



**Faculty of Engineering** 

#### Department of Artificial Intelligence and Data Science Engineering Semester-ODD Academic Year 2024-25

Structure of Course

Class	B. Tech. SemV
Course Code and Course Title	BTAIC501 Computer Network and Cloud Computing
Prerequisite/s	Computer Fundamentals, Fundamentals of Digital Communication
Teaching Scheme: Lecture/Tutorial/Practical	01/08/2024
Credits	04
Evaluation Scheme: CA / MSE / ESE	20/20/60

Course Outcomes ( Upon successful cor	COs): appletion of this course, the student will be able to:	Blooms Level
BTAIC501_1	Analyse the requirements for a given organizational structure and select the most appropriate networking architecture and technologies	L3
BTAIC501_2	<b>Specify</b> and identify deficiencies in existing protocols, and then go onto select new and better protocols.	L3
BTAIC501_3	Have a basic <b>knowledge</b> of installing and configuring networking applications	L2
BTAIC501_4	Understand the different cloud computing environments	L2
BTAIC501_5	Apply concepts of virtualization and various cloud services to design, develop and deploying cloud applications.	L3

#### Mapping of CO's with PO's and PSO's:

Course Outcomes		Programme Outcomes													
Course Outcomes	1	2	3	4	5	6	7	8	9	10	11	12	PSO 1	PSO 2	PSO 3
BTAIC501_1	3	3	3	3	3	2				3	1	1	2	2	3
BTAIC501_2	3	3	3	3	3	1				3	1		2		2
BTAIC501_3	3	3	3	3	3	3			1	3		2	2	2	2
BTAIC501_4	3	3	3	3	3	2			1	3	2	1	3	2	2
BTAIC501_5	3	3	3	3	3	2				3	2	1	3		3
Total	15	15	15	15	1 5	10			2	15	6	5	12	6	12
Average	3	3	3	3	3	2			1	3	1.5	1.2	2.4	2	2.4
BTAIC501				925			THE S								

**CO Attainment Targets:** 

CO	501_1	501_2	501_3	501_4	501 5
Previous Attainment	-				
Target for CAY	3	3	3	3	3

Prepared by **Course Coordinator** 

Verified by Academic Coordinator

Approved by HOD- AI & DS HOD

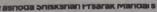
Artificial Intelligence

Vision: Developing Al & DS applications that addresses regional challenges and empowering in on and challenges, to becaned leading rural AI & DS hub. Data Science Engg. Mission: Vashoda Technical Campas Sarara

M1: Emphasizing responsible AI development that considers social and environmental factors specific to the region.

M2: Educating the public about the potential benefits and responsible use of Al & DS technologies.

M3: Facilitating internships and research projects with AI & DS companies to bridge the gap between theory and practice.





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**Faculty of Engineering** 

## Department of Artificial Intelligence and Data Science Engineering Academic Year 2024-25

Structure of Course

Class	B. Tech. SemV
Course Code and Course Title	BTAIC502 Machine Learning
Prerequisite/s	Data Analysis, Python Programming Language
Teaching Scheme: Lecture/Tutorial/Practical	01/08/2024
Credits	04
Evaluation Scheme: CA / MSE / ESE	20/20/60

Course Outcomes

	ourse Outcomes (COs): con successful completion of this course, the student will be able to:				
BTAIC502_1	BTAIC502_1 Develop a good understanding of fundamental principles of machine learning				
BTAIC502 2	Formulation of a Machine Learning problem	L4			
BTAIC502_3	<b>Develop</b> a model using supervised/unsupervised machine learning algorithms for classification/prediction/clustering	L6			
BTAIC502_4	Evaluate performance of various machine learning algorithms on various data sets of a domain.	L5			
BTAIC502_5	<b>Design</b> and Concrete implementations of various machine learning algorithms to solve a given problem using languages such as Python	L6			

