COMMUNICATION NUMERIQUES CODEES

ECTS
5 credits

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

In brief

> **plugin.odf-inp:PLUGINS_ODF_COURSE_NBHOURS_TXT:** 64

> **Code:** N7EN03

Presentation

Objectives

- be able to dimension a channel coding scheme based on convolutional and cycle codes
- be able to code and decode the proposed codes
- understand the issues of time-frequency-phase synchronization and channel estimation in a receiver
- understand the problematic of data compression
- be able to implement a mobile communications chain and evaluate its performance on MATLAB software

Description

The first part of this unit is devoted to channel coding, and more specifically to the study of convolutional and cyclic codes.
This first part is followed by an introduction to digital receivers and data compression.
The last part of the EU is devoted to the sizing and implementation under MATLAB of a communications chain encoded on a frequency-selective channel.

Pre-requisites

Digital communications (UE N6EN02 "Telecommunications" or equivalent)

List of courses

	Nature	CM	TD	TP	Crédits
Codage canal	UE				
Récepteurs	UE				
Source Coding	UE				
Projet	UE				

Useful info

Place

> Toulouse