WHERE IDEAS BLOOM,TECH IGNITES

Machine Learning Course Syllabus

Understanding the Basics of Machine Learning
- Defining Machine Learning and its applications
- Overview of supervised and unsupervised learning
- Real-world examples and case studies
- Introduction to ML algorithms

Supervised Learning and Regression
- Understanding supervised learning
- Basics of regression: Linear and logistic regression
- Hands-on exercises with beginner-friendly ML tools
- Practical applications in regression

Unsupervised Learning and Clustering
- Overview of unsupervised learning
- Introduction to clustering algorithms (k-means, hierarchical)
- Hands-on clustering exercises
- Real-world applications of clustering

Feature Engineering and Model Evaluation
- Importance of feature engineering in ML
- Evaluating ML models: Accuracy, precision, recall
- Avoiding overfitting and underfitting
- Practical tips for improving model performance

Introduction to Neural Networks and Final Project
- Basics of neural networks and deep learning
- Overview of neural network architectures
- Final hands-on project: Implementing a basic ML application
- Presenting and sharing insights from final project

Final Course Outcomes
- Hands on experience with real time projects
- Industry Recognized Certificate
- Placement Assistance