#### Mapping of CO's with PO's and PSO's:

Course Outcomes			W. Life		0.31	]	Progr	amm	e Ou	tcome	es				
Course Outcomes	1	2	3	4	5	6	7	8	9	10	11	12	PSO 1	PSO 2	PSO 3
BTAIC502_1	3	3	3	3	3	2	2			3	1	1	3	3	3
BTAIC502_2	3	3	3	3	3	1				3	1		3	3	3
BTAIC502_3	3	3	3	3	3	3	2	3 69		3		2	3	3	3
BTAIC502_4	3	3	3	3	3	2				3	2	1	3	3	3
BTAIC502_5	3	3	3	3	3	2	1			3	2	1	3	3	3
Total	15	15	15	15	1 5	10	5			15	6	5	15	15	15
Average	3	3	3	3	3	2	1.6			3	1.5	1.2	3	3	3
BTAIC501															

**CO Attainment Targets:** 

СО	502_1	502_2	502_3	502 4	502 5	
Previous Attainment						
Target for CAY	3	3	3	3	3	

Course Coordinator

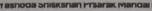
Verified by Academic Coordinator

Approved by HOD- AI & DS HOD Artificial Intelligence

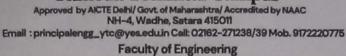
and Data Science Engg.

Vision: Developing AI & DS applications that addresses regional challenges and empowering innovation and challenges, to become a leading rural AI &

M1: Emphasizing responsible AI development that considers social and environmental factors specific to the region.
M2: Educating the public about the potential benefits and responsible use of AI & DS technologies.
M3: Facilitating internships and research projects with AI & DS companies to bridge the gap between theory and practice.









Department of Artificial Intelligence and Data Science Engineering Academic Year 2024-25 Semester-ODD

Structure of Course

Class	B. Tech. Sem. –V
Course Code and Course Title	BTAIHM503C Knowledge Reasoning and AI Ethics.
Prerequisite/s	None
Teaching Scheme: Lecture/Tutorial/Practical	01/08/2024
Credits	04
Evaluation Scheme: CA / MSE / ESE	20/20/60

#### **Course Outcomes:**

Course Outcomes (O Upon successful com	COs): pletion of this course, the student will be able to:	Blooms Level
BTAIHM503C_1	Apply the knowledge and reasoning based concepts	L3
BTAIHM503C _2	Specify and identify the logical agents.	L2
BTAIHM503C_3	Apply Probabilistic Reasoning & Uncertainty along with rules.	L3
BTAIHM503C_4	Understand the human psychology and social ethics to use AI	L2
BTAIHM503C_5	Apply concepts of virtualization and various cloud services to design, develop and deploying cloud applications.	L3

#### Mapping of CO's with PO's and PSO's:

Course Outcomes		Programme Outcomes													
	1	2	3	4	5	6	7	8	9	10	11	12	PSO 1	PSO 2	PSO 3
BTAIHM503C_1	3	3	3	3	3	2				1	1	1	2	3	1
BTAIHM503C _2	3	3	3	3	3	2				1	1	2	3	2	
BTAIHM503C_3	3	3	3	3	3	3		1	Tink	1	1	2	2	3	1
BTAIHM503C_4	3	3	3	3	3	2				1	2	1	3	1	1
BTAIHM503C_5	3	3	3	. 3	3	2				1	2	1	3	3	2
Total	15	15	15	15	15	11				7	7	7	13	12	5
Average	3	3	3	3	3	2.2				1	1.4	1.4	2.6	2.4	1.25
BTAIC501													2.0	2.4	1.23

## **CO Attainment Targets:**

CO	503C_1	503C 2	503C 3	503C 4	503C 5
Previous Attainment	-			-	5050_5
Target for CAY	3	3	3	3	3

Prepared by Course Coordinator

erified by Academic Coordinator

Approved by HOD- AI & DS HOD ificial Intelligence

Vision: Developing AI & DS applications that addresses regional challenges and empowering innovation and challenges, Science | Edinggural AI & Vashoda Technical Campas Salace

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Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC NH-4, Wadhe, Satara 415011 Email: principalengg\_ytc@yes.edu.in Call: 02162-27238/39 Mob. 9172220775 Faculty of Engineering



