

## 66348 - Projects of renewable energy plants

### Syllabus Information

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**Academic Year:** 2020/21

**Subject:** 66348 - Projects of renewable energy plants

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

**Degree:** 535 - Master's in Renewable Energies and Energy Efficiency

**ECTS:** 5.0

**Year:** 1

**Semester:** Second semester

**Subject Type:** Optional

**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 methodology followed in this course is oriented towards achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as lectures, searching and selection of information, interaction with colleagues. Student have to select the approach and the technology and plan to performance.

### 4.2.Learning tasks

The course includes the following learning tasks:

- A01 Lectures (25 hours). Presentation of theoretical contents by faculty staff or external experts. Although it is not mandatory, regular attendance is highly recommended.
- A02 Problems and case solving activities (13 hours). Solving practical problems and exercises. Although it is not mandatory, regular attendance is highly recommended.
- A03 Lab sessions (12 hours). Students will work in groups to solve practical assignments actively.
- A06 Guided assignments (20 hours). Students will complete assignments, problems and exercises related to concepts presented in lab sessions and lectures.
- A07 Autonomous work (50 hours). Students should study theoretical concepts, solve problems and prepare lab sessions.
- A08 Assessment activities (5 hours).

This number of hours is just an estimation. It will be adjusted depending on the academic schedule for each year.

At the beginning of the course, lecturers will present the schedule of practical sessions. It will be in accordance with the syllabus and the availability of laboratories and computer classrooms.

### **4.3.Syllabus**

The course will address the following topics:

1. Stages in the development of renewable energy projects
2. Current scenario and legal framework
3. Analysis of energy resources
4. Financial analysis and risks
5. Environmental and social issues
6. Building: possibilities and budgets
7. Hiring and budget of Operation & Maintenance
8. Performance of the electrical system
9. Permitting
10. Urban aspects

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

Further information concerning the schedule, classroom, assessment dates and other course details, will be provided in the presentation class. Students can also visit the [EINA webpage](#) to get more information.

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