Course guide
270106 - EDO - Digital Strategy for Organisations

Last modified: 12/07/2022

Unit in charge: Barcelona School of Informatics
Teaching unit: 732 - OE - Department of Management.
Degree: BACHELOR'S DEGREE IN INFORMATICS ENGINEERING (Syllabus 2010). (Optional subject).
Academic year: 2022 ECTS Credits: 6.0 Languages: Spanish

LECTURER

Coordinating lecturer: ANTONIO CAÑABATE CARMONA
Others: Primer quadrimestre:
ANTONIO CAÑABATE CARMONA - 10

REQUIREMENTS

- Corequisite NE
- Corequisite SIO

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.
CSI2.1. To demonstrate comprehension and apply the management principles and techniques about quality and technological innovation in the organizations.
CSI2.5. To demonstrate knowledge and capacity to apply business information systems (ERP, CRM, SCM, etc.).
CSI2.6. To demonstrate knowledge and capacity to apply decision support and business intelligence systems.
CSI3.2. To develop the information system plan of an organization.
CSI3.4. To develop business solutions through the deployment and integration of hardware and software systems.

General:
G1. ENTREPRENEURSHIP AND INNOVATION: to know and understand the organization of a company and the sciences which govern its activity; capacity to understand the labour rules and the relation between planning, industrial and business strategies, quality and benefit. To develop creativity, entrepreneur spirit and innovation tendency.
G4. EFFECTIVE ORAL AND WRITTEN communication: To communicate with other people knowledge, procedures, results and ideas orally and in a written way. To participate in discussions about topics related to the activity of a technical informatics engineer.

TEACHING METHODOLOGY

The students will read the suggested readings on the theoretical concepts of the content and sometimes extend it with a little research on the net and then discuss in class. This group will work both in class and outside class practical cases of application for each functional area that students must analyze and propose a solution and build the software to be determined.

At the end of each activity associated with a functional area of the business groups of students present their solution to the class.
LEARNING OBJECTIVES OF THE SUBJECT

1. Study the concept of corporate strategy and the need to develop a digital strategy to support it.
2. Knowing the type of software applications that support sales and marketing functions and acquiring ability to apply them to solutions that support the strategy.
3. Knowing the type of software applications that support financial administration functions and acquiring ability to apply them to solutions that support the strategy.
4. Knowing the type of software applications that support logistics and distribution functions and acquiring ability to apply them to solutions that support the strategy.
5. Knowing the type of software applications that support human resources functions and acquiring ability to apply them to solutions that support the strategy.
6. Knowing the type of software applications that support manufacturing and operations functions and acquiring ability to apply them to solutions that support the strategy.

STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours large group</td>
<td>15,0</td>
<td>10.00</td>
</tr>
<tr>
<td>Guided activities</td>
<td>6,0</td>
<td>4.00</td>
</tr>
<tr>
<td>Hours small group</td>
<td>30,0</td>
<td>20.00</td>
</tr>
<tr>
<td>Hours medium group</td>
<td>15,0</td>
<td>10.00</td>
</tr>
<tr>
<td>Self study</td>
<td>84,0</td>
<td>56.00</td>
</tr>
</tbody>
</table>

Total learning time: 150 h

CONTENTS

The digital strategy in organizations. A comprehensive vision of IT to support business strategy

Description:
The concept of business strategy is presented as well as the most important points of its development. The incorporation of ICT in the value chain leads to define a digital strategy.

ICT in sales and marketing

Description:
Most usual sales and marketing processes will be review and the type of software applications that support them

ICT in financial administration

Description:
Most usual financial administration processes will be review and the type of software applications that support them

ICT in logistics and distribution

Description:
Most usual logistics and distribution processes will be review and the type of software applications that support them
ICT in the area of human resources

Description:
Most usual human resources processes will be review and the type of software applications that support them

ICT in manufacturing and operations

Description:
Most usual manufacturing and operations processes will be review and the type of software applications that support them

ACTIVITIES

The digital strategy in organizations

Description:
Reading theoretical material and the case proposed. Group discussion and completion of exercises and case

Specific objectives:
1

Related competencies:
G1. ENTREPRENEURSHIP AND INNOVATION: to know and understand the organization of a company and the sciences which govern its activity; capacity to understand the labour rules and the relation between planning, industrial and business strategies, quality and benefit. To develop creativity, entrepreneur spirit and innovation tendency.
CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 10h
Theory classes: 1h
Practical classes: 1h
Laboratory classes: 2h
Self study: 6h
**ICT in sales and marketing**

**Description:**
Reading theoretical material and the case proposed. Discussion and building a solution for the case with the proposed software.

