

# Algorithms and Imperative Programming



Component

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



Semester  
Automne

## In brief

- > **Ametys Code:** N5EE02A
- > **Open to exchange students:** Yes

## Presentation

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### Objectives

This class aims to present the key tools used to design IT applications. The various design steps are presented in an approach ranging from reading a specification to implement on a computer-based solution (here using the C-ANSI language).

### Description

There are two separated parts to the Algorithms and Imperative Programming class. The first part will focus on tools dedicated to the design of computer programs totally independent of the programming language. The program refinement and their translation into algorithmic form will be learned.

The second part discusses the specificities of the C language and the methodologies for translating and algorithm in that language.

This class is associated with a tutorial which illustrates both the design and the programming part. Different examples are dealt in order to illustrate the design process, up to the final implementation of the computer code.