



Includes...

T - Training

C - Certification (International)

I - Internship

Python Programming

(From the Scratch)

+

R -Programming

With

Live Online Lectures

(just like being in a classroom from your home or office or just anywhere)

Course Curriculum- Python

Part 1 : Getting Started with Python

- ✚ History of Python.
- ✚ Installing Python.
- ✚ Introduction to IDE's like Jupyter Notebook, Spyder, Anaconda.
- ✚ Architecture and Library Collection in Anaconda.

Part 2 : Python Programming Basics

- ✚ Introduction to various Datatypes in Python.
- ✚ The Idea Of indentation.
- ✚ Understanding Python Interpreter.
- ✚ Typecasting in Python.

Part 3 : Lists, Tuples & Dictionary

- ✚ How to Create a List, Tuple and Dictionary.
- ✚ Operations on List, Tuples & Dictionary.
- ✚ Compare and Contrast List, Tuple & Dictionary.

Part 4: Control Structures in Python

- ✚ If Statement.
- ✚ For Statement.
- ✚ While Statement.
- ✚ Elif Statement.
- ✚ Break, Continue and Pass Statement.

Part 5: Functions in Python

- ✚ What are Functions.
- ✚ How to define functions in Python.
- ✚ Concept of Function Overloading.
- ✚ Defining `__init__` functions.

Part 6: Decorators in Python

- ✚ Role of Decorators in Python.
- ✚ Using Functions as objects.
- ✚ Defining a function inside a function.

Part 7: Strings in Python

- ✚ Creating Strings in Python.
- ✚ Various string operations including striping and striding.

Part 8: Object Oriented Programming in Python

- ✚ Creating Classes and Objects.
- ✚ Data abstraction in Python.
- ✚ Inheritance in Python Classes.
- ✚ Concept of Method Overriding.

Part 9: Exception Handling in Python

- ✚ What are Exception.
- ✚ Exceptions Vs Errors.
- ✚ Catching Exceptions.
- ✚ Reporting exceptions.
- ✚ User Defined Exceptions.

Part 10: GUI (Graphical User Interface) design in Python

- ✚ Introduction to Tkinter Programming.
- ✚ Creating Forms.
- ✚ Adding Components like Labels,Command Buttons,Option Buttons,Dropdown Boxes etc.
- ✚ Adding Canvas to Tkinter Frame.

Part 11: Working with NumPy & Pandas

- ✚ Introduction to Numerical Python and Pandas Library.
- ✚ Importing Data from Excel sheets.
- ✚ Performing operations on Dataframes and sequences.

Part 12: Database Programming using Python

- ✚ Creating a database.
- ✚ Creating Dumps for a Database.
- ✚ Connecting to a Database in the backend.
- ✚ Adding, Retrieving and modifying the data in the database using Python Front End.

Part 13: Web Scraping in Python

- ✚ Using Beautiful Soup library.
- ✚ Extracting data from Instagram and facebook.

Part 14: Data visualization in Python

- ✚ Introduction to MATPLOTLIB
- ✚ Creating all Different Kinds of Graphs including, Bar graphs, Scatter plots, line graphs, worm graphs etc.

Part 15: Regular Expression and lambda Functions in Python

- ✚ Defining and Using Regular Expressions.
- ✚ Understanding Lambda Functions.
- ✚ Implementing Lambda Functions in Projects.

Project Based Approach

After every set of Concepts ,we implement a project using all those concepts. The Course Includes the following projects.

- 1) A Game Design Based on Course curriculum Part 1 to Part 8.
- 2) Election Data analysis Using Pandas and Matplotlib.
- 3) Designing a complete Project validation form using Regular Expressions and Lambda Functions (GUI & Database based)
- 4) A Project on How to design an Audio Player
- 5) Web Scraping from Instagram.
- 6) Olympic data analysis.

