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

The learning process that is designed for this subject is based on the following:

The course is planned to facilitate continuous and active student learning. Learning resources to be used to achieve it are:
- Theoretical Classes given by the teacher to whole group. In these, theoretical concepts of the subject will be illustrated
with examples to help understand and in which students are challenged to participate, reasoning about theoretical concepts exposed.

- classes Problems. In these classes the contents of the theory classes are strengthened by performing carefully selected problems to cover all relevant aspects. Practical sessions organized so that students become familiar with spreadsheet programs. Individual realization of problems, jobs and public exhibitions independently.
- Tutorías In which the student will help resolve the doubts raised during learning.
- Other Learning activities scheduled.

5.2. Learning tasks

- Theoretical classes.
- Classes about calculation programs.
- Classes about problems of the subject.
- Group work sessions.
- Tutorials.
- Conferences Given by invited staff.
- Visits to a work.

5.3. Syllabus

Summary results of Resistance Materials subject.

Introduction to the theory of structures. Stability and hyperstaticity.

Basic theorems and applications.


Isostatic structures. Articulated structures.

Statically indeterminate structures.

Matrix calculation of bar structures.

5.4. Course planning and calendar

It will be announced by the teacher, both in class and through the platform Moodle support.

5.5. Bibliography and recommended resources


BC Gracia Villa, Luis e Ibartz, Elena. Análisis Estructural. Zaragoza: Copy Center