Teaching guide

IDENTIFICATION DETAILS

Degree: Computer Engineering

Field of Knowledge: Engineering and Architecture

Faculty/School: Senior Polytechnic School

Course:

Type: Compulsory  ECTS credits: 6

Year: 3  Code: 3653

Teaching period: Fifth semester

Area: Software Engineering

Module: Specific Technology

Teaching type: Classroom-based

Language: Spanish

Total number of student study hours: 150

SUBJECT DESCRIPTION

The Quality course allows students to integrate quality in software on the basis of knowledge of the general quality management models and their application to software engineering, with a view to developing and implementing specific models of quality management and software quality control.

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 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 conceive, develop and maintain computer applications, services and systems using software engineering methods as an instrument to ensure quality.

**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.
- An ability to identify, assess and manage potential associated risks that may arise.

**DISTRIBUTION OF WORK TIME**

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<thead>
<tr>
<th>CLASSROOM-BASED ACTIVITY</th>
<th>INDEPENDENT STUDY/OUT-OF-CLASSROOM ACTIVITY</th>
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<tbody>
<tr>
<td>68 hours</td>
<td>82 hours</td>
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