Byte Academy Syllabus

Foundation Course on Software Development

Duration: 4 Weeks

Week 1: Computer Science & Programming Basics
Introduction to Computer Science
- Introduction to Computer Architecture and Computer Organization

Fundamentals of Writing Software and System Operation
- Editing and Executing Software Programs
- Linux / Mac OS / Windows Development Environment

Introduction to Python Programming
- Python Objects, Python Data Structures
- Variables, Expressions, Control Flow

Week 2: Python and Algorithms – Python Implementation
Python Programing
- Python File Operations
- Python Functions and Modules
- Python Standard Library Reference

Writing quality programs & Best practices in Software Development

Introduction to Algorithms
- Big O Notation
- Sorting
- Searching

Week 3: Web Scraping using Python
Web scraping using Beautiful Soup and Selenium
Read and Write Data formats (XML, JSON, CSV, Excel, PDFs) using corresponding Python Libraries

Week 4: Automation & Project Work
Automate the boring stuff
- Automate email receiving and sending
- Automate scheduling of programs and tasks on your computer

Skill Assessment & Project Work Evaluation