Salient Features Of the Course

- 1) Completely Hand on Course.
- 2) Online Support from our App and Website.
- 3) Theoretical concepts covered too, as they are important for certification and Interviews.
- 4) Certification to be provided at the end of the course.

Course Syllabus - R

- 1) **Introducing to R**
- 2) **R Data Structures**
- 3) **Help functions in R**
- 4) **Vectors**
- 5) **Scalars**
- 6) **Declarations**
- 7) **recycling**
- 8) **Common Vector operations – Using all and any – Vectorized operations**
- 9) **NA and NULL values – Filtering**
- 10) **Vectorised if-then else**
- 11) **Vector Equality**
- 12) **Vector Element names**
- 13) **Creating matrices**
- 14) **Matrix operations – Applying Functions to Matrix Rows and Columns**
- 15) **Adding and deleting rows and columns – Vector/Matrix Distinction**
- 16) **Avoiding Dimension Reduction**
- 17) **Higher Dimensional arrays – lists**
- 18) **Creating lists – General list operations**
- 19) **Accessing list components and values**
- 20) **applying functions to lists**
- 21) **Creating Data Frames – Matrix-like operations in frames**
- 22) **Merging Data Frames – Applying functions to Data frames**
- 23) **Factors and Tables – factors and levels – Common functions used with factors**
- 24) **Working with tables - Other factors and table related functions**
- 25) **Control statements – Arithmetic and Boolean operators and values**

- 26) Default values for arguments - Returning Boolean values**
- 27) functions are objects – Environment and Scope issues**
- 28) Writing Upstairs - Recursion – Replacement functions**
- 29) Tools for composing function code – Math and Simulations in R**
- 30) S3 Classes – S4 Classes**
- 31) Managing your objects – Input/Output – accessing keyboard and monitor**
- 32) reading and writing files – accessing the internet**
- 33) String Manipulation**
- 34) Graphics – Creating Graphs – Customizing Graphs – Saving graphs to files**
- 35) Creating three-dimensional plots**
- 36) Linear models – Non-linear models – Time Series and Auto-correlation – Clustering**

About Junaid Khateeb

Qualification : M.E. Computer Engineering

Teaching Experience : 17 Years

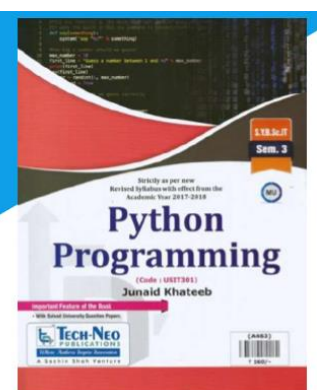
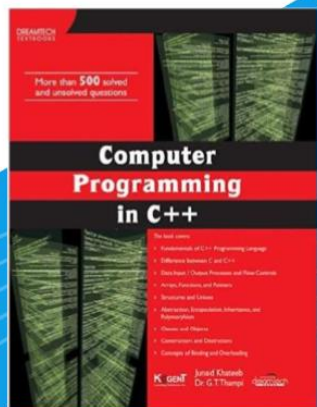
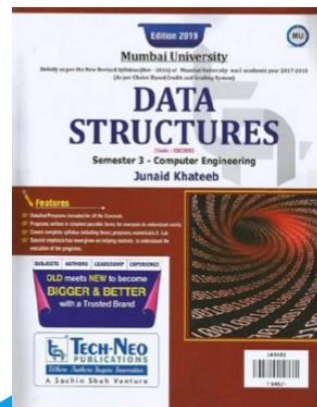
Profile: Founder of Khateeb Group of Insitutes & Junkminds.com

Technologies Taught: C , C++ , JAVA , Python , Machine Learning , Artificial Intelligence , R-Programming

Concepts Taught : Object Oriented Programming, Database Management System, Operating System, Data Structures, Software Engineering, Discrete Mathematics, Analysis of Algorithms, Distributed Processing.

Number Of students trained : over 10,000 and counting.

Author of the Following books:



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