

Programme for Advancing Computer Education (PACE)

Course Name: Certificate in Artificial Intelligence (Beginner)

Course Code: CAI(B)

Course Duration: 1.5 months, **Total hours:** 45 hrs.

Course Fees: Rs. 4500/-

Course Objective: To develop an understanding of Artificial Intelligence.

Eligibility: Minimum 12th Pass from Govt. recognized Board / University

Prerequisite: Basic Knowledge of computers is essential.

1. Teaching Schema: (Tabular format)

Sr. No	Modules	Hours
1	Introduction to AI	45

2. Detailed Course Contents

Introduction to AI (45 Hrs.)

- Defining AI
- Evolution & Ethics of AI
- Responsible AI
- Meaning, Scope, and Stages of Artificial Intelligence
- Intelligence and Its Traits
- Advantages and Disadvantages of AI
- Effects of Artificial Intelligence on Society
- Adversarial attacks on AI
- Future of AI
- Applications of AI
- Fundamentals of Machine Learning
- Types of Machine Learning
- Introduction to Deep Learning
- Machine Learning Workflow
- Introduction to NLP
- Applications of NLP (Machine Translation, Speech Recognition, Search System etc.)
- Introduction to Computer Vision
- Image Recognition
- Applications of CV (Image to Text conversion-OCR, Vehicle Number Detection, Face Recognition, Object Detection etc.)
- Case Studies
 - Sentiment Analysis on Movie Review
 - Facial Emotion Recognition

4. List of Reference Books

- Artificial Intelligence – A Modern Approach (3rd Edition) By Stuart Russell & Peter Norvig