

## 25878 - Computer Aided Design II

### Syllabus Information

**Academic Year:** 2020/21

**Subject:** 25878 - Computer Aided Design II

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

**Degree:** 558 - Bachelor's Degree in Industrial Design and Product Development Engineering

**ECTS:** 6.0

**Year:** 3

**Semester:** First semester

**Subject Type:** Compulsory

**Module:** ---

### 1.General information

#### 1.1.Aims of the course

#### 1.2.Context and importance of this course in the degree

#### 1.3.Recommendations to take this course

### 2.Learning goals

#### 2.1.Competences

#### 2.2.Learning goals

#### 2.3.Importance of learning goals

### 3.Assessment (1st and 2nd call)

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

### 4.Methodology, learning tasks, syllabus and resources

#### 4.1.Methodological overview

The learning process, which has been designed for this subject, is based on the following activities:

- Lectures.
- Practice sessions in the computer workshop, proposed by the professor that allow consolidating the theoretical contents.
- Tutoring where the individualized follow-up of works will be carried out, solving doubts and establishing control of the evolution of the student's learning.

In practical laboratory classes, the fundamental concepts of the subject will be explained through application examples. The student will put into practice the application of the Computer-Aided Design tool for the execution of the proposed exercises.

#### 4.2.Learning tasks

The course includes the following learning tasks:

- Teaching type1: Lectures (1h / week in the computer room). They are taught in a single group. In them and on the computer, the applied contents of each of the modules are taught. The teacher shows the content and guidance in the development and access to the documentation that the student should review in the personal study phase.
- Teaching type 3: Directed practices (3 h / week) in the computer room. They are taught in groups of approximately

20 students. In them and on the computer, the applied contents of each of the modules are taught. The teacher shows a practical application of the most important concepts that students must strengthen in a class by performing exercises and then apply to their corresponding work.

- Teaching type 7: Personal study. Individual dedication necessary to consolidate a correct learning process.
- Other activities: Tutoring. Direct attention to the student for questions about the contents of the subject, resolution of doubts and follow-up of the assignments.

### 4.3.Syllabus

The Computer Assisted Design II subject content will address the following topics:

1. Solidworks Introduction
2. Advanced tools
3. Parametric design
4. Component configuration
5. Assemblies
6. Assembly configuration
7. Smart Components
8. Drawings
9. Surface Design
10. Visualize
11. Animation

### 4.4.Course planning and calendar

Course planning for onsite activities and project presentations:

The sessions of master classes (Type 1) and practices (Type 3) are taught according to the schedule established by the Center and are published prior to the starting date of the course on the EINA website, as well as in the corresponding electronic boards of the Center <https://eina.unizar.es/>.

The schedule of tutoring for each of the teachers will be available at the link <http://eina.unizar.es/intraneteina/index.php?r=tutorias>, as well as at the door of the office.

The enrolled students will have access from the beginning of the subject through the corresponding link of the Moodle ADD to all the relevant information for the follow-up of the subject:

#### Planned Schedule:

Week	Topic	Deliverable
1	Solidworks Introduction	Subject presentation and statement delivery
2 y 3	Advanced tools	
4	Parametric design	
5	Component configuration	
6	Assemblies	
7	Assembly configuration	Work 1 delivery
8	Smart Components	
9	Drawings	
10, 11 y 12	Surface Design	
13	Visualize	
14	Animation	Work 2 delivery (just before Christmas holidays)
15	Group Project review	Group project delivery.

#### Timing and distribution of workload:

The total teaching load of the subject is 6 ECTS credits with an equivalent of 150 hours for the student, of which:  
 ? 15 hours of master class (15 sessions of 1 hour)

? 45 hours of practical class (15 sessions of 3 hours)

? 20 hours of personal study.

? 65 hours of personal work.

? 5 hours of evaluation tests.

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