

Syllabus: Python

Sr No:	Topic	Date	Sign
Module 1:	An Introduction to Python		
1.1	• What can Python do?		
1.2	• Why Python?		
1.3	• Good to know		
1.4	• Python Syntax compared to other programming languages		
1.5	• Python Install		
Module 2:	Beginning Python Basics		
2.1	• The print statement		
2.2	• Comments		
2.3	• Python Data Structures & Data Types		
2.4	• String Operations in Python		
2.5	• Simple Input & Output		
2.6	• Simple Output Formatting		
2.7	• Operators in python		
Module 3:	Python Program Flow		
3.1	• Indentation		
3.2	• The If statement and its' related statement		
3.3	• An example with if and it's related statement		
3.4	• The while loop		
3.5	• The for loop		
3.6	• The range statement		
3.7	• Break &Continue		
3.8	• Assert		
3.9	• Examples for looping		
Module 4:	Functions& Modules		
4.1	• Create your own functions		
4.2	• Functions Parameters		
4.3	• Variable Arguments		
4.4	• Scope of a Function		
4.5	• Function Documentations		
4.6	• Lambda Functions& map		
4.7	• n Exercise with functions		
4.8	• Create a Module		
4.9	• Standard Modules		
Module 5:	Exceptions Handling		
5.1	• Errors		
5.2	• Exception handling with try		
5.3	• handling Multiple Exceptions		

5.4	● Writing your own Exception		
Module 6:	File Handling		
6.1	● File handling Modes		
6.2	• Reading Files		
6.3	• Writing& Appending to Files		
6.4	• Handling File Exceptions		
6.5	• The with statement		
Module 7:	Classes In Python		
7.1	• New Style Classes		
7.2	• Creating Classes		
7.3	• Instance Methods		
7.4	• Inheritance		
7.5	• Polymorphism		
7.6	• Exception Classes & Custom Exceptions		
Module 8:	Generators and iterators		
8.1	• Iterators		
8.2	• Generators		
8.3	• The Functions any and all		
8.4	• With Statement		
8.5	• Data Compression		
Module 9:	Data Structures		
9.1	• List Comprehensions		
9.2	• Nested List Comprehensions		
9.3	• Dictionary Comprehensions		
9.4	• Functions		
9.5	• Default Parameters		
9.6	• Variable Arguments		
9.7	Specialized Sorts		
Module 10:	Collections		
10.1	• namedtuple()		
10.2	• deque		
10.3	• ChainMap		
10.4	• Counter		
10.5	• OrderedDict		
10.6	• defaultdict		
10.7	• UserDict		
10.8	• UserList		
10.9	UserString		
Module 11:	Python SQL Database Access		
11.1	• Introduction		
11.2	• Installation		

11.3	• DB Connection		
11.4	• Creating DB Table		
11.5	• INSERT, READ, UPDATE, DELETE operations		
11.6	• COMMIT & ROLLBACK operation		
11.7	handling Errors		
Module 12:	Network Programming		
12.1	• Introduction		
12.2	• A Daytime Server		
12.3	• Clients and Servers		
12.4	• The Client Program		
12.5	• The Server Program		
Module 13:	Date and Time		
13.1	• sleep		
13.2	• Program execution time		
13.3	• more methods on date/time		
Module 14:	Regular Expression		
14.1	• Split		
14.2	• Working with special characters, date, emails		
14.3	• Quantifiers		
14.4	• Match and find all		
14.5	• character sequence and substitute		
14.6	• Search method		