

# Introduction to Static Conversion



Component

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



Semester

Printemps

## In brief

- > **Amety's Code:** N6EE04D
- > **Open to exchange students:** Yes

## Presentation

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### Objectives

Students will understand the basic principle of static conversion and analyze the behavior of the devolper chopper.

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### Description

This course is an introduction to static conversion of electrical energy. The concepts of switching and filtering cells are covered. The operation of non-isolated DC-DC converters is studied. The implementation of a MOS transistor-based step-down converter is carried out in a design office.

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### Pre-requisites

Methods for studying electrical circuits.

Harmonic analysis.

First-order and second-order electrical circuits: index response and harmonic response.