Academic Year/course: 2021/22

30243 - Prerequisite Engineering

Syllabus Information

Academic Year: 2021/22
Subject: 30243 - Ingeniería de requisitos
Faculty / School: 110 - Escuela de Ingeniería y Arquitectura
Degree: 439 - Bachelor's Degree in Informatics Engineering
ECTS: 6.0
Year: 3
Semester: Second semester
Subject Type:
Module:

1. General information

1.1. Aims of the course

1. To provide a deep introduction to the students to one of the most relevant Software Engineering cycles.
2. To succeed in providing the student with the necessary skills for developing a Software Requirements Engineering process.
3. To provide students with useful techniques in Requirements Engineering.
4. To provide students with meaningful procedures used in Requirements Engineering.
5. To train the students in software analysis tools to apply them to real problems.

1.2. Context and importance of this course in the degree

Requirements Engineering is an obligatory subject in the Software Engineering area which is taught in the third year of the Computer Science Degree. Its scheduling is aimed to provide the students with specific knowledge for software requirements elicitation together with other essential issues related to the software cycle. These are developed in other subjects such as Projects, Software Architecture and Verification and Validation.

1.3. Recommendations to take this course

The student should have done previous subjects in the following topics:
- Programming, and advanced Programming
- Data Structures and Algorithms

2. Learning goals

3. Assessment (1st and 2nd call)

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. A wide range of teaching and learning tasks are implemented:

1. Lectures.
2. Autonomous work and study.
3. Practical sessions and problems.
4. Development of a real practical problem.

4.2. Learning tasks

The course includes the following learning tasks:

1. Development of the program for the subject in lectures.
2. Application of specific concepts and techniques presented in the subject program in problem sessions and practical lessons.
3. Application of concepts and techniques along the course in guided lessons.

4.3. Syllabus

The course will address the following topics:

I. Introduction and Basic Concepts
- L1. Introduction to Software Engineering
- L2. Introduction to Requirements Engineering

II. Analysis and Requirements Engineering
- L3. Inception and Elicitation of Requirements
- L4. Writing and Reviewing Requirements
- L5. Analysis of Requirements

III. Qualification and Management of Requirements
- L6. Quality and Management of Requirements
- L7. Verification and Validation of Requirements

IV. Current Trends in Requirements Engineering
- L8. Agile Methodologies and Requirements Engineering

4.4. Course planning and calendar

The schedule for the subject will be defined according to the academic calendar defined by the School.

Temporal Distribution

- 30 hours for theoretical lessons
- 15 hours for problem sessions
- 15 hours for practical sessions
- 15 hours for individual work in T6
- 75 hours of additional individual work by the student

4.5. Bibliography and recommended resources

http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=30243&Identificador=14708