

Academic Year: (2023 / 2024)

Review date: 03-06-2023

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

Extraordinary call:

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

1. If the student followed the continuous evaluation: the grade will be the one established in the program of the subject for the ordinary call. However, the student will have the right to be graded only with the grade obtained in the final exam if it is more favorable.

2. If the student did not follow the continuous evaluation: the grade will be the grade obtained in the final exam. However, the teacher may authorize the delivery of the exercises of the continuous evaluation in the extraordinary call, being evaluated in such case in the same way as in the ordinary call.

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