

Gurukul Educational And Research Institute



SHIKSHA SANKUL, SAHASTRADHARA ROAD, NEARBY IT PARK,
DEHRADUN, UTTARAKHAND PIN CODE - 248013



Contact@geritharidwar.org

AI FUNDAMENTALS (Artificial Intelligence – Basic Level)

Duration: 6 Months Eligibility: 12th Pass / Basic Computer Knowledge

Mode: Theory + Practical+ Project

Module 1 – Introduction to Artificial Intelligence

- What is Artificial Intelligence?
- History of AI Types of AI (Narrow, General, Super AI)
- AI vs Human Intelligence
- Applications of AI (Healthcare, Banking, Education, etc.)
- Real-life Examples (Chatbots, Google Assistant, Self-driving cars)

Module 2 – Basics of Machine Learning

- What is Machine Learning?
- Types of ML (Supervised, Unsupervised)
- Basic Algorithms Concept
- Data & AI Relationship
- Introduction to Neural Networks (Basic Idea)

Module 3 – Python for AI (Basic)

- Introduction to Python
- Variables & Data Types
- Loops & Conditions
- Functions
- Basic Programs
- Introduction to Libraries (NumPy, Pandas – Basic Idea)

Module 4 – Data Handling Basics

- What is Data? Types of Data
- Data Collection
- Data Cleaning (Basic)
- Introduction to Excel for Data

Module 5 – AI Tools & Applications

- ChatGPT & AI Tools Overview
- AI in Image Generation
- AI in Content Creation
- AI in Business Automation
- Ethics in AI
- Responsible AI Usage

Module 6 – Introduction to Deep Learning (Basic Concept)

- What is Deep Learning?
- Neural Network Basics
- Image Recognition (Concept)
- Natural Language Processing (Basic Idea)

Project Work

- Small Python Program
- AI Tool-Based Mini Project
- Data Analysis Mini Task
- Final Viva

Examination Pattern

- Theory – 50 Marks
- Practical – 50 Marks
- Project – 50 Marks
- Viva – 50 Marks

Career Scope After AI Fundamentals

- AI Intern
- Data Entry + AI Assistant
- Junior AI Executive
- Python Trainee
- Automation Support Executive

