

Inverter



Component

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

In brief

- **Ametys Code:** N8AE16A
- **Open to exchange students:** No

Presentation

Objectives

Understand the principles of modulation and filtering of single-phase or three-phase PWM voltage inverters.

Description

This course first presents the basic principles of pulse-width modulation control for single-phase or three-phase voltage inverters. The different waveform forms are analyzed to determine the filtering components for voltages and currents. Examples are addressed in the form of a design office and a project.

Be able to size the filtering components associated with a single-phase or three-phase voltage inverter controlled by pulse-width modulation.

Pre-requisites

Knowledge of the basic structures of static electric power conversion- Knowledge of second-order filters- Basic knowledge of spectral analysis.