

Computing and Data Science – The Python Part (CS102-4)

Joshua Maglione

Semester 2 (2026)

Module information:

Meeting Times:

- Tuesdays 2:00pm – 2:50pm ([CSB-1007](#))
- Wednesdays 2:00pm – 2:50pm ([AC202](#))
- Thursdays 9:00am – 9:50am ([Tyndall](#))

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Website: [Canvas](#) and <https://joshmaglione.com/2025CS102-4.html>.

The Python part of this module comprises the first 12 lectures.

Topics: We will cover the basics of four key topics in this module:

1. Scientific Computing,
2. Data Analysis,
3. Data Visualization, and
4. Machine Learning.

We do this by exploring four ubiquitous Python packages: NumPy, pandas, Matplotlib, and scikit-learn.

Assessment: There will be four ???

Reading: We will go through *Python Data Science Handbook* by Jake VanderPlas.

The book is available online: [Python Data Science Handbook](#).

As a secondary source, one might consider *IPython Interactive Computing and Visualization Cookbook, 2nd edition* by Cyrille Rossant. The book is available online: [IPython Cookbook](#).