Signal Processing

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

Semester
Printemps

In brief

- **Ametys Code:** N6EE02A
- **Open to exchange students:** Yes

Presentation

Objectives

- Know the different classes of signals and the properties of their representations (autocorrelation function, energy or power spectral densities).
- Identify or design linear filtering operations.
- Understand the effects of ideal and real sampling,
- Know the techniques of restitution.

Description

Chapter 1: Correlation and spectra (Fourier transform, signal classes, properties).

Chapter 2: Linear filtering (Wiener-Lee relations, interference formula).

Chapter 3: Sampling (ideal sampling, actual sampling, restitution).

Chapter 4: Nonlinear filtering (quadrator, quantification).