

Course guide

220672 - 220672 - Information and Communication Technology

Last modified: 19/04/2023

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 707 - ESAII - Department of Automatic Control.

Degree: MASTER'S DEGREE IN MANAGEMENT ENGINEERING (Syllabus 2012). (Optional subject).

Academic year: 2023 **ECTS Credits:** 3.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: JAUME FIGUERAS JOVE

Others:

TEACHING METHODOLOGY

The course is divided into three parts:

Theory classes
Guided activities class
Self-study for doing exercises and activities.

In the theory classes, teachers will introduce the theoretical basis of the concepts, methods and results and illustrate them with examples appropriate to facilitate their understanding.

In the guided activity class (in the classroom), teachers guide students in applying theoretical concepts to solve problems, always using critical reasoning. We propose that students solve exercises in and outside the classroom, to promote contact and use the basic tools needed to solve problems.

Students, independently, need to work on the materials provided by teachers and the outcomes of the sessions of exercises/problems, in order to fix and assimilate the concepts.

The teachers provide the curriculum and monitoring of activities (by ATENEA).

LEARNING OBJECTIVES OF THE SUBJECT

This course introduces the concepts, principles and basics of the different tools related to information technologies (IT) applying them to business and industry. This course will focus IT on industrial organization and decision making support.

STUDY LOAD

Type	Hours	Percentage
Guided activities	16,0	21.33
Self study	48,0	64.00
Hours medium group	3,0	4.00
Hours large group	8,0	10.67

Total learning time: 75 h



CONTENTS

Introduction to IT technologies in use on Management Engineering

Description:

The basis of the following ICT tools will be shown:

- Introduction to ICT tools
- WEB Technologies
- e-Commerce technologies
- Mobile technologies
- ERPs
- AI and Solvers

Full-or-part-time: 75h

Theory classes: 8h

Practical classes: 3h

Guided activities: 16h

Self study : 48h

GRADING SYSTEM

The course mark depends on:

A project: 50%

Problem resolution: 50%

EXAMINATION RULES.

There are no specific rules