# Courses

MIT Open Courseware Introduction to Computer Science and Programming in Python

<https://ocw.mit.edu/courses/6-0001-introduction-to-computer-science-and-programming-in-python-fall-2016/>

PY4E Python for Everybody (Dr. Chuck) (on Coursera, edX, and FreeCodeCamp)

<https://www.py4e.com/>

Harvard CS50 Introduction to Programming with Python

<https://cs50.harvard.edu/python/2022/>

(Kombina YouTube CS50 intro <https://www.youtube.com/watch?v=3xaVX0cluDo>)

Data Carpentries Python for Ecology) <https://datacarpentry.org/python-ecology-lesson/>

FreeCodeCamp 4 hour Python course Youtube

<https://www.youtube.com/watch?v=rfscVS0vtbw>

# Problems

Rosalind Bioinformatics Python Village

<https://rosalind.info/problems/list-view/?location=python-village>

100 days of Code (concept)

<https://www.100daysofcode.com/>

(Replit Youtube implementation <https://www.youtube.com/playlist?list=PLto9KpJAqHMQNY3XP0JqLs7NyeU_dnNj0>)

A page with lots of Python tutorials

<https://wiki.python.org/moin/BeginnersGuide/Programmers>

# Projects

Clever Programmer (lots of) Python projects with source code

<https://thecleverprogrammer.com/2021/01/14/python-projects-with-source-code/>

Tiny Python Projects

<https://tinypythonprojects.com/>

<https://github.com/kyclark/tiny_python_projects>

# Books

Python for Everybody (Dr. Chuck Charles Severance) <http://do1.dr-chuck.com/pythonlearn/EN_us/pythonlearn.pdf>

Think Stats 2ed (Allen Downey)

<https://greenteapress.com/thinkstats2/html/index.html>

Other Python books for beginners <https://www.theinsaneapp.com/2021/05/best-free-python-programming-books.html>

# Misc

## numpy

\* NumPy [reference](https://numpy.org/doc/stable/reference/)

\* SciPy [lectures](https://scipy-lectures.org/)

\* One-hour [tutorial](https://www.youtube.com/watch?v=QUT1VHiLmmI) on Youtube

## Matplotlib

## Going further

\*  Official [tutorial](https://matplotlib.org/tutorials/introductory/pyplot.html)

\* [Tutorial](https://www.youtube.com/watch?v=qErBw-R2Ybk) on Youtube

# ChatGPT

# (Tina Huang Youtube ChatGPT Prompts to Learn to Code Faster (and not get bored 🥱)

) <https://www.youtube.com/watch?v=IaA-3FdWFm8>

<https://www.freecodecamp.org/news/how-to-use-chatgpt-for-data-scientists/>

(JCharisTech YouTube Analysing data with ChatGPT <https://www.youtube.com/watch?v=Dw0irOIJYnA>)

(Sundas Khalid YouTube How to learn Python fast with ChatGPT) <https://www.youtube.com/watch?v=tEn5BjRY8Uw>