

30158 - Communication Theory

Información del Plan Docente

Academic Year 2016/17

Academic center 179 - Centro Universitario de la Defensa - Zaragoza

Degree 563 - Bachelor's Degree in Industrial Organisational Engineering

457 - Bachelor's Degree in Industrial Organisational Engineering

ECTS 6.0

Course 4

Period First 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 learning process that is designed for this subject is based on the following:

- The presentation of the theorical contents in lectures.
- The resolution of problems .
- · Personal study by students .
- Practical teaching in laboratories where students must apply their theoretical knowledge in practical situations.
- Development of individual or in-group work s .



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5.2.Learning activities

The main learning activities are:

- The presentation of the theorical contents in lectures and the resolution of theoretical problems and practical cases by the students.
- · Laboratory sessions.
- I ndividual or in-group work s .

5.3. Program

- 1. Introduction
- 2. Random signals and noise
- 3. The Transmission channel
- 4. Analog Modulations
- 5. Base Band Digital Transmission
- 6. Digital Modulations

5.4. Planning and scheduling

The planning and scheduling of lectures and practical sessions will be announced by the teachers, both in class and at the moodle platform.

5.5.Bibliography and recomended resources

| BB | Carlson, A. B. Communications Systems. |
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5ª ed. McGraw-Hill, 2010

Sklar, Bernard. Digital communications: fundamentals and applications / Bernard Sklar - 2nd ed 5th print Upper Saddle

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River, New Jersey: Prentice-Hall PTR,

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Proakis, John G.. Communication systems engineering / John G. Proakis, Masoud

Salehi . 2nd ed. Englewood Cliffs, New

Jersey: Prentice Hall, cop. 2001