







# THE INTERNSHIP CELL

IN COLLABORATION WITH Samarth Bharat

and

# STUDENT LEARNING CENTRE

HANSRAJ COLLEGE

presents

**Certificate Course on** 

Artificial Intelligence and Prompt Engineering (SLC 23)



### **About the Course**

The internship cell of Hansraj in collaboration with Samarth Bharat and Student Learning Center Hansraj is launching a course. This Artificial Intelligence and Machine Learning course is designed to teach the basics and advanced concepts of Artificial Intelligence, including machine learning, deep learning, natural language processing (NLP), and computer vision. It focuses on practical applications in areas like healthcare, finance, and marketing, using tools like TensorFlow and OpenCV. The course also covers Al ethics, future trends, and how to use Al effectively in businesses. Through hands-on lab sessions and projects, participants will learn to build, evaluate, and deploy Al models to solve real- world problems.

## **Learning Outcomes**

Starting from the very basics of AI and prompt engineering to learning the use of AI in business, this course navigates from beginner level to intermediate proficiency





#### **Completion Certification**

Hansraj College and Samarth Bharat 85% Attendance and assignments are mandatory for the Course Completion Certificate

# **COURSE OUTLINE**

### **Introduction to Artificial Intelligence**

- 1. Overview of Al
- 2 Applications of Al
- 3 AI Ethics and Governance
- 4 Future Trends in Al

### **Machine Learning Fundamentals**

- 1 Introduction to Machine Learning
- 2 Supervised Learning
- 3 Unsupervised Learning
- 4 Reinforcement Learning
- 5 Evaluation and Model Selection

### **Deep Learning**

- 1.Introduction to Deep Learning
- 2 Neural Networks and Training
- 3 Convolutional Neural Networks (CNNs)
- 4 Recurrent Neural Networks (RNNs)
- 5 Practical Deep Learning

### **Natural Language Processing (NLP)**

- 1 Introduction to NLP
- 2 Text Processing and Feature Extraction
- 3 Sentiment Analysis and Text Classification
- 4 Advanced NLP Techniques
- 5 Hands on exercises with NLP libraries
- 6 Practical NLP

### Al in Computer Vision

- 1 Introduction to Computer Vision
- 2 Image Processing Techniques
- 3 Object Detection and Recognition
- 4 Image Segmentation
- 5 Hands on exercises with computer vision libraries
- 6 Practical Computer Vision

# **COURSE OUTLINE**

#### **Introduction to Prompt Engineering**

- 1 Overview of Prompt Engineering
- 2 Applications and Use Cases
- **3 Understanding Prompts**
- 4 Crafting Effective Prompts
- 5 Common Pitfalls and How to Avoid Them
- 6 Introduction to ChatGPT
- 7 Dynamic Prompting and Real-World Scenarios

#### Al in Business

- 1 AI Strategy and Implementation
- 2 AI in Marketing and Sales
- 3 AI in Operations and Supply Chain
- 4 AI in Finance and Risk Management

#### **Hands-on Lab Sessions**

- 1 Setting Up AI Development Environment
- 2 Data Collection and Preprocessing
- 3 Building and Training Models
- 4 Model Evaluation and Optimization
- 5 Deployment and Integration
- 6 Capstone Project

# **Important Details**

- Starting from 2nd week of February 2025
- Live Sessions of Master Class, Assessments and Assignments
- Course Completion Certificate
- Registration Fee Rs. 2500
- Last date for registration 25th January 2025

## To Register here:





# Payment Details:

Course Fees: Rs. 2500

Account Name: Principal, Hans Raj College SLC account

Account Number: 2848101019888

Bank: Canara Bank IFSC: CNRB0002848

Course fees is non-refundable

## For Queries Contact us:

#### **Student Coordinator**

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## **Patron:**

Prof. (Dr.) Rama, Principal Hansraj College Ms. Alka Kacker, Director, IQAC Hansraj College

## **Coordinators**:

Dr. Pooja Arora, Convenor, SLC

Ms. Madhavi Moni K.., Assistant Professor Hansraj College

Dr. Anurag Kakkar, Assistant Professor, Hansraj College