



### About Machine Learning with Python

The course covers in depth knowledge of various Machine Learning techniques using Python, detailed understanding of supervised machine learning concepts, hands-on over various regression techniques in Python, application of learning theory functions in Python, detailed understanding of unsupervised machine learning concepts and its application in Python, hands-on over various clustering methods, dimensionality reduction and Kernel methods in Python, application of reinforcement machine learning concepts and adaptive control using Python, detailed understanding of Neural networks and advanced topics like advanced neural networks and convolution neural networks and their industry application.

### Course Objectives

- Extraction, transformation, scraping, joining and cleaning of large data sets
- Analyse large data sets to bring out insights to solve business problems
- Use machine learning libraries and apply established machine learning algorithms in Python
- Hands-on knowledge on Machine learning concepts in Python using problem solving approach by working on real time cases and in class programming assignments
- Develop code in support of Machine learning solutions in Python
- Evaluation and debugging of various learning algorithms
- Detailed understanding and application of advanced machine learning concepts



## Curriculum

- Module 1:** Introduction to machine learning
- Module 2:** Python stack
- Module 3:** Supervised learning part 1
- Module 4:** Supervised learning part 2
- Module 5:** Supervised learning part 3
- Module 6:** Support vector machine & kernel svm
- Module 7:** Overfitting
- Module 8:** Advanced statistics
- Module 9:** Classifiers using trees
- Module 10:** Unsupervised learning
- Module 11:** Dimensionality reduction
- Module 12:** Intro to artificial intelligence
- Module 13:** Deeper into AI
- Module 14:** Natural language processing
- Module 15:** Deep learning
- Module 16:** A Real time case-study - final project



### Instructor

All our instructors have industry experience and extensive functional expertise in the fields they train. They are handpicked and trained to deliver a great online learning experience.

### Certification

The assessment will be done on the basis of an online test and Project Evaluation at the end of the course.

On completion of the Assessment (Project + Test) with a minimum of 70% marks, a certificate of successful completion will be issued from NIIT.

### Pre-requisites

To join this course, the aspirant should have the knowledge of Python programming language.

### FAQs

**What is the Case Study based Project which I need to develop as part of this program?**

**NETFLIX MOVIE RECOMMENDATION ENGINE:** Recommend movies to the netflix users or viewers based on their liking taste or coming with an innovative approach to suit their taste of movies

**COPENHAGEN AIRPORT FLIGHT DELAY PREDICTION:** Based on the flight stats available go to the root cause and figure out the reason for a flight delay and the delay prediction

**SENTIMENT ANALYSIS OF A POLITICAL CAMPAIGN BASED ON TWITTER REVIEWS:** Based on the twitter reviews of a product or a campaign conduct sentiment analysis of the data available

### Who should join this course?

- IT professionals looking for a career switch into machine learning, data sciences and artificial intelligence
- Software developers looking for a career switch into machine learning, artificial neural networks and artificial intelligence
- Professionals working in machine learning and NLP
- Graduates with Python programming knowledge looking to build a career in machine learning



- Anyone with Python programming knowledge and a genuine interest in the field of machine learning
- Experienced professionals who would like to harness machine learning in their fields

### Why should I join this course?

Owing to the huge demand for Machine Learning professional against scarcity of professionals in this field, Machine Learning has become top notch lucrative career option with impressive salary packages both inland and abroad. If you are seeking high career rise with promising future and heavy pay package then this course is a must for you.