Artificial Intelligence & Data Science Department

Academic Year 2024-25

Semester- ODD

Class	B. Tech. Sem. –V
Course Code and Course Title	BTAIPE504C Sensors and Robotics Technology
Prerequisite/s	None
Teaching Scheme: Lecture/Tutorial/Practical	03/01/00
Credits	04
Evaluation Scheme: CA / MSE / ESE	20/20/60

#### **Course Outcomes:**

	ourse Outcomes (COs): pon successful completion of this course, the student will be able to:					
BTAIPE504C_1	principles with examples.					
BTAIPE504C_2	Predict the expected performance of various sensors	L2				
BTAIPE504C_3	Familiar with the history, concept development and key components of robotics technologies.	LI				
BTAIPE504C_4	Implement basic mathematics manipulations of spatial coordinate representation and transformation.	L3				
BTAIPE504C_5	Calculate Gripping Force required for object manipulation by various robotic end effectors	L4				

#### Mapping of CO's with PO's and PSO's:

Course Outcomes		Programme Outcomes													
	1	2	3	4	5	6	7	8	9	10	11	12	PSO 1	PSO 2	PSO 3
BTAIPE504C_1	3	3	2		3							2		1	2
BTAIPE504C_2	3	3	2		3							2		1	2
BTAIPE504C_3	3	3	2		3							2		1	2
BTAIPE504C_4	3	3	2		3							2		1	2
BTAIPE504C_5	3	3	2		3							2		1	2
Total	15	15	10		15							10		5	10
Average	3	3	2		3							2		1	2
BTAIPE504C	3	3	2		3							2		1	2

#### **CO Attainment Targets:**

СО	504C_1	504C_2	504C_3	504C_4	504C_5
Previous Attainment	NA	NA	NA	NA	NA
Target for CAY					

Prepared by Course Coordinator

Verified by **Academic Coordinator** 

Approved by **HOD-AI & DS** 

Vision of the Department
Developing Al & DS applications that addresses regional challenges and empowering innovation and challenges, to become a leading rural Al & DS hub

Mission of the Department

M1: Emphasizing responsible AI development that considers social and environmental factors specific to the region.

M2: Educating the public about the potential benefits and responsible use of AI & DS

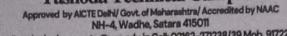
technologies.

M3: Facilitating internships and research projects with AI & DS companies to bridge the gap between theory and practice.



Yashoda Shiskshan Prsarak Mandal's

## Yashoda Technical Campus





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**Faculty of Engineering** 

# Department of Artificial Intelligence and Data Science Engineering

Semester-ODD Academic Year 2024-25

Class	TY B.Tech. SemV
Course Code and Course Title	BTAIOE505C Software Engineering and Testing
Prerequisite/s	
Teaching Scheme: Lecture/Tutorial/Practical	03/01
Credits	04
Evaluation Scheme: CA / MSE / ESE	20/20/60

#### **Course Outcomes:**

Course Outcomes Upon successful co	(COs): mpletion of this course, the student will be able to:	Blooms Level
BTAIOE505C_1	To use the techniques, skills, and modern engineering tools necessary for	L2
BTAIOE505C_2	To design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.	L3
BTAIOE505C_3	To apply software testing knowledge and its processes to software applications.	L3
BTAIOE505C_4	To identify various software testing problems and solving software testing problems by designing and selecting software test models, criteria, strategies and methods.	L3
BTAIOE505C_5	To apply the techniques learned to improve the quality of software development.	L3

# Mapping of CO's with PO's and PSO's:

Course Outcomes		Programme Outcomes													
	1	2	3	4	5	6	7	8	9	10	11	12	PSO 1	PSO 2	PS O3
BTAIOE505C_1	3				3							1		3	
BTAIOE505C_2	3		3			2						1	2		
BTAIOE505C_3	1	2										3	3		
BTAIOE505C_4		3	2	2	2							2			
BTAIOE505C_5	2	2		1								3	3		
Total	9	7	5	3	5	2						10	8	3	
Average	2. 25	2.	2.	1.	2.	2						2	2.66	3	
BTAIOE505C	2	2	3	2	3	73						2	3	3	

**Course Coordinator** 

erified by **Academic Coordinator** 

Approved by

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factors specific to the region

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