Programming for scientific computing

Component
École Nationale Supérieure d'Électrotechnique d'Électronique d'Informatique d'Hydraulique et des Télécommunications

In brief

- **Ametys Code:** N8EE22B
- **Open to exchange students:** Yes

Presentation

Objectives

Introduce students to the Fortran 90 language, which is still widely used in the field of numerical methods and scientific computing, through examples from the finite element course applied to waveguide problems.

Description

Introductory course to Linux and the Fortran language. The main syntax concepts are covered through independent exercise sessions and an application project. Interfacing with the Python language is covered at the end of the project.

Note: Development work must be carried out on Linux in order to allow students to deepen their knowledge of this operating system.

Pre-requisites

Programming basics, finite elements