

Academic Year: ( 2022 / 2023 )

Review date: 31-03-2022

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: GARCIA GUZMAN, JAVIER

Type: Basic Core ECTS Credits : 6.0

Year : 1 Semester : 1

**REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)**

Nothing

**DESCRIPTION OF CONTENTS: PROGRAMME**

Didactic unit I - Information System fundamentals

1. Introduction to Computing
2. Applications of Informatics in the enterprise
3. Computer platforms
4. Operating systems
5. Storage systems and databases
6. Computer networks and the Internet
7. Software and system libraries
8. Programming tools

Didactic unit II - Information Systems in the enterprise

9. Components of an Enterprise Information System (ERP, CRM, SCM, BI, and so on and so forth)
10. Architecture of an Enterprise Information System
11. The Internet, the Web, and the paradigm of Cloud Computing
12. From Systems to Services: Service-Oriented Architecture

**LEARNING ACTIVITIES AND METHODOLOGY**

LA1. THEORETICAL-PRACTICAL CLASSES. Where the knowledge that students should acquire will be presented. They will receive the scores and will have basic texts of reference to ease the follow-up of classes and the development of subsequent work. Students will solve exercises and practical problems. Workshops and evaluation tests will be carried out to acquire the necessary skills.

LA2. TUTORIALS. Individualized assistance (individual tutorials) or group assistance (collective tutorials) to students by the lecturer.

LA3. INDIVIDUAL OR GROUP STUDENT WORK.

DM1 THEORY CLASS. Exposition of the topics in lecturer's class with support of computer and audiovisual media, where the subject main concepts are developed, and materials and bibliography are provided to complement the students' learning process.

DM2. PRACTICES. Resolution of practical cases, problems, and so on and so forth, posed by the lecturer and oriented individually or in groups.

DM3. TUTORIALS. Individualized assistance (individual tutorials) or group assistance (collective tutorials) to students by the lecturer. For subjects of 6 credits, there will be provided 4 hours with 100% of attendance.

Acronyms

LA: Learning Activity

DM: Development Methodology

**ASSESSMENT SYSTEM**

AS1. FINAL EXAM. In which the knowledge, skills, and abilities acquired throughout the course will be assessed globally.

AS2. CONTINUOUS ASSESSMENT. Exercises, presentations, performance in debates, exhibitions in class, practices and the work in workshops throughout the course will be scored.

Acronym

AS: Assessment System

<b>% end-of-term-examination:</b>	55
<b>% of continuous assessment (assignments, laboratory, practicals...):</b>	45

#### BASIC BIBLIOGRAPHY

- Ralph Stair, George Reynolds Fundamentals of Information Systems, 7th Edition (ISBN-13: 978-1305108110), Cengage Learning, 2016
- Smallwood, R.F. Information Governance: Concepts, Strategies and Best Practices (ISBN 978-1-118-21830-3), Wiley, 2014

#### BASIC ELECTRONIC RESOURCES

- Jaime Busquets et al. . IT Fundamentals for Business Professionals (Professional Certificate Program - Universitat Politècnica de Valencia): <https://www.edx.org/professional-certificate/upvalenciav-it-fundamentals-for-business-professionals>
- Jong-Moon Chung . Emerging Technologies: From Smartphones to IoT to Big Data (Specialized program - 6 courses - Yonsei University): <https://www.coursera.org/specializations/emerging-technologies>