

# Doctoral training for 2024-2025

## BASICS FOR RESEARCH

Ethics in research  
(mandatory)

Open science  
(mandatory)

Write and  
publish  
your article

**TBD**  
Data  
Visualization

**+** **NEW**  
Scientific  
dissemination

**+** **NEW**  
Research  
transfer

**NEW**  
Green science

**NEW**  
AI for research

## DATA ANALYSIS AND PROCESSING

**+** **NEW**  
Python

**NEW**  
Origin/QtiPlot

**NEW**  
Matlab/R

**NEW**  
VBA

**TBD**  
Git

**TBD**  
AI for data analysis

**NEW**  
High performance  
computing

## DISCOVER ANALYTICAL TOOLS

**NEW**  
Introduction to  
analytical tools

**NEW**  
Structure and surface  
of materials

Nuclear magnetic  
resonance

**TBD**  
Mass spectrometry and  
chromatography

**TBD**  
Radiochemistry  
Arronax cyclotron

**TBD**  
Geochemistry




## METHODOLOGY AND MANAGEMENT

**NEW**  
Thesis writing  
workshop

**NEW**  
Write with  
LaTeX/Overleaf

Intervenir  
en TD ou TP

Lutter contre les  
discriminations

 recommended training  
 optional training  
 several courses available