

Artificial Intelligence Course Content

Module 1: Introduction to AI

- Definition and Overview of AI
- Types of AI:
 - Narrow AI (Weak AI)
 - General AI (Strong AI)
 - Superintelligence
- AI in Everyday Life

Module 2: Key Concepts in AI

- Machine Learning (ML)
 - Supervised Learning
 - Unsupervised Learning
 - Reinforcement Learning
 - Deep Learning
 - Introduction to Neural Networks and Artificial Neurons.

Module 3: AI Techniques and Algorithms

- Search Algorithms
 - Breadth-First Search (BFS) and Depth-First Search (DFS)
 - Optimization Algorithms
 - Gradient Descent
- Natural Language Processing (NLP)
- Computer Vision

Module 4: AI Tools and Technologies

- Programming Languages:
 - Python
 - R
- AI Libraries and Frameworks:
 - TensorFlow
 - PyTorch
 - Scikit-learn
- Data Handling:
 - Pandas

- NumPy
- Matplotlib

Module 5: AI Project Development

- AI Workflow
- Supervised Learning Project
- Unsupervised Learning Project
- Reinforcement Learning Project

Module 6: Ethical and Social Implications of AI

- Ethics in AI
- AI in the Future

Module 7: AI Applications in the Real World

- Autonomous Systems
- AI in Healthcare
- AI in Finance