

Basic Structures for C/A and A/C Conversion



Component
École Nationale
Supérieure
d'Électrotechnique
d'Électronique

In brief

- > **Amety's Code:** N6EE06B
- > **Open to exchange students:** Yes

Presentation

Objectives

Understand the basic structures of AC-DC and DC-AC power conversion.

Description

Presentation of single-phase and three-phase voltage rectifier topologies using diodes or thyristors.
Presentation of single-phase voltage inverters using full-wave control and pulse width modulation.
Study of the properties of these topologies and waveforms through simulations and experimental models.

Pre-requisites

Methods for studying electrical circuits
Harmonic analysis
Concept of switching cells