basic concepts of game theory. To apply game theoretic models to real world problems

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
BTCOC603_1			1											
BTCOC603_2	2			3										2
BTCOC603_3					2								2	
BTCOC603_4			2	2									2	3
<b>AVG</b>	<b>2</b>		<b>1.5</b>	<b>2.5</b>	<b>2</b>								<b>2</b>	<b>2.5</b>

Correlation level 1,2,3 as defined below:

1 – Slight

2 – Moderate

3 – High

Course Coordinator



HOD

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Computer Science & Engg.

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COs	Cloud Computing (BTCOC702)
BTCOC702_1	To understand and define Cloud Computing , different Cloud service and deployment models.
BTCOC702_2	To understand the Cloud applications with their architecture, vulnerabilities, and resource
BTCOC702_3	To describe importance of virtualization along with their technologies.
BTCOC702_4	To understand the design & develop backup strategies for cloud data based on features

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
BTCOE703A_1	3	2	1									2	2	2
BTCOE703A_2	1	2	2	3								3	1	2
BTCOE703A_3	2	3	2									3	3	1
BTCOE703A_4	1	2	3		1							2	1	2
AVG	1.8	2.3	2	3	1							2.5	1.8	1.8

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COs	Big Data Analytics (BTCOE703C)
BTCOE703C_1	Understand the basic concepts of Big Data Hadoop, Apache Spark & File system.
BTCOE703C_2	Apply map reduce concepts for desired applications.
BTCOE703C_3	Learn the different big data streaming platforms.
BTCOE703C_4	Understand the Machine learning algorithms & visualize the data.
BTCOE703C_5	To experiment with Database for the Modern Web


CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
BTCOE703C_1	2	3	2							1		3	2	1
BTCOE703C_2	2	3	2		3					1		3	2	2
BTCOE703C_3	2	3	2		3					1		3	2	1
BTCOE703C_4	2	3	3		3					1		3	2	1
BTCOE703C_5	2	3			3							3	2	1
<b>AVG</b>	<b>2</b>	<b>3</b>	<b>2.25</b>		<b>3</b>					<b>1</b>		<b>3</b>	<b>2</b>	<b>1.2</b>

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COs	Business Intelligence (BTCOE704B)
BTCOE704B _1	Understand the basic BI concept, components, life cycle
BTCOE704B _2	Know the fundamentals BI implementation
BTCOE704B _3	Understand working of BI tools
BTCOE704B _4	Understand basics of Data ware house and dimensional modeling

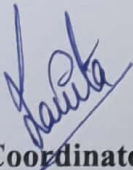
CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
BTCOE704B _1	2	3	2	1									3	2
BTCOE704B _2	2	2	3	2									3	2
BTCOE704B _3	1	3	3	3	3								3	2
BTCOE704B _4	2	2	2	2	2								3	3
<b>AVG</b>	<b>1.75</b>	<b>2.5</b>	<b>2.5</b>	<b>2</b>	<b>2.5</b>								<b>3</b>	<b>2.25</b>

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COs	Design Thinking (BTCOE705C)
BTCOE705C_1	Understand the design thinking process model and design thinking tools.
BTCOE705C_2	Describe role of empathy in design thinking process and different empathy tools used in design thinking.
BTCOE705C_3	Discuss different methods and tools for used in ideate and prototype phase.
BTCOE705C_4	Apply Design Thinking framework as a structured process to solve problems.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
BTCOE705C_1	2	2	1	1									2	2
BTCOE705C_2	2	2	1	1									2	3
BTCOE705C_3	2	2	1	1									2	2
BTCOE705C_4	2	2	1	1									2	3
<b>AVG</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>									<b>2</b>	<b>2.5</b>

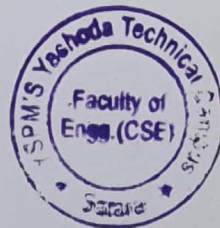
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COs	Foreign Language Studies (BTHM706)
BTHM706_1	Language skills: Students will develop the ability to speak, listen, read, and write in the target language.
BTHM706_2	Socio-cultural understanding: Students will learn about the socio-cultural dimensions of the language.
BTHM706_3	Personal development: Learning a language can promote personal development and global awareness.
BTHM706_4	Cognitive abilities: Learning a language can sharpen cognitive abilities.
BTHM706_5	Communication: Students will learn to communicate effectively with people from different backgrounds.


CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
BTHM706_1						1						3		1
BTHM706_2						3		2						
BTHM706_3						1			3					1
BTHM706_4									2			2		2
BTHM706_5										3		3		2
<b>AVG</b>						<b>1.7</b>		<b>2</b>	<b>2.5</b>	<b>3</b>		<b>2.7</b>		<b>1.5</b>

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Cos	Artificial Intelligence & Cloud Computing Lab (BTCOL707)
BTCOL707_1	Study of PRPLOG and Python basic programming.
BTCOL707_2	Study and implementation of various informed and uninformed search techniques.
BTCOL707_3	Demonstration of Moodle WordPress Cloud-9 and implementation of google app engine, Configuration of Virtual Machin.
BTCOL707_4	Study of AWS services and Cloud services with Microsoft Azure.

CO to PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
BTCOL707_1	3	3	3		3				3		3	3	3	3
BTCOL707_2	3	3	3		3				3		3	3	3	3
BTCOL707_3	3	2	1									2	2	2
BTCOL707_4	1	2	2	3								3	1	2
AVG	2.5	2.5	2.25	3	3				3		3	2.75	2.25	2.5

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COs	Project Phase – I (BTCOS708)
BTCOS708_1	Solve real life problems by applying knowledge.
BTCOS708_2	Analyze alternative approaches, apply and use most appropriate one for feasible solution
BTCOS708_3	Write precise reports and technical documents in a Latex.
BTCOS708_4	Participate effectively in multi-disciplinary and heterogeneous teams exhibiting team work .
BTCOS708_5	Establish Inter-personal relationships, conflict management and leadership quality


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BTCOS708_1	3	3	1	1									2	3
BTCOS708_2	3	3	3	2	3	1	2		3	3	2	3	2	2
BTCOS708_3	3	3	3	1		1	1	3	2	3	1	3	2	2
BTCOS708_4	3	1	3	2	1						2	2	1	2
BTCOS708_5	2	2	3	2	2	1	1	2	3	2			2	2
AVG	2.8	2.4	2.6	1.6	2	1	1.3	2.5	2.7	2.7	1.7	2.7	1.8	2.2

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