

Academic Year: (2018 / 2019)

Review date: 09/05/2018 20:12:20

Department assigned to the subject: Mechanical Engineering Department

Coordinating teacher: DURAN HERAS, ALFONSO

Type: Compulsory ECTS Credits : 3.0

Year : 1 Semester : 2

OBJECTIVES

Skills and knowledge to organize and manage companies
 Skills and knowledge on strategy and planning, applied to different organizational structures
 Knowledge of Management Information Systems, industrial organization, production and logistic systems and quality management systems.
 Skills and knowledge in integrated project management

DESCRIPTION OF CONTENTS: PROGRAMME

- * Foundations of Information Systems (IS)
 - ** General concepts: Data, Information, Information Systems
- * IS Procurement / Development
 - ** Custom development vs. package acquisition
 - ** Development methodologies. Technological foundations
 - ** Open Software. Open Source.
- * Telecommunications
 - ** Distributed IS. Networks: LAN, WAN
 - ** Cloud computing. Technological foundations
- * Information Management
 - ** Database Management Systems
- * Integrated IS.
 - ** Interfunctional business processes.
- * Implementation and adaptation of IS / Integrated IS
 - ** Who adapts to whom? BPR vs. customization
- * IS for Management (Executive Information Systems)
 - ** Decision Support Systems
 - ** Data warehouses. Big Data
- * Current IS trends
 - ** IT evolution. Hw, Sw, Security.
 - ** Inter-company IS. Electronic Commerce
 - ** IS and strategic management
 - ** Other trends

LEARNING ACTIVITIES AND METHODOLOGY

Learning activities will encompass:

- * Lectures, aimed at presenting the knowledge to be acquired by the students. As supporting material, students will get slides and will have basic reference texts to facilitate following the lectures and ulterior work.
- * Exercise resolution by the students, aimed at the self-evaluation and to attain the required capabilities
- * Practical sessions, in computer lab or based on case discussions
- * Personal student work, including study and tests

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ASSESSMENT SYSTEM

% end-of-term-examination/test:	60
% of continuous assessment (assignments, laboratory, practicals...):	40

The assessment system will encompass the continuous evaluation of the student activity, as well as an assessment through a final written exam, that will globally evaluate the knowledge, skills and capabilities acquired throughout the course. Percentages: 40% (Continuous evaluation) and 60% (final written exam).

Minimum grade at final exam to pass the course: 4

In the extraordinary (make-up) evaluation, continuous evaluation grade will only be taken into account if this leads to a higher grade.

BASIC BIBLIOGRAPHY

- Laudon, K.C.; Laudon, J.P. Management Information Systems: Managing the Digital Firm, Prentice Hall.

ADDITIONAL BIBLIOGRAPHY

- Henry C. Lucas Jr Information Technology: Strategic Decision Making for Managers, John Wiley & Sons.