

Faculty Development Program on Data Science

Data is the new oil. It is an immensely untapped valuable asset and the tech industry is booming with the urge to learn more about it. Looking at the uprising demand of Data Science in the industry, the **Information Technology Department** of *Maharaja Surajmal Institute of Technology*, in association with **4 Achievers, Noida**, organized a **5-day Faculty Development Program** to augment their knowledge.

The program took place from **28 December 2020 to 1 January 2021**, from 11 am to 1 pm each day. It was commemorated by a leading Data Science and Machine Learning Expert, **Mr Nitin Shrivastav**, who enlightened the faculty with his top-notch teaching skills.

Day 1 & 2 included the elaboration on Topics related to Python, including:

- ✓ Features of Python
- ✓ Uses of Python
- ✓ Why Python is popular?
- ✓ Libraries of Python
- ✓ Companies using Python
- ✓ Types of language
- ✓ Why this Language is for Machine Learning and Artificial Intelligence?

After the first 2 days, the foundation had been laid and it was time to work upon some advanced learnings. So the **next 3 days** were dedicated to topics such as:

- ✓ **Data Analytics**; to understand and analyse what we can infer from data.
- ✓ **Supervised Learning**; to train a model based on a given outcome.
- ✓ **Unsupervised Learning**; to identify patterns in data sets containing data points that are neither classified nor labelled.
- ✓ **Reinforcement Learning**; to learn in an environment in order to maximize the notion of cumulative reward.
- ✓ **Neural Networks**; to recognize underlying relationships in a set of data through a process that mimics the way the human brain operates.
- ✓ **Deep Learning**; an artificial intelligence function that imitates the workings of the human brain in processing data and creating patterns for use in decision making.

This program proved to be a great way of giving boost to the discussion of Data Science among the faculty members and provided appreciable insights to everyone. It was, thus, a very fruitful program indeed and the knowledge gained will forever be beneficial.