Teaching guide

IDENTIFICATION DETAILS

Degree: Computer Engineering
Field of Knowledge: Engineering and Architecture
Faculty/School: Senior Polytechnic School
Course: INFORMATION SYSTEMS IN BUSINESS
Type: Compulsory
ECTS credits: 6
Year: 4
Code: 3640
Teaching period: Seventh semester
Area: Software Engineering
Module: Specific Technology
Teaching type: Classroom-based
Language: Spanish
Total number of student study hours: 150

SUBJECT DESCRIPTION

This course demonstrates the response that specific, acclaimed business information systems available on the market have contributed to business strategy, from the perspective of software engineering both in their development design and in the potential for integration. This course is based on the contribution, in terms of their design, of enterprise resource planning (ERP) systems, CRM applications, workflow systems and decision-making support systems, and provides students with an understanding of the functionalities, design requirements and architecture that support them, thus enabling them to structure the knowledge they have acquired in software engineering and therefore recognise the solidity that certain practices give to an information system.

SKILLS
### Basic Skills

Students must have demonstrated knowledge and understanding in an area of study that is founded on general secondary education. Moreover, the area of study is typically at a level that includes certain aspects implying knowledge at the forefront of its field of study, albeit supported by advanced textbooks.

Students must be able to apply their knowledge to their work or vocation in a professional manner and possess skills that can typically be demonstrated by coming up with and sustaining arguments and solving problems within their field of study.

Students must have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgments that include reflections on pertinent social, scientific or ethical issues.

Students must be able to convey information, ideas, problems and solutions to both an expert and non-expert audience.

Students must have developed the learning skills needed to undertake further study with a high degree of independence.

### General Skills

- An ability to conceive, draft, organise, plan, develop and execute projects in the field of computer engineering whose purpose is to conceive, develop or exploit computer applications, services and systems.
- An ability to analyse and assess the social and environmental impact of technical solutions, understanding the ethical and professional responsibility of the activity of a technical computer engineer.
- Knowledge and application of the basic elements of economics and management of human resources, project organisation and planning, and legislation, regulations and standardisation in the field of computer projects.
- To nurture an attitude of intellectual curiosity and a quest for truth in all areas of life and to foster interpersonal and intercultural communication, adopting an attitude of dialogue, respect and personal and social commitment to oneself and others, interpreting any information presented or reality occurring, and subsequently comparing it with one's own concept of truth and the meaning of existence.
- An ability to direct activities linked to computer projects.
- An ability to design, develop, assess and guarantee the accessibility, ergonomics, usability and security of computer applications, services and systems, and the information managed therein.
- An ability to define, assess and choose hardware and software platforms for the development and execution of computer applications, services and systems.
- An ability to conceive, develop and maintain computer applications, services and systems using software engineering methods as an instrument to ensure quality.
- An ability to conceive and develop computer systems or architectures that are centralised or distributed, integrating hardware, software and networks.
- An ability to solve problems with initiative, with effective decision-making, independence and creativity. Capacity for being able to communicate and convey knowledge and skills of the technical computer engineering profession.

### Specific skills

- An ability to develop, maintain and assess software services and systems that meet all user requirements, are reliable and efficient, are affordable to develop and maintain and meet quality standards, applying software engineering theories, principles, methods and practices.
- An ability to identify and analyse problems and design, develop, implement, verify and document software solutions based on suitable knowledge of current theories, models and techniques.

### DISTRIBUTION OF WORK TIME
<table>
<thead>
<tr>
<th>CLASSROOM-BASED ACTIVITY</th>
<th>INDEPENDENT STUDY/OUT-OF-CLASSROOM ACTIVITY</th>
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<tbody>
<tr>
<td>69 hours</td>
<td>81 hours</td>
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