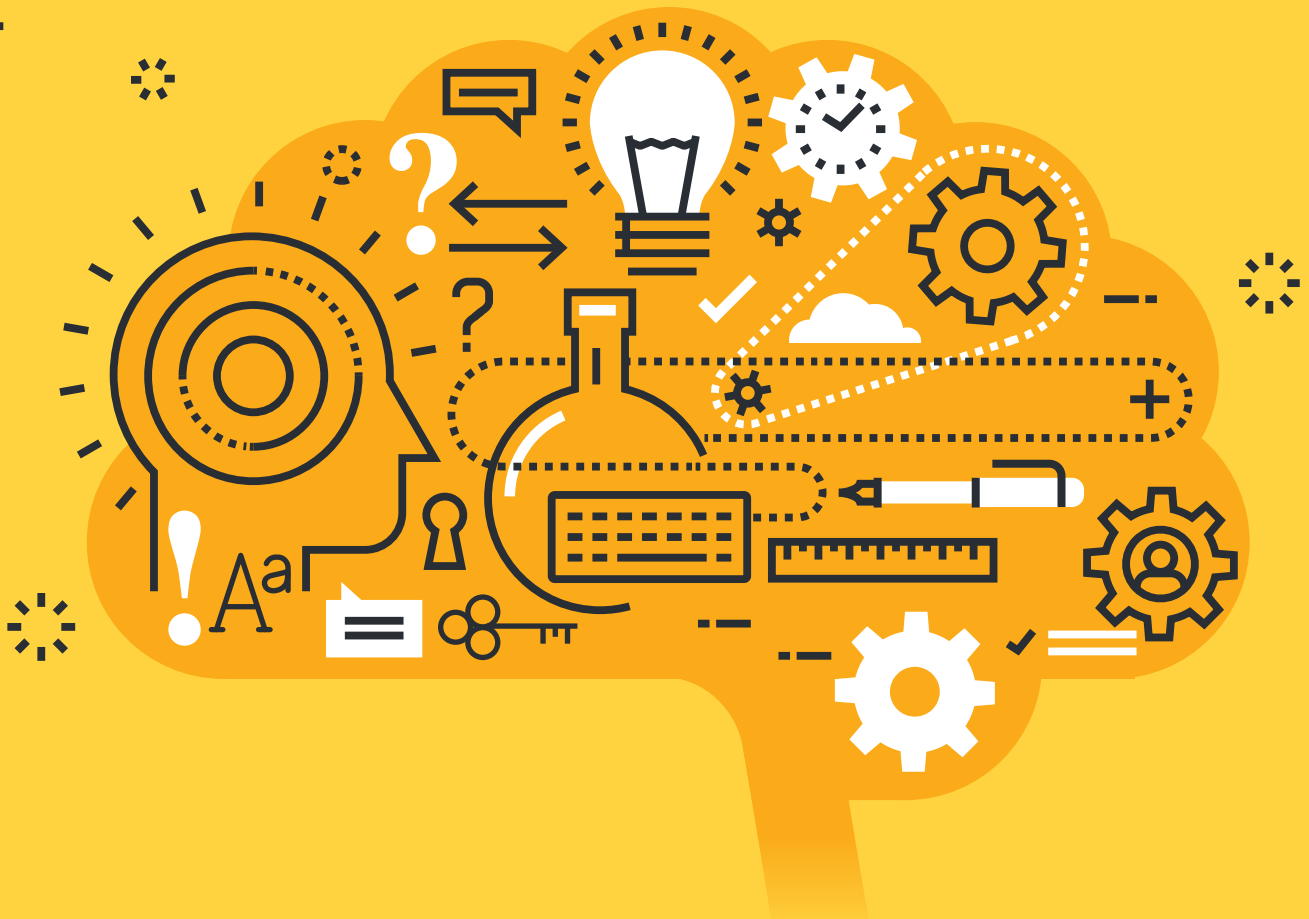




INSTITUTE OF  
MANAGEMENT  
PROFESSIONALS



# DATA SCIENCE DIPLOMA

Machine Learning with Python

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## About Institute of Management Professionals (IMP)

**Institute of Management Professionals (IMP)** is an independent professional institute partnering with consultation companies in various fields dedicated to bringing all related marketing, sales and business development training, Our mission is to help individuals with a competitive edge in their careers to face different job and life challenges.

Our training courses are designed and delivered by subject experts who are competent in providing solutions which is applicable to today's business challenges.





Get what you really wanted

# About The Course

- Level up your data analytics skills by learning how to apply various data science and machine learning techniques to analyze and visualize a data set using Python.
- Upon completion of this course, you'll be able to write your own Python scripts and perform basic hands-on data analytics using Python language.
- You will learn Python from scratch and practice through lab exercises and hands-on methods.
- Processing and managing your data in Python, discover the patterns and draw predictions that would enable you to give your company a competitive edge & also help you to boost your career to the next level.

# Why to study

## Data Science?

### Career Chances:

Data Science was chosen as the #1 career in 2019 as the fastest-paced job.

### High Paying Jobs:

Data Scientists are one of the highly paying jobs.

### High Demand:

Demand for data job positions will be growing rapidly in time to come.



