## Python for QA. Part 1.

Trainer: [Yevgen Runts](https://kb.epam.com/users/viewuserprofile.action?username=yevgen_runts)

Location: Lviv

Available Languages: UA

Level: Beginner, Intermediate

### Audience

This training is made for:

* Quality Assurance Engineers;
* Junior Software Engineers;

### Training Description

This training…

Each module contains homework tasks for practice and knowledge consolidation (2-3 hours are needed for solving each homework).

| Training Type | Duration  (Hrs) | Cost per Employee  (USD) |
| --- | --- | --- |
| Classroom  (Max Group Size - 12) | 7.5 |  |

### Necessary Knowledge

* Basic skills in Linux
* Experience in scripting using any programming language

### Training Goals

After the training attendees will be able to:

* Use Python to automate routine tasks;
* Implement scripts in Python to work with HTTP, HTML, JSON and XML;
* Use PyCharm IDE for Python development;
* Use GIT as version control system;

### Training Agenda

| Module | Lecture Duration  (Hrs) | Practice Duration  (Hrs) |
| --- | --- | --- |
| **Module 0: Course introduction**   * Agenda * Course structure * Working environment | 0.5 | 0.25 |
| **Module 1: Introduction to Python**   * Why Python? * Python interpreter * Ecosystem | 0.5 | 0.25 |
| **Module 2: Python Basics. Part 1.**   * Build-in data types * Operators * Type casting and detection * Data types methods and operations | 1 | 0.5 |
| **Module 3: Python Basics. Part 2.**   * Decision Making * Blocks * Loops * Functions | 1 | 0.5 |
| **Module 4: Python Intermediate**   * List comprehension * Functional programing tools * Modules and packages * Files * Exceptions * CSV | 1 | 0.5 |
| **Module 5: HTTP, HTML, JSON, XML**   * Package requests * Module json * !!!!!!!!!!!!!! * !!!!!!!!!!!!!!!! | 1 | 0.5 |
| Total: | 5 | 2.5 |
| Training duration: | 7.5 | |

### Technical Equipment & Software

* **Projector**
* **Blackboard with markers**

### ****Recommended Reading****

* [Python Tutorial](https://docs.python.org/3/tutorial/)
* [Google's Python Class](https://developers.google.com/edu/python/)
* [Official Python Documentation](https://docs.python.org/3/)
* [Python Cookbook](http://shop.oreilly.com/product/0636920027072.do)