In partnership with

Applied Data Science

Externship Program Course Content

Approved by AICTE

SmartInternz

In partnership with

Start Date: **28 June 2021**

Timings: **5:30 – 7:30 PM**

Duration: **30 Days (3 Weeks Live Sessions+1 Week Project Development)**

Program Benefits:

- ✓ **40 Hrs. Live Instructor-Led Training**
- ✓ **40 Hrs. Project Development**
- ✓ **Dedicated Mentor Support**
- ✓ **1 Guided Project**
- ✓ **Project Completion Certificate from IBM**
- ✓ **Externship Completion Certificate from SmartInternz**

Course Content

Modules	Content
Module - 1	**Introduction to Machine Learning** • What is Machine Learning • Use cases of Machine Learning • Types of Data • Role of Machine Learning Engineer • Different types of Machine Learning **Environment Setup of anaconda** **Introduction to python programming** • Python Data Structures • Python Programming Fundamentals • Conditions and Branching • Loops • Functions • Python Packages • Overview of OOP Terminology

Module - 2	**Python for Data Science** • Working with Numpy • Working with Pandas • Introduction to Data Visualization • Introduction to Matplotlib and Seaborn • Basic Plotting with Matplotlib and Seaborn • Working with Scikit-Learn
Module - 3	**Data Wrangling Techniques** • Introduction to Data preprocessing • Importing the Dataset • Handling Missing data • Working with categorical Data • Splitting the data in to Train and Test set • Feature Scaling

Module - 4	**Introduction to Supervised Machine Learning** **Introduction to Regression Algorithms** • Linear Regression • Multiple Linear Regression • Polynomial Regression • Decision Tree
Module - 5	**Introduction to Classification algorithms** • Logistic Regression • K-Nearest Neighboring • Support Vector Machine • Naive-Bayes • Decision Tree Classification • Random Forest Classification **Model Evaluation for classification and regression problems**
Module -6	**Unsupervised Learning** • K-Means Clustering

Module - 7	**Introduction to different modes of Deployments** • Working with the Flask framework • Building an application with Flask Framework • Integrating Machine learning model with Web Application • Introduction to IBM Python Flask APP • Deploying Python Flask application on IBM Python
Module - 8	**Introduction to IBM Cloud Services** • Introduction to IBM Cloud • Introduction to Watson Studio • Building Machine learning model in Watson Studio • Deploying Machine Learning Models as web services
Module - 9	**Introduction to Auto AI** • Building a Machine Learning Model Using Auto AI • Introduction to IBM Node-red • Integrating Machine Learning model to IBM Node-red • Building Web Application