

60032 - Communication physics

Información del Plan Docente

Academic Year	2016/17
Academic center	100 - Facultad de Ciencias
Degree	538 - Master's in Physics and Physical Technologies
ECTS	5.0
Course	1
Period	Second semester
Subject Type	Optional
Module	---

1.Basic info

1.1.Recommendations to take this course

1.2.Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

2.2.Introduction

3.Context and competences

3.1.Goals

3.2.Context and meaning of the subject in the degree

3.3.Competences

3.4.Importance of learning outcomes

4.Evaluation

5.Activities and resources

5.1.General methodological presentation

The results programmed for this course include theoretical and experimental skills in the field of the communication systems. In order to evidence the learning objectives of the course and the learning process, it has been programmed activities choosing the methodology that best suits to learning outcomes. The course consists of three well separated learning strategies:

- Knowledge acquisition about the contents of the course (3 ECTS).
-

60032 - Communication physics

Solving problems related with the content of the subject (1 ECTS).

- Introduction of design, characterization and experimental measurements of main communication transceiver blocks (1ECTS).

These activities will allow the student to acquire the desired knowledge on the topics of the subject, experimental skills in communication systems, and problem resolution competences.

5.2.Learning activities

- Lecture classes on the main topics of the subject.
- Formal lectures,expositive sessions and interactive problem resolution classes.
- Laboratory sesions.
- Student personal work on solving proposed exercises.
- Study and oral exposition and discussion with the class of selected topics.

5.3.Program

1. Introduction
2. Theory of communications
3. Advanced treatment of propagation of the electromagnetic signal
4. Antennas
5. Transmitter
6. Receiver

5.4.Planning and scheduling

Final calendar has to be set. It will be announced well in advance.

5.5.Bibliography and recomended resources