

## Carpentry trainings @Unistra 2021-2024

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- What is the Carpentries project?
  - Which trainings were given in Strasbourg?
  - Perspectives
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What is the Carpentries project?

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a [registered 501©\(3\) non-profit](#) based in USA

a private/ non operating foundation with incomes from endowments (institutional memberships & workshop fees)

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to teach foundational coding and data science skills...

...needed to do computational, data-intensive research

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...often not included as a part of basic research training in many disciplines.

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audience: researchers worldwide

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instructors:

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1998 [Software Carpentry](#)

Greg Wilson & Brent Gorda taught researchers software development skills

Greg Wilson developed [a community of instructors](#)

with collaboratively-developed and openly-available [lessons](#)

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2014 [Data Carpentry](#): mission of building communities teaching universal data literacy

2014 [Library Carpentry](#): mission of teaching data skills to people working in library- and information-related roles

developing both lessons + communities of practice

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2018 Carpentries

Software Carpentry and Data Carpentry merged their projects to form a new project called The Carpentries, under the fiscal sponsorship of [Community Initiatives](#), and shortly thereafter welcomed Library Carpentry as a Lesson Program

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Wilson G. Software Carpentry: lessons learned [version 2; peer review: 3 approved].  
F1000Research 2016, 3:62 (<https://doi.org/10.12688/f1000research.3-62.v2>)

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Which trainings were given in Strasbourg?

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Open Access Week 2021

1st workshop [Ecology with R](#)

lessons:

- Data Organization in Spreadsheets
  - OpenRefine for Data Cleaning
  - Introduction to R
  - Data analysis and Visualization
  - Data Management with SQL
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University of Strasbourg Membership

[2023-2024](#)

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2 Software Carpentry workshops:

lessons:

- the Unix Shell
- plotting & programming with Python
- Version control with Git

[2023-03](#)

[2024-05](#)

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## Data Carpentry: Image Processing with Python ([2024-01](#))

lessons:

- image basics
  - working with skimage
  - drawing and bitwise operations
  - creating histograms
  - blurring images
  - thresholding
  - connected component analysis
  - capstone challenge
- 

## Data Carpentry: Genomics curriculum ([2024-10](#))

lessons:

- project organization & management
  - introduction to the command line
  - data wrangling and processing
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## Data Carpentry: Intro to R and RStudio in Genomics ([2025-01](#))

lessons:

- Introducing R and RStudio, R Basics
  - Using packages, Data Wrangling and Visualization
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109 people registered/ 91 participants

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PhD students

1st first year: 21 registered/ 19 participants

2nd year: 9 registered/ 7 participants

3rd year: 8 registered/ 6 participants

4th year: 1 registered/ 1 participant

year unknown: 56 registered/ 45 participants

total: 95 registered/ 78 participants

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Postdocs:

6 registered/ 5 participants

Engineers:

3 registered/ 3 participants

Researchers:

2 registered/ 2 participants

University Staff:

Library Department: 1 registered/ 1 participant

IT Department: 1 registered/ 1 participant

Language center: 1 registered/ 1 participant

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disciplines:

lack of data 🙄

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doctoral schools:

!!!ED unknown: 33 PhD students

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ED 182: physics and chemistry-physics: 9 registered/ 7 participants

ED 222: chemical sciences: 8 registered/ 6 participants

ED 269: mathematics, information science & engineering: 4 registered & participants

ED 413: earth and environmental sciences: 2 registered & 2 participants

ED 414: life and health sciences: 27 registered/ 23 participants

ED 519: social and human sciences: 1 registered & 1 participant

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5 local instructors:

Manon Marchand, engineer (Astronomical Observatory of Strasbourg)

Swaroop Kunapuli, PhD student (Joint Research Unit Chemistry of Complex Matter)

Julien Godet, researcher (Faculty of pharmacy)

Valentine Gilbrat, engineer (Institute of Genetics and Molecular and Cellular Biology)

Greg Henning, researcher (Institut pluridisciplinaire Hubert Curien)

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Perspectives

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New membership agreement

from March, 2025

to February, 2026

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2 centrally organised workshops

- Software Carpentry workshop
  - Data Carpentry workshop
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What else???

- self-organised workshops can be organized in Strasbourg
  - workshops can be implemented in PhD students curricula
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What are the students' needs?

In term of [lessons](#)

-> a survey for PhD students coming soon

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In term of help/community meetings after the workshop sessions?

-> [maker sessions](#) @lab numérique (Atrium building, Esplanade campus)

-> community meetings coming soon in English

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Interested in becoming instructor?

[Instructor training handbook](#)

Next training sessions: [calendar](#)

Ask for institutional code before your registration: [cobolet@unistra.fr](mailto:cobolet@unistra.fr)

5 seats are available thanks to our membership

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Collaborative Lesson Development: curriculum development community

Lesson developers collaborate on new lessons in [The Carpentries Incubator](#). Mature lessons can be submitted for open peer review in [The Carpentries Lab](#) and/or may be adopted by one of our lesson programs.

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A [training on collaborative lesson development](#) can be organized here in Strasbourg

New and existing members can supplement their workshop and instructor training quotas with this great new training

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Join the community sessions online

Calendar: <https://carpentries.org/community/events/>

Program & registrations [on the pad of the sessions](#)

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Skill-up Session (1 hour)

Creating a workshop website

A hands-on session on how to create a website for your Carpentries workshop. You will need a GitHub account.

Europe/Paris: Wednesday 12 February 2025 16:00PM

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Community Discussion Session (1 hour)

Workshop Debrief and Teaching Discussion

Discussion designed for Instructors getting ready to teach or having recently taught to come discuss their workshop with the community and new instructors going through the check-out process.

Europe/Paris: Wednesday 12 February 2025 20:00PM

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Workbench Transition Coworking (1 hour)

Coworking calls for lesson developers who want to ask questions and/or get help migrating their projects from The Carpentries previous lesson infrastructure to The Carpentries Workbench.

Transition workflow: <https://carpentries.github.io/sandpaper-docs/migrating-from-styles.html>

Europe/Paris: Monday 24 February 2025 20:00PM

Europe/Paris: Monday 24 February 2025 10:00PM

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Community Discussion Session (1 hour)

AI and The Carpentries: Session 2 - LLMs for Data Science: Essential Knowledge and Common Misconceptions

This series aims to foster community dialogue about how our lessons can evolve to address the benefits and challenges of using LLM-based chatbots like ChatGPT in teaching software and data skills.

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These community discussion sessions are open to everyone, and we encourage you to join us and share your perspectives and experiences—whether you've used generative AI chatbots or not—in teaching the skills covered in Data Carpentry, Library Carpentry, and Software Carpentry workshops.

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Topics:

1. The Ethics of Teaching LLMs in Carpentries Workshops
2. LLMs for Data Science: Essential Knowledge and Common Misconceptions
3. LLMs for Data Science: Case Studies to Inform Carpentries Curriculum

Europe/Paris: Tuesday 25 February 2025 13:00PM

Europe/Paris: Tuesday 25 February 2025 22:00PM

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Europe/Paris: Tuesday 25 March 2025 13:00PM

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Skill-up Session (1 hour)

Creating a workshop website

A hands-on session on how to create a website for your Carpentries workshop. You will need a GitHub account.

Europe/Paris: Wednesday 26 March 2025 16:00PM

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More resources to get involved

Carpentries Website: <https://carpentries.org/>

Carpentries Blog Posts (<https://carpentries.org/blog/>)

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Many Thanks!

Noémi Cobolet

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