

SHORT TERM CERTIFICATION ON DATA SCIENCE – MACHINE LEARNING BY IBM

Course Content:

1st Week:

Introduction to Data Science , Fundamentals of Data , Machine Learning and bigdata
Data Science Hands-on with Open Source Tools, Learn and try out the most popular
open data science tools like Jupyter Notebooks, IDE's .Introduction to Python
Programming

Advance Python libraries (Numpy, Pandas ,Matplotlib, SKLearn, SciPy)
Introduction to Machine Learning , Application ,What is Machine Learning?
Machine Learning Use-Cases
Machine Learning Process Flow
Machine Learning Categories

2nd Week:

Supervised Learning algorithm: Linear Regression and Logistic Regression
Hands-On/Demo

What are classification and its use cases

What is Decision Tree

Algorithm for Decision Tree Induction

Creating a Perfect Decision Tree

Confusion Matrix

What is Random Forest

What is Navies Bayes

Support Vector Machine: Classification

Hands-On/Demo

Machine learning algorithms, hands-on practice with machine learning

3rd week:

Real data sets and practice data mining techniques to predict or classify different
datasets

Hands-On/Demo

Hands-On/Demo

Hands-On/Demo

Hands-On/Demo

4th Week:

Hands-On/Demo

Introduction to Big Data, Hadoop, EcoSystems (MR, Hive, Pig, Sqoop, Flume)

Practicals on Hadoop OpenSource and Closed Package

Basic Data Analytics over bigdata using Ecosystems

Introduction to spark,Real Time Cluster Computing Framework

Machine Learning Library of Apache Spark, Understanding Spark SQL with Examples

Hands-On/Demo

