

## 30717 - Computing

### Syllabus Information

**Academic Year:** 2022/23

**Subject:** 30717 - Computing

**Faculty / School:** 110 - Escuela de Ingeniería y Arquitectura

**Degree:** 470 - Bachelor's Degree in Architecture Studies

**ECTS:** 6.0

**Year:** 2

**Semester:** Second semester

**Subject Type:** Compulsory

**Module:**

### 1. General information

### 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, such as lectures, problem-solving, and laboratory sessions.

The orientation of this course is mainly practical. The proposed activities are focused on learning based on experience. The most suitable teaching strategies are the resolution of problems and laboratory practice. However, these strategies are difficult to be performed without a fundamental basis that allows students to understand and learn outside the classroom.

#### 4.2. Learning tasks

This course is organized as follows:

- **Lectures.** Syllabus topics will be developed in lectures.
- **Problem-solving.** Problems with concept application and techniques explained in the program of the subject will be solved in special classes dedicated to those problems.
- **Laboratory sessions.** In these sessions, students will put into practice the theory learnt in lectures.

#### 4.3. Syllabus

This course will address the following topics:

- Information, Computer systems and Computer architecture
- Physical and logical structure of a computer: hardware and software
- Information representation, Programming and Algorithmics
- Computer graphics
- Architecture design art and Informatics
- Computer networks
- Computer security

- Exercises related to programming

#### **4.4. Course planning and calendar**

The calendar of the course will be determined by the academic calendar of the corresponding course in each of the centers where this course is taught. The face-to-face sessions will have an estimated duration of 60 hours distributed between lectures, resolution of problems, and laboratory practice. The timetables of all the class hours and practice sessions will be announced with enough time in advance through the website of the center and the web page of the course.

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course will be provided on the first day of class or please refer to the College of Higher Engineering and Architecture (EINA) website (<https://eina.unizar.es/>) and Moodle.

#### **4.5. Bibliography and recommended resources**

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=30717>