

Course name (in English): Computer Networks Course name (in Spanish): Redes de computadores Course code: 47005263 Undergraduate/Postgraduate Degree (in English): Bachelor Degree Industrial Engineering (Electronic speciality) Undergraduate/Postgraduate Degree (in Spanish): Ingeniería técnica Industrial. (Especialidad de Electrónica Industrial)		
Department (in English): Telecommunications Engineering Departament (in Spanish): Ingeniería de Telecomunicación		
UJA credits¹: 6	ECTS credits: 4.8	Semester²: 1
Lecturer 1: M^a Dolores Molina González Email: mdmolina@ujaen.es Telephone: 953-212813 Building/Room: A3-441		
Course description and teaching methodology³:		
Lecture (Theory): 1		Hours per week
Lecture (Practice): 2		Hours per week
Seminars: 1		Hours per week
Homework: 1		Hours per week

¹ El ratio de conversión es el siguiente: 1 crédito ECTS = 1.25 créditos UJA.

² 1 (Octubre > Febrero), 2 (Febrero > Julio), 1 & 2 (Octubre > Julio).

³ Con indicación de la metodología específica para estudiantes extranjeros acogidos al programa PATIE.

Content description:

The course gives a general vision to the students on the possibilities that a computer network offers to the industrial and business world. The main units are:

- An introduction to computers networks and an description of OSI reference model (the physical , the data link, medium access methods, network, transport, application layers) and protocols (IP,ICMP, TCP, UDP).
- Description of local Area Networks, topologies, transmission media, medium access methods and IEEE Standards.
- Funcionality and concepts about wide Area Networks such as RTC, Internet, X.25, RDSI, Frame Relay and ATM with its performance.

Assessment methodology:

There are two ways of assessment:

1. Written exam with questions for the students whodo not assist to theoretical lessons.
2. Continuous assessment. Oral presentation of a work, the assistance to theoretical lessons, development adequacy of the practical lessons and the participation in the seminar will be also taken into account.

Teaching language (English):

Level (1 – 2 – 3)⁴: 1

Main booklist:

H. Halsall. Computer Networking and Internet. 5th Edition. Addison-Wesley.2006

A. Tanenbaum. Computer Networking 4th edition. Prentice Hall. 2003

W. Stalling. Data Communications and computer network. 7th Edition. Prentice Hall.2004.

⁴ [1] Tutorial support sessions, materials and exams in English, French or German.

[2] Tutorial support sessions, materials, exams and seminars in English, French or German.

[3] Tutorial support sessions, materials, exams, seminars and regular lectures in English, French or German.