

**An overview of common Python modules- (5)**

1. Command Line Arguments
2. OS Tasks (Directories, Paths & System Calls)
3. Datetime
4. Mathematics and Basic Statistics
5. Regular Expressions
6. Persisting Data Structures with Pickle (Serialization/Deserialization)
7. Accessing Internet Resources (Using urllib and requests)
8. Testing and QA in Python using Docstring and unittests

**Popular Data Formats- (2h)**

1. base64
2. JSON
3. XML
4. CSV
5. XLSX
6. YAML

**Interaction with Databases- (3h)**

1. Sqlite3
2. MongoDB
3. PostgreSQL
4. ORM Based Databasing using SQLAlchemy

**Caching- (1h)**

1. Memcached
2. Redis

**Basic Web Scraping with Python using BeautifulSoup- (2h)**

1. What is web scraping and why is it relevant?
2. Scraping Static Data From Websites
3. Scraping Dynamic Data From Websites

**MicroServices using Python- (2h)**

1. MicroServices (REST APIs using Flask)
2. Faster MicroServices using Japronto or Falcon

**Advanced Concepts Introduction (Optional)- (2h)**

1. *Sockets\**
2. *Multithreading\**
3. *Interaction with media*
4. *Asynchronous Programming*

**Total Hours - 17h**

**Prerequisites - Python Fundamentals.**

