

Python Development 1

Syllabus

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Overview of Training

This cornerstone training program is designed for you if you are determined to become a skilled Python Developer and a respected member of a modern software development team. It provides you with enough Python coding practice and enough theoretical knowledge to give you a broad foundation in programming tools and techniques. Upon completing the training, you are ready to start learning more advanced topics in Python.

Python programming can't be learned in a few weeks by passively watching video tutorials and then doing some coding exercises on your own. It's an advanced skill set which can only be mastered with a significant amount of closely supervised practice. NCLab's proven training method is called Instructor-Assisted Learning By Doing and it closely parallels an unpaid apprenticeship.

Instructor-Assisted Learning By Doing

Throughout your learning, you are assisted by a gamified Artificial Intelligence-based teaching platform that watches your every step, grading your work in real time, and helping you with contextual information, hints, and templates, as needed. The platform also teaches you established best practices, methodologies, and guidelines that you need to follow to ensure consistency, accuracy, and reliability in your work.

You learn actively from Day 1. After gaining confidence in one topic, you move to the next one. The progression has been improved and tuned for many years and it is so smooth that you never get lost and you are never alone.

The syllabus that follows shows both what you are taught and what you are required to make use of yourself; this means that after taking the training, you will have actually mastered each of the topics covered, not just taken an exam showing that you have absorbed some percentage of the knowledge covered.

Courses

1. [Optional] [Computational Thinking 1, 2, and 3](#)
2. [Introduction to Python](#)
3. [Working with Text](#)
4. [Plotting and Drawing](#)
5. [Optional] [Software Project 1](#)
6. [Working with Files in Python](#)
7. [Optional] [Software Project 2](#)
8. [Data Visualization with Python](#)