Smart Energy - EUR

ECTS	Composante
3 crédits	**Sciences Fondamentales et Appliquées**

En bref

Langue(s) d'enseignement: Anglais

Ouvert aux étudiants en échange: Non

Présentation

Description

The part 1 addresses the problem of optimizing the quality of service (QoS) required of a digital communication system when energy consumption is constrained. These are strategies related to adaptive modulations or the use of optical rather than electromagnetic communications ... Quality of service can be define by transmission distance, bit error rate, bit rate and requires knowledge of the link budget.

In the part 2, we define the constituent elements of an IOT ..., all the elements "composing" their behaviour and in particular their consumption characteristics. We will also look at the physics of some components. The following chapters will be discussed: Sensors for IoT (temperature, gaz, light…), antennas for IoT, transmitters / receivers for IoT Materials and technologies for sensors, antennas, transceivers for IoT, harvesting and storage module. Materials and processes for each device will be described.

Heures d'enseignement

CM	CM	26h
TD	TD	34h

Informations non contractuelles.
Dernière mise à jour le 20 septembre 2024

Pré-requis obligatoires

Methodology part of electronic design of IoT

Physics of components and semiconductors in IoT

Informations non contractuelles.
Dernière mise à jour le 20 septembre 2024