

## Introduction to the Unix Shell & Version Control with Git

### Description :

This hands-on workshop draws on materials from The Carpentries (<https://carpentries.org/workshops/>) and is tailored for graduate students.

You will learn to use the Unix command-line to navigate and manipulate files, automate repetitive tasks, and then apply version control with Git to track, share and reproduce your work.

The emphasis is on practical workflows that align with research data management, reproducibility and collaboration.

### Objectives:

- Explain how and why to use the Unix shell – understand how the shell relates to the operating system, why command-line interfaces are useful rather than only GUIs.
- Navigate the file system, create and manage files and directories using the command line (e.g., cd, ls, mkdir, rm).
- Build pipelines and use loops and shell scripts to automate repetitive tasks, making your work more efficient and reproducible.
- Understand the benefits of version control – see how Git acts as a digital lab notebook, enabling you to go back in time, track who changed what and collaborate safely.
- Perform the core Git workflow: initialize a repository, stage changes, commit snapshots, explore history, ignore unwanted files, and connect to remote repositories.
- Apply best practices for reproducible research and collaboration – share your code/data, maintain clear history, avoid loss of work or confusion across versions.

**Intervenants :** Manon MARCHAND, Marc CHANTREUX

Additional information: <https://grehenning.github.io/2026-01-27-Strasbourg/>

**Person to contact:** Greg HENNING [ghenning@unistra.fr](mailto:ghenning@unistra.fr)

!! Please note that **places are limited** to 25 people !!

**Dates:** 27 et 28 January 2026

**Venue:** Amphitheatre Grunewald, Building 25, IPHC, Campus Cronenbourg