

## 28639 - IT and Communication for Construction

### Información del Plan Docente

Academic Year	2017/18
Faculty / School	175 - Escuela Universitaria Politécnica de La Almunia
Degree	422 - Bachelor's Degree in Building Engineering
ECTS	5.0
Year	3
Semester	Second semester
Subject Type	Optional
Module	---

### **1.General information**

#### **1.1.Introduction**

#### **1.2.Recommendations to take this course**

#### **1.3.Context and importance of this course in the degree**

#### **1.4.Activities and key dates**

### **2.Learning goals**

#### **2.1.Learning goals**

#### **2.2.Importance of learning goals**

### **3.Aims of the course and competences**

#### **3.1.Aims of the course**

#### **3.2.Competences**

### **4.Assessment (1st and 2nd call)**

#### **4.1.Assessment tasks (description of tasks, marking system and assessment criteria)**

### **5.Methodology, learning tasks, syllabus and resources**

#### **5.1.Methodological overview**

Strong interaction between the teacher/student. This interaction is brought into being through a division of work and responsibilities between the students and the teacher. Nevertheless, it must be taken into account that, to a certain degree, students can set their learning pace based on their own needs and availability, following the guidelines set by the teacher.

## 28639 - IT and Communication for Construction

The current subject (Information and Communication Technologies related to Construction) is conceived as a stand-alone combination of contents, yet organized into three fundamental and complementary forms, which are: the theoretical concepts of each teaching unit, the solving of problems or resolution of questions and laboratory work, at the same time supported by other activities

The organization of teaching will be carried out using the following steps:

– **Theory Classes** : Theoretical activities carried out mainly through exposition by the teacher, where the theoretical supports of the subject are displayed, highlighting the fundamental, structuring them in topics and or sections, interrelating them.

– **Practical Classes** : The teacher resolves practical problems or cases for demonstrative purposes. This type of teaching complements the theory shown in the lectures with practical aspects.

– **Individual Tutorials** : Those carried out giving individual, personalized attention with a teacher from the department. Said tutorials may be in person or online.

### 5.2.Learning tasks

Involves the active participation of the student, in a way that the results achieved in the learning process are developed, not taking away from those already set out, the activities are the following:

– **Face-to-face generic activities** :

• **Theory Classes** : The theoretical concepts of the subject are explained and illustrative examples are developed as support to the theory when necessary.

• **Practical Classes** : Problems and practical cases are carried out, complementary to the theoretical concepts studied.

– **Generic non-class activities** :

• Study and understanding of the theory taught in the lectures.

• Understanding and assimilation of the problems and practical cases solved in the practical classes.

• Preparation of seminars, solutions to proposed problems, etc.

• Preparation of the written tests for continuous assessment and final exams.

### 5.3.Syllabus

Theory contents

## 28639 - IT and Communication for Construction

- Introduction to the management information
- Information sources of building sector
- Composition and creation of a technic project
- Advanced management information
- Design and creation of simulator to the resolution of simple problems
- Standards bibliographic citation style, applied to the building

### Practical contents

- Information management tools
- Location and use of sources of information
- Support tools for the creation of a Technical Project

### 5.4.Course planning and calendar

The subject has 5 ECTS credits, which represents 125 hours of student work in the subject during the trimester, in other words, 10 hours per week for 12'5 weeks of class.

A summary of a weekly timetable guide can be seen in the following table. These figures are obtained from the subject file in the Accreditation Report of the degree, taking into account the level of experimentation considered for the said subject is moderate.

**Activity \_\_\_\_\_ Weekly school hours**

Lectures \_\_\_\_\_ 4

Practical Activities \_\_\_\_\_ 6

Nevertheless the previous table can be shown into greater detail, taking into account the following overall distribution:

## 28639 - IT and Communication for Construction

&mdash; 40 hours of lectures, with 50% theoretical demonstration and 50% solving type problems.

&mdash; 6 hours of written assessment tests, one hour per test.

&mdash; 4 hours of PPT presentations.

&mdash; 75 hours of personal study, divided up over the 12'5 weeks of the 2 nd semester.

There is a tutorial calendar timetable set by the teacher that can be requested by the students who want a tutorial.

The written assessment tests will be related to the following topics:

- Information management tools
- Location and use of sources of information
- Support tools for the creation of a Technical Project

The dates of the final exams will be those that are officially published at <http://eupla.unizar.es/index.php/secretaria-2/informacion-academica/distribucion-de-examenes>.

### 5.5. Bibliography and recommended resources

**Material** \_\_\_\_\_ **Format**

Topic theory notes, Topic problems \_\_\_\_\_ Repository

Topic theory notes, Topic presentations

Topic problems, Related links \_\_\_\_\_ Digital/Moodle

Educational software \_\_\_\_\_ Web page