

Dipartimento di Scienze Chimiche e Geologiche

## PhD Course M3ES Models and Methods for Material and Environmental Sciences

## PRESENTS Introduction to Data Science with R

Speaker: Prof. Federico Lugli (UNIMORE)

## 21, 22, 23, 24 July 2025 *Time 9:00-13:00* Computer Room 2° Floor *DSCG – Via Campi, 103, Modena*

**Abstract**: The course provides an introductory overview of R and its use in data science. The course is tailored for PhD students from diverse disciplines and backgrounds. Participants will learn the main principles of data science, including data tiding, visualization, univariate and multivariate statistical analysis, and (machine learning) modeling, with an emphasis on reproducibility and best practices. Through coding exercises and real-world case studies, students will explore key R packages such as e.g. tidyverse, ggplot2, dplyr and caret. By the end of the course, attendees will be equipped with the skills to clean, analyze, and interpret complex datasets, allowing them to integrate data science techniques into their research effectively by using R coding. No prior experience with R is required, but basic knowledge of statistics will be beneficial.



To attend the course register at: https://forms.gle/iMsWjKaM5YL2yYK68

## INFO: federico.lugli@unimore.it