

# Architecture and Control TER



Component  
École Nationale  
Supérieure  
d'Électrotechnique  
d'Électronique

## In brief

- > **Ametys Code:** N9EE22C
- > **Open to exchange students:** Yes

## Presentation

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### Objectives

Analysis of the structure of an uninterruptible power supply for IT loads.

Breakdown into sub-elements; each group is responsible for studying one of them and must:

- Study how it works,
- Develop sizing criteria
- Propose component values and a choice of control elements and their parameter values, enabling compliance with specifications corresponding to a real device.

The analyses, choices, and sizing carried out are validated by simulation.

The different groups must collaborate to conduct the study of the complete device.

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### Description

Apply the lessons learned in the "UPS design" and "UPS control" courses.

Know how to analyze the operation of an industrial uninterruptible power supply (UPS).

Learn how to size components and control loops based on given specifications.

Validate the results through simulation.

## Pre-requisites

"CVS Design" course

"CVS Control" course / N9EE22B