Internet Networking Technologies for Big Data

Academic Year: (2023 / 2024)   **Review date: 11-04-2023**

Department assigned to the subject: Telematic Engineering Department

Coordinating teacher: BAGNULO BRAUN, MARCELO GABRIEL

Type: Electives ECTS Credits : 6.0

Year : 4 Semester :

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Computer Networks

DESCRIPTION OF CONTENTS: PROGRAMME

1. Introduction
· Economic impact
· Caches
2. Content distribution networks
3. Data storage in the network
4. Datacenters
· Introduction
· Virtualization in datacenters
· Architecture
· Communications
· Storage
5. Internet of Things
· Introduction
· Reference models: ITU-T, IoT world forum, ETSI M2M
· Main protocols for IoT applications
· Industry standards and use cases

LEARNING ACTIVITIES AND METHODOLOGY

AF1: THEORETICAL-PRACTICAL CLASSES. They will present the knowledge that students should acquire. They will receive the class notes and will have basic texts of reference to facilitate the follow-up of the classes and the development of the subsequent work. Exercises, practical problems on the part of the student will be solved and workshops and evaluation test will be held to acquire the necessary skills.

AF3: INDIVIDUAL OR GROUP WORK OF THE STUDENT.
AF8: WORKSHOPS AND LABORATORIES.
AF9: FINAL EXAMINATION In which the knowledge, skills and abilities acquired throughout the course will be assessed globally.
MD1: CLASS THEORY. Presentations in the teacher's class with support of computer and audiovisual media, in which the main concepts of the subject are developed and the materials and bibliography are provided to complement the students' learning.
MD2: PRACTICES. Resolution of practical cases, problems, etc. proposed by the teacher individually or in groups.
MD3: TUTORIES. Individualized assistance (individual tutorials) or group (collective tutorials) to students by the teacher.
MD6: LABORATORY PRACTICES. Applied / experimental teaching to workshops and laboratories under the supervision of a tutor.

ASSESSMENT SYSTEM

SE1: final exam
SE2: Continuous evaluation.

% end-of-term-examination: 60

% of continuous assessment (assigments, laboratory, practicals…):   40