



University of Pavia Dipartimento di Ingegneria Civile e Architettura - DICAr

Introduction to scientific programming with Matlab

The objective of the course is to provide students on the verge of starting bachelor and master programmes with preliminary notions of scientific programming in Matlab. Lessons will be taught remotely in English.

Contents:

- 1 The MATLAB environment: Get started2 MATLAB operators and simple calculations
- 3 Formulas and functions
- 4 Vectors and matrices in MATLAB
- 5 Matrix operations and functions
- 6 Exercises
- 7 Algorithms and structures
- 8 MATLAB scripts and functions (m-files)
- 9 Control structures (if...then, loops)
- 10 Postprocessing with Matlab
- 11 MATLAB graphic functions
- 12 Review and hands-on session

Dr. Zahreddine Hafsi

Research Assistant at DICAr

Prof. Enrico Creaco

Full Professor at DICAr

University of Pavia

Dates: to be fixed during the second and third week of September 2025

Time: 4 x 3 hours, or 6 x 2 hours

Classroom: zoom link to be provided