

# 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:** N6AE04A
- > **Open to exchange students:** No

## Presentation

---

### Objectives

At the end of this course, students will be able to understand, simulate, and operate two types of static converters: single-phase voltage inverters and single-phase and three-phase voltage rectifiers.

---

### Description

This course includes lessons on the theory of single-phase inverter operation and control strategies, as well as the principles of single-phase and three-phase uncontrolled (diode) and controlled (thyristor) voltage rectifiers.

These theories are accompanied by two design offices for the simulation of single-phase voltage inverters and controlled and uncontrolled three-phase voltage rectifiers.

---

### Pre-requisites

This subject requires knowledge of the basic elements and theories of electronics and electrical circuits.