**NDP Coding Bootcamp**

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All materials are hosted on the web: <https://github.com/mdbudde/NDPprogramming>

* The course will go at a pace dictated by your familiarity and experience. So please ask questions and engage, this is your time to learn.
* Coding may be unfamiliar, but it will save you countless time and effort in the future.
* You do not need to install programs on your computer to use the course materials.

**Before meeting:**

Please try to look through an [introduction to the python language](https://library.oapen.org/bitstream/id/56d27e73-e92a-4398-8198-239be7aacc93/2020_Book_IntroductionToScientificProgra.pdf). You do not need to read it in depth, but even just quickly looking though some of the content may help.

You may also use the github link above to view course materials and/or load the notebooks/scripts we will use.

For continuing beyond the course, I recommend using Visual Studio Code (editor) and anaconda (python installation). You can install these beforehand.

**Day 1: Introduction to Python and programming environments**

* [Powerpoint lecture](https://github.com/mdbudde/NDPprogramming/blob/main/Mini-course%20Outline%20and%20slides.pptx) of python basics; orienting you to programming environments, how to run programs, etc.
* Using [jupyter notebooks](https://gesis.mybinder.org/v2/gh/mdbudde/NDPprogramming/main) as an introduction to python; variables, conditional statements, lists, functions, and packages.
* How-to get started on your own: navigating vscode, anaconda, and using AI.

**Day 2: Advanced Concepts and Hands-on**

* Recap
* Using VScode and anaconda.
* Creating figures with python and matplotlib.
* Good coding practices, code sharing and collaborating.
* Free practice, hands-on help, or other topics.