# Why to Study

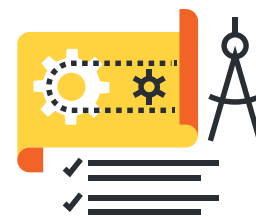
## Python as a Data Science Language

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### Easy to learn

Python has few keywords, easy structure, and a clearly described syntax.



### Easy to read

Python code is more virtually described and visible to the eyes.



### Easy to maintain

Python's source code is fairly easy to preserve.



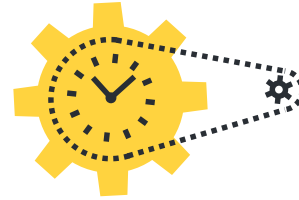
### A broad standard library

Python's library is cross-platform compatible on Windows, and Macintosh.



## Interactive Mode

Python allows interactive checking out of snippets of code.



## Portable

Python can run on a vast range of hardware structures and has the equal interface on all platforms.



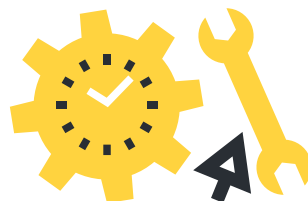
## Databases

Python offers interfaces to all fundamental business databases.



## Scalable

Python affords a better structure and support for large applications than shell scripting.



## Accessible

Python is a free, flexible and powerful open source language



# Diploma Objectives

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In this training program you will learn how to collect, process, analyze and visualize any size of data to get the conclusions supporting you taking the right decision for your business and build a data models to help you find the predictions to plans for the future.

- Learn all Python basics.
- Learn OOP (Object-Oriented Programming) and data structures in Python.
- Fully be able to implement any algorithm or program using Python but without GUI (Graphical User Interface).
- Learn how to code in Python and use for statistical analysis.
- Can deal with all files using Python.
- Learn The important topics in Data Science and Mathematics.
- Qualify trainee to be data scientists.
- Learn most needed Data science algorithms.
- Be able to implement entire Data Science Projects using Python.
- Understand the mathematics behind Machine Learning

# Diploma Topics

## Python Part

### 1-Introduction

- a. What's Python?
- b. Different Field python can fit
- c. Different Python Versions
- d. Environment setup

### 2-Basics

- a. Basic Syntax
- b. Data Types
- c. Operators
- d. Decisions
- e. Loops
- f. Strings
- g. Functions
- h. Most needed Library and tools

### 3-OOP (Object-oriented programming)

- a. Classes
- b. Objects
- c. Data members
- d. Overloading
- e. Inheritance



# Diploma Topics

## Python Part

### 4-Data Structures

- a.List and tuples
- b.Sets
- c.Dictionaries

### 5-Files and Databases

- a.Reading from Files
- b.Writing into files
- c.Database Connections
- d.Dealing with files using pandas

### 6-Advanced Topics

- a.Multi threads
- b.Sockets
- c.APIs



# Diploma Topics

## Data Science part

### 1. Introduction to data science

- a. Data science trends?
- b. Statistics Refreshment (Descriptive and Inferential)
- c. Mathematics Refreshment

### 2. Supervised Learning

- a. Linear Regression
- b. Logistic Regression

### 3. Unsupervised Learning

- a. Clustering

### 4. Machine Learning

- a. What's Machine Learning?
- b. What's Deep Learning?
- c. Neural Networks
  - i. Neural Network Architecture and How it works
  - ii. Neural Network Implementing
- d. Intro to Tensor Flow

### 5. Data Visualization

### 6. Recommended Systems

### 7. Full Business Case



# Who this course is for

## Python as a Data Science Language

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- Needs to learn Practical Data Analytics using Python.
- Needs to start his career in the field of data science.
- Needs to enhance his analytical skills.
- Interested In learning to implement Machine Learning algorithms using Python.
- Looking to work with real life data In Python.

### Contact us

To get more details  
regarding special discount for  
groups.

**Prerequisites:** There are no prerequisites for this program, aside from basic computer skills.

 **Diploma Duration:**  
70 Hours (Python 30 H + Data Science 40 H)

 **Diploma Location:**  
37 Amman St., Mohy Eldin Abo Elezz, Mohandseen,  
Giza, Egypt, (Fourth floor).

#### FOR MORE INFORMATION:

**Website:** <http://imanagementpro.com/en/>

**E-mail:** [info@imanagementpro.com](mailto:info@imanagementpro.com)

**Mobile:** 02 01008800923

**Address:** 37 Amman st, Fourth Floor, El Dokki , Giza , Egypt.



## TRAINING TERMS & CONDITIONS

On behalf of IMP we honored to grab your attention to our terms & conditions wishing you beneficial training.

Your agreement upon these conditions will save your rights and ensure you have the premium services.

### **1- Certificate:**

Attendance certificate will be awarded to those who attended 65% of the course.

### **2- Recap:**

Recap is available for only 1 session 'with the available dates'.

If you need to recap a session you attended already it will be paid for 190 LE per session 'with the available dates'

### **3- Postponing:**

Postponing only could be before the start of the course with minimum 3 days.

### **4- Refund:**

- Refund prior 5 days of the course start date, 100% refund.
- Refund after 2 sessions of the course, 50% refund of course fees.
- Refund after 3 sessions of the course, no refund.

Any refund request should be requested by a documented email.