

# Python Full Stack – Syllabus

WEEK	TOPICS
Week 1	<b>Python Fundamentals</b> Python 2 vs 3, Interpreter vs Compiler, REPL, Identifiers & Keywords, String literals, Types & Values, Namespaces, Exceptions, Simple/Compound statements, Operators, Dictionaries, Classes & Objects, Lambdas & Functions, File Handling: open()/close(), PyPI & pip, Variable scopes/lifetime, Pythons, PyChecker, Pylint, Logging, Decorators, Modules, Unit testing, Datetime, Regular Expressions, Collections
Week 2	<b>PyMongo &amp; MongoDB</b> NoSQL, NoSQL vs SQL (RDBMS), MongoDB, PyMongo driver, Mongo collections, Mongo documents, Insert, Find, Delete, Query, Sort, Update, Limit
Week 3	<b>Python HTTP, HTML/CSS, Flask</b> HTTP, HTTP headers, Status Code, Python http.server, Python http client, Client-Server Communication, Hosts & Ports, HTTP methods, HTML & CSS, Flask, REST
Week 4	<b>JavaScript</b> JSON, Web Services, JavaScript
Week 5	<b>React</b> Introduction to React, Component based architecture, data binding, router, Redux
Week 6	<b>AWS / Linux / Docker</b> 12 Factor App, Containerization, Linux, Linux Namespaces, Dockerfile, Image vs Container, docker subcommands, docker flags, AWS
Week 7	<b>DevOps / Microservices</b> Jenkins, CI/CD, Orchestration, Kubernetes, Green Blue deployment, EKS
Week 8	Project 3
Week 9	Project 3
Week 10	Project 3