

Matlab-Simulink



Component

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

In brief

- > **Ametys Code:** N5AE02B
- > **Open to exchange students:** No

Presentation

Objectives

A comprehensive introduction to:

The MATLAB® scientific computing environment
Basic modeling techniques and tools for developing SIMULINK® models

Description

- The MATLAB environment interface
- Entering commands and creating variables
- Analyzing vector and matrix data
- Visualizing vector and matrix data
- Processing data files
- Data types
- Automating commands with scripts
- Writing programs containing loops and conditional branches
- Writing functions

- Creating and modifying Simulink models, and simulating system dynamics
- Modeling continuous, discrete, and hybrid systems
- Modifying solver options for simulation accuracy and performance
- Hierarchy in a Simulink model
- Creating components with subsystems, libraries, and model references

Pre-requisites

No prior knowledge of programming with MATLAB and Simulink software from Mathworks is required.