

Data Science for Beginners

Course Syllabus

Course Description:

An introductory course to Data Science. Learn the fundamentals of data analysis, machine learning, and statistical modeling.

Course Details:

Duration: 4 hours

Category: Data Science

Course Objectives:

1. Understand data science fundamentals
2. Learn data analysis and visualization
3. Master basic statistical concepts
4. Implement machine learning algorithms
5. Work with real-world datasets

Course Outline:

Module 1: Introduction to Data Science

- What is Data Science?
- Data Science workflow
- Tools and technologies

Module 2: Data Analysis

- Data cleaning and preprocessing
- Exploratory data analysis
- Data visualization

Module 3: Machine Learning Basics

- Supervised learning
- Unsupervised learning
- Model evaluation

Prerequisites:

- Basic Python programming
- Basic mathematics and statistics
- Familiarity with data concepts

Assessment Methods: