

60808 - Transportation and industrial maintenance

Información del Plan Docente

Academic Year	2016/17
Academic center	110 - Escuela de Ingeniería y Arquitectura
Degree	532 - Master's in Industrial Engineering
ECTS	4.5
Course	
Period	Half-yearly
Subject Type	Compulsory
Module	---

1.Basic info

1.1.Recommendations to take this course

1.2.Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

2.2.Introduction

3.Context and competences

3.1.Goals

3.2.Context and meaning of the subject in the degree

3.3.Competences

3.4.Importance of learning outcomes

4.Evaluation

5.Activities and resources

5.1.General methodological presentation

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

The proposed methodology seeks to foster continued student work, and focuses on the most practical and calculation and optimization of transport and industrial maintenance aspects.

In sessions with the whole group, theoretical and descriptive aspects of the systems studied in the form of master class they are treated and calculation procedures of the various components and devices are also explained.

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In the practical classes, transport systems and their components will be designed and optimized throughout a specific software developed for this purpose. Real design variables are handled.

The evaluation focuses on the practical and computational aspects of the systems studied, but to adequately meet these systems initially requires a complete description thereof. The criteria used in the evaluation process are explained in this guide.

5.2.Learning activities

The program offered to the student to help achieve the expected results includes the following activities:

The course is organized with 36 hours of class during the 15 weeks of the semester . These classes are held for the entire whole group, and includes the description of transport systems, procedures, calculation and design of systems and its elements, accompanied by the realization of practical problems. Other additional nine hours are given to small groups, usually in the computer lab, to develop skills in solving real problems and interpretation of results. Detailed information regarding the conduct of laboratory practices will appear on the website of the center or on the website of the course.

More specifically :

A 01 Master class 20 100

A 02 Problems and case studies 10 100

A 03 Lab practices 9 100

A 04 Special practices 1 100

A 05 Applied research and practical studies 6,5 0

A 06 Personalized teacher-student tutoring 4 100

A 07 Theory study 58 0

A 08 Assessment tests 4 100

5.3.Program

The following learning modules arise :

1. Module 1: Industrial conveyors .

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2. Module 2: Cranes: Components and Devices.

3. Module 3: Electrical and hydraulic lifts .

5.4.Planning and scheduling

Schedule sessions and presentation of works

Lectures and problem classes and practice sessions will be held in the laboratory according to schedule set by the center and published prior to the start date of the course (<http://eina.unizar.es>).

Each teacher will inform its hours of tutoring.

The other activities will be planned depending on the number of students and will be announced well in advance.

5.5.Bibliography and recommended resources

*Los transportes en la ingeniería industrial : (Teoría) / A. Miravete , E. Larrodé, L. Castejón y J. Cuartero . - 1a ed.
Zaragoza : Antonio Miravete, 1998

*Los transportes en la ingeniería industrial : (problemas y prácticas) / A. Miravete, E. Larrodé, J. Cuartero y L. Castejón . -
1ª ed. Zaragoza : Antonio Miravete, 1998