

Gokhale Education Society's  
**B.Y.K College of Commerce**

**Certificate Course in Artificial Intelligence**

**Depth of the Course:** Functional knowledge in AI.

**Course Outcome:** Students who aim to be Executives in leadership positions at all levels will improve their impact and performance through effective and impactful leadership communication through this course.

**Eligibility and Selection Criterion:** BBA (CA), BBA, BBA (IB) and B.Com students who have passed in first year with at least 50% marks.

**Duration:** Semester (4<sup>th</sup> Semester)

## **Course Objectives**

1. To introduce the concepts of Artificial intelligence and methods
2. To provide the knowledge representation and Learning techniques to problem solving strategy
3. To design and understand real world problems using AI approaches
4. To implement AI techniques in different fields.

## **Course Outcome**

On completion of the course, the learner will be able to—Able to Demonstrate knowledge of the fundamental principles of Artificial intelligent systems and would be able to analyze and compare the relative merits of a variety of AI problem

solving techniques. CO1: Identify the need of Intelligent agents in problem solving CO2: Compare and analyze different search techniques applied for problem solving CO3: Apply the knowledge representation method and reasoning for given decision problem CO4: Design and analyze a learning technique for a given system in different AI application domains like marketing, healthcare, banking, finance, education.

## Syllabus

Unit No.	Unit Title	Contents	Purpose & Skills to be develop
1	<b>Introduction to AI</b>	<ul style="list-style-type: none"><li>• Introduction</li><li>• Types of AI</li><li>• Importance of AI</li><li>• Scope of AI</li><li>• Future of AI</li><li>• Advantages and Disadvantages of AI</li></ul>	To understand what AI is and to study the scope and future of AI in various fields.
2	<b>Agents in AI</b>	<ul style="list-style-type: none"><li>• Types of Agents</li><li>• Intelligent Agent</li><li>• Agent Environment</li><li>• Turing Test in AI</li></ul>	To study AI agent, its types and use of Turing test in AI

3	<b>Machine Learning and Deep Learning, Neural Network</b>	<ul style="list-style-type: none"> <li>• Introduction to Machine Learning</li> <li>• Machine Learning Techniques</li> <li>• Introduction to Deep Learning</li> <li>• Difference between Machine Learning and Deep Learning</li> </ul>	To get acquainted with machine learning and deep learning
4	<b>Applications of AI</b>	<ul style="list-style-type: none"> <li>• AI Applications in various fields in marketing, healthcare, banking, finance, etc. Case Studies: Credit card Fraud Analysis, Sentiment Analysis, Recommendation Systems and Collaborative filtering, Uber Alternative Routing</li> <li>• Artificial Intelligence in Business and Society</li> <li>• The future of Artificial Intelligence</li> </ul>	To identify and appreciate Artificial Intelligence and study its applications in daily life.

### Teaching Methodology

Sr. No.	No of Lectures	Innovative Methods to be used	Project/Practical	Expected Outcome
1	10	List out the applications of AI	To demonstrate the various applications of AI.	The students must understand the role of AI in Business.
2	08	Case study on Artificial Intelligence	Prepare a case study report on Machine learning/Deep Learning	The students must get acquainted with the different entry modes in Deep Learning.
3	08	Practical Approach of AI	To demonstrate the various examples of AI	Students must understand different modules of AI.
4	04	Tutorial / Evaluation	Student shall submit assignment/tutorial	-

## Evaluation Methods

Evaluation	Marks
1. Online MCQ test	70%
2. Individual Presentation (Online).	10%
3. Project / Report	20%
<b>Total</b>	<b>100</b>

### **Suggested References**

Sr. No.	Title of the Book	Author/s	Publication
1	Artificial Intelligence and Machine Learning	Vinod Chandra S. S.	PHI Publication
2	Artificial Intelligence: The Basics	Kevin Warwick	
3	Machine Learning for Beginners	Harsh Bhasin	BPB Publications

### **Syllabus Framing Committee:**

<b>Sr.No</b>	<b>Name</b>	<b>Designation</b>
1	Prin.Dr.Ram Kulkarni	Chairman
2	Dr. Leena Bhat	Incharge
3	Mrs. S. Y. Mulay	Co-ordinator
4	Mrs. Pradnya Bapat	Member