

# USEEJ8 - Wireless Mobile Networks

Mis à jour le 06-04-2020

## Présentation

### Prérequis

Basics in computer networks and communication protocols.

### Objectifs pédagogiques

The objective of the course is to study mobile and wireless network systems, their architectures and technologies.

### Compétences

Deep understanding of the architectures of cellular networks, WiFi and VANet

## Programme

### Contenu

Challenges in mobile computing.

Media access protocols.

Wireless LAN and WAN.

3G, 4G and 5G technologies

Ad hoc, VANET delay-tolerant and opportunistic networking.

Sensor networks.

Various cross-cutting themes, including energy, privacy and security.

Modeling and simulation of mobile networks.

### Modalités de validation

- Projet(s)
- Examen final

### Description des modalités de validation

Hands-on labs are organized to cover key parts of the teaching module and evaluated based on lab reports. Presentations will be requested and evaluated. The final exam is based on exercises covering the whole module.

## Bibliographie

Titre	Auteur(s)
Wireless Personal Communications: Simulation and Complexity	Mohsen A. M. El-Bendary



### Code : USEEJ8

Unité spécifique de type cours

6 crédits

### Responsabilité nationale :

EPN03 - Electroniques,  
électrotechnique, automatique et  
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