60831 - Business intelligence

<u>**Información del Plan Docente**</u>

Academic Year	2016/17
Academic center	110 - Escuela de Ingeniería y Arquitectura
Degree	532 - Master's in Industrial Engineering
ECTS	6.0
Course	2
Period	First semester
Subject Type	Optional
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 has been designed for this subjet bases on the following thing:

1. Skillful classes in which the theoretical foundations of the content of the subjet appear and in that the participation of the pupils is caused.

2, Classes of problems/cases in which practical applications of the foundations presented/displayed in the skillful classes are made, with possibility of exhibition of such on the part of the students.

3, Practical exercises of laboratory (with computer) [optional] in which, in small groups, a series practical or scripts related to the matter is made and in which computer science tools will be used, search of information through the network, use of bases of data and resolution of exercises or problems that by their extension or difficulty cannot be made in slate.

4, Accomplishment of a practical work in group [optional], and tutorized by the professor, based on the contents of the subjet.

5, Customized attention to the student through the positions of a guardian.

6. Special visits and activities.

7, Possibility of accomplishment of any other activities which the professor considers suitable (like collection of exercises, audio-visual document projection, visits guided companies, participation of external guests...) to obtain the fixed objectives of learning.

5.2.Learning activities

The program that is offered to the student to help him to obtain the predicted results includes/understands the following activities...

Activity of type I: Skillful classes (Approximately 30 hours with the complete group of students)

In these classes they will be developed most of the contents of the subjet. Its objective is to present/display the knowledge and skills that are tried that it acquires the student and to facilitate his assimilation, reason why its pursuit is fundamental for the consolidation and the good development of the programmed learning.

Activity of type II: Classes of problems (Approximately 15 hours with the complete group of students)

These classes of problems are integrated with the skillful classes to facilitate the absorption and to offer a practical vision of the knowledge. In them the work in group is caused, the discussion and the valuation of the capacity of the student for the assimilation of the own contents of the subjet and its application. They promote a productive interrelation student-professor.

Activity of type III: Practical exercises of laboratory with computer (8 hours divided in 4 practices of 2 hours with reduced groups of students) [Optional for the alternative evaluation]

They complement those concepts of the subjet for whose better understanding it is necessary to make a calculation complicated, a graphical representation or is necessary the use of the network, for example, for which the computer supposes a valuable tool.

Activity of type I SAW: Practical work had the charge of (Approximately 44 nonactual working hours more 10 of trusteeship) [Optional for the alternative evaluation]

Accomplishment of a work in group based on the contents of the subjet and that is related to the analysis of a technological company. So much will be valued the content and presented/displayed material, like the used language and capacity of synthesis in the exhibition of the same one.

Activity of type VII: Effective personal study (Approximately 34 nonactual working hours) Is fundamental that the student distributes this service load throughout all the fourth month period. To dedicate a small time to the study after each skillful class or to prepare the sessions of problems in advance the working hours will diminish sensibly that will later require the dominion of the matter.

Activity of type VIII: Test of final evaluation/examination (Approximately 2 hours).

Tutorials (Approximately 4 hours).

5.3.Program

The matter of the subjet BUSINESS INTELLIGENCE that is developed through the previous activities structure in four thematic units. Next he appears gathered the synthetic program of the subjet, next to a brief commentary of his content and the recommended bibliography.

A. INFORMATION MARKETS

Introduction to the Business Intelligence and the digital revolution

The transformation of the markets and the value of the information

Speed and decision making

Generators of value in businesses

Entrepreneurship in the information markets

B. INNOVATION IN BUSINESSES

The innovation in the processes and models of business

Emergent IT and other technologies for the Company

Visualization of Data

The social data and networks

C. BI TECHNOLOGIES

Business Intelligence & Data Warehousing

Technologies and solutions in the organizations

The Main directorate and the Business Intelligence

Competitive strategy

Algorithms of automatic learning for the decision making

D. GENERATORS OF VALUE IN BUSINESSES

Areas of business and KPÍs

Models of Innovating Management

Presentation of the Data.

Data and optimization of enterprise results. Cases of Success

5.4.Planning and scheduling

Calendar of actual sessions and presentation of works

Throughout the fourth month period the following distribution of activities will be made:

- Weekly sessions of integrated skillful classes with classes of problems of 2 hours of duration.

- Weekly sessions of integrated skillful classes with classes of problems of 1 hour of duration.

- 4 sessions of practices of laboratory, in reduced groups, of 2 hours of duration.

- The schedules of tutoring of works and exhibition of such will be flexible and students convenience of and teaching staff will pay attention to. The exhibition of the works will be towards the end of the fourth month period.

In any case, the skillful classes and of problems are distributed according to the schedule established by the Center, as well as the sessions of laboratory practices, having the student, in this last case, to choose to score in one of the groups that there are available.

5.5.Bibliography and recomended resources
- The literature would be recommended through the library EINA