INSTITUT NATIONAL DES SCIENCES APPLIQUÉES LYON

DPT TELECOMMUNICATIONS SERVICES ET USAGES
TELECOMMUNICATIONS, SERVICES & USAGES
INSA Campus LyonTech - Bâtiment Hedy Lamarr
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Télécommunications

Wireless Technologies for the Internet of Things

IDENTIFICATION

CODE : TC-5-S1-EC-IOT
ECTS : 2.0

HOURS

Lectures :	16.0 h
Seminars :	16.0 h
Laboratory :	0.0 h
Project :	0.0 h
Teacher-student contact :	32.0 h
Personal work :	0.0 h
Total :	32.0 h

ASSESSMENT METHOD

TEACHING AIDS

TEACHING LANGUAGE

English

CONTACT

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AIMS

This course is part of the teaching unit 5TC Options (TC-5-OPT) and contributes to the following skills:

A3 Implement an experimental approach
A5 Process data
C2 Specify, design and model communication networks and protocols
C4 Specify and scale digital systems that answer to customer's needs
C6 Design, implement, develop, deploy networks and protocols
C8 Operate, analyze, improve digital systems
Ability: Choosing the best IoT technology for a given application
Capacity: Collect environmental data using a wireless IoT technology
Capacity: Create a point-to-point LPWAN network
Capacity: Use a public LPWAN network to collect data
Ability: Visualize and analyze environmental data
Capability: Learn techniques for enabling IPv6 connectivity in constrained networks
Capacity: Study the connectivity of an LPWAN network
Capacity: Measure the performance of an LPWAN network
Knowledge: LPWAN, LoRa, LoRaWAN, NB-IoT, LTE-M, BLE, The Things Network, IPv6 header compression

In addition, it requires the following skills:

B3 Interact with others, work in a team