ESCUELA TÉCNICA SUPERIOR DE INGENIERÍA

DTC-GITT-313 Computer Network Technologies

SEMESTER: Fall

CREDITS: 6 ECTS (4 hrs. per week. 2h Theory + 2h Lab)

LANGUAGE: Spanish

DEGREES: 3º GITT

Course overview

The aim of the course is to provide students with knowledge of network technologies, both local and wide area, allowing select, size and configure communications infrastructure appropriate to the needs of users.

Course contents

Theory:

1. Introduction to Telecommunications Networks.
2. Data Link Layer.
3. Introduction to Local Area Networks.
4. Ethernet/802.3 network.
5. Switched Local Area Networks.
6. 802.11 Wireless Local Area Networks.
7. Introduction to WAN technologies.
8. WAN technologies and protocols.

Laboratory:

There will be six 2-hour sessions between the third and the last lecture week, including the lab exam.

P1. Hardware connectivity.
P2. Ethernet configuration.
P3. VLAN and trunking.
P4. Inter-VLAN routing.
P5. Switching security.
P6. VLANs troubleshooting.
P7. STP.
P8. 802.11 WLAN.
P9. PPP and Frame Relay.

Textbook

- Odom Wendell. "Cisco press:Ccna Icnd 1. Guía oficial para el examen de certificación", 2ª edición. Pearson Educación, 2008.
- Odom Wendell. "Cisco press:Ccna Icnd 2. Guía oficial para el examen de certificación", 2ª edición. Pearson Educación, 2008.

Grading

The following conditions must be accomplished to pass the course:

- A minimum grade in the final exam of 5 over 10.

The overall grade is obtained as follows:

- Final exam 50%.
- Lab exam 30%.
- Other exams 20%. Typically there is 1 mid-term exam (2-hour long) and 2 additional short exams (1-hour long).