

Academic Year: ( 2023 / 2024 )

Review date: 05-06-2023

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: FERNANDEZ ARREGUI, SUSANA

Type: Electives ECTS Credits : 6.0

Year : Semester :

## DESCRIPTION OF CONTENTS: PROGRAMME

- I - The global digital world
  - 1. The global digital world
  - 2. Value of information in the global economy
  - 3. Policy, Regulation and Globalization in Information Technology
- II - Paradigms and models of global information systems
  - 1. Internet, the Web and the Internet of Things (IoT)
  - 2. Distributed computing and storage systems.
  - 3. From systems to services: service-oriented architecture.
  - 4. Virtualization and Cloud Computing.
  - 5. Cloud service models.
  - 6. Implementation of services in the cloud: practical aspects.
  - 7. Big data paradigms for companies.
- III - Design of Global Systems
  - 1. High-performance IT systems for enterprises.
  - 2. Data Center Standards
  - 3. Planning, prevention and response for disaster recovery

## LEARNING ACTIVITIES AND METHODOLOGY

- AF1. THEORETICAL-PRACTICAL CLASSES. Knowledge and concepts students must acquire. Student receive course notes and will have basic reference texts to facilitate following the classes and carrying out follow up work. Students partake in exercises to resolve practical problems and participate in workshops and an evaluation tests, all geared towards acquiring the necessary capabilities.
- AF2. TUTORING SESSIONS. Individualized attendance (individual tutoring) or in-group (group tutoring) for students with a teacher.
- AF3. STUDENT INDIVIDUAL WORK OR GROUP WORK.
- MD1. THEORY CLASS. Classroom presentations by the teacher with IT and audiovisual support in which the subject's main concepts are developed, while providing material and bibliography to complement student learning.
- MD2. PRACTICAL CLASS. Resolution of practical cases and problem, posed by the teacher, and carried out individually or in a group.
- MD3. TUTORING SESSIONS. Individualized attendance (individual tutoring sessions) or in-group (group tutoring sessions) for students with teacher as tutor. Subjects with 6 credits have 4 hours of tutoring/100% on-site.

## ASSESSMENT SYSTEM

- SE1. FINAL EXAM. Global assessment of knowledge, skills and capacities acquired throughout the course.
- SE2. CONTINUOUS EVALUATION. Assesses papers, projects, class presentations, debates, exercises, internships and workshops throughout the course.

Extraordinary call:

Students who do not pass the subject in the ordinary call will have an extraordinary call to pass:

- 1. If the student followed the continuous evaluation: the grade will be the one established in the subject program for the ordinary call. However, you will have the right to be graded only with the grade obtained in the final exam if this is more favourable.
- 2. If the student did not follow the continuous evaluation: the grade will be the one obtained in the final exam. However, the teacher may authorize the delivery of the continuous assessment exercises in the

extraordinary call, evaluating in such a case in the same way as in the ordinary call.

**% end-of-term-examination:** 60

**% of continuous assessment (assignments, laboratory, practicals...):** 40