**Specific objectives:**
2

**Related competencies:**
G1. ENTREPRENEURSHIP AND INNOVATION: to know and understand the organization of a company and the sciences which govern its activity; capacity to understand the labour rules and the relation between planning, industrial and business strategies, quality and benefit. To develop creativity, entrepreneur spirit and innovation tendency.
G4. EFFECTIVE ORAL AND WRITTEN communication: To communicate with other people knowledge, procedures, results and ideas orally and in a written way. To participate in discussions about topics related to the activity of a technical informatics engineer.
CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

**Full-or-part-time:** 29h
- Theory classes: 3h
- Practical classes: 3h
- Laboratory classes: 6h
- Guided activities: 1h
- Self study: 16h

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**ICT in financial administration**

**Description:**
Reading theoretical material and the case proposed. Discussion and building a solution for the case with the proposed software.

**Specific objectives:**
3

**Related competencies:**
G1. ENTREPRENEURSHIP AND INNOVATION: to know and understand the organization of a company and the sciences which govern its activity; capacity to understand the labour rules and the relation between planning, industrial and business strategies, quality and benefit. To develop creativity, entrepreneur spirit and innovation tendency.
G4. EFFECTIVE ORAL AND WRITTEN communication: To communicate with other people knowledge, procedures, results and ideas orally and in a written way. To participate in discussions about topics related to the activity of a technical informatics engineer.
CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

**Full-or-part-time:** 27h
- Theory classes: 3h
- Practical classes: 3h
- Laboratory classes: 6h
- Guided activities: 1h
- Self study: 14h
**ICT in logistics and distribution**

**Description:**
Reading theoretical material and the case proposed. Discussion and building a solution for the case with the proposed software

**Specific objectives:**
4

**Related competencies:**
G1. ENTREPRENEURSHIP AND INNOVATION: to know and understand the organization of a company and the sciences which govern its activity; capacity to understand the labour rules and the relation between planning, industrial and business strategies, quality and benefit. To develop creativity, entrepreneur spirit and innovation tendency.
G4. EFFECTIVE ORAL AND WRITTEN communication: To communicate with other people knowledge, procedures, results and ideas orally and in a written way. To participate in discussions about topics related to the activity of a technical informatics engineer.
CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

**Full-or-part-time:** 27h
- Theory classes: 3h
- Practical classes: 3h
- Laboratory classes: 6h
- Guided activities: 1h
- Self study: 14h

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**ICT in the area of human resources**

**Description:**
Reading material and the theoretical case proposed. Discussion and building a solution for the case with the proposed software

**Specific objectives:**
5

**Related competencies:**
G1. ENTREPRENEURSHIP AND INNOVATION: to know and understand the organization of a company and the sciences which govern its activity; capacity to understand the labour rules and the relation between planning, industrial and business strategies, quality and benefit. To develop creativity, entrepreneur spirit and innovation tendency.
G4. EFFECTIVE ORAL AND WRITTEN communication: To communicate with other people knowledge, procedures, results and ideas orally and in a written way. To participate in discussions about topics related to the activity of a technical informatics engineer.
CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

**Full-or-part-time:** 20h
- Theory classes: 2h
- Practical classes: 2h
- Laboratory classes: 4h
- Self study: 12h
# ICT in manufacturing and ¿¿operations

## Description:
Reading material and the theoretical case proposed. Discussion and building a solution for the case with the proposed software.

## Specific objectives:
6

## Related competencies:
G1. ENTREPRENEURSHIP AND INNOVATION: to know and understand the organization of a company and the sciences which govern its activity; capacity to understand the labour rules and the relation between planning, industrial and business strategies, quality and benefit. To develop creativity, entrepreneur spirit and innovation tendency.
G4. EFFECTIVE ORAL AND WRITTEN communication: To communicate with other people knowledge, procedures, results and ideas orally and in a written way. To participate in discussions about topics related to the activity of a technical informatics engineer.
CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

## Full-or-part-time: 27h
- Theory classes: 3h
- Practical classes: 3h
- Laboratory classes: 6h
- Guided activities: 1h
- Self study: 14h

## written exam

### Full-or-part-time: 10h
- Guided activities: 2h
- Self study: 8h

## GRADING SYSTEM

The elements of assessment are:
- NSeg: Mark by the solutions proposed in the group, carrying out the activities of self-learning and class participation.
- NExamen: Mark in the written test.

The Final Mark is calculated as:
\[ NF = 80\% \times n_s + 20\% \times NExamen \]

The assessment of generic competition for the course (G1.3) was calculated based on ns as follows:
- A nsec in the case of NSeg >= 8.5
- B in the case of NSeg >= 6.5 < 8.5
- C in the case of NSeg >= 5 < 6.5
- D in the case of NSeg < 5

The assessment of generic competition for the course (G4.3) will be based on one or more of the presentations to the class of solutions constructed by the proposed cases. Note, using a rubric that will be provided in advance, take the values A, B, C or D.

## BIBLIOGRAPHY

### Basic:

### Complementary:

- Barrabés, F.; Cano, J.L.; Fernández, V. Caso práctico de Estrategia Digital (varios PDF en campus virtual).


- Cañabate, A. Cuadro de mando integral (documento compartido en campus virtual).

- Barrabés, F.; Cañabate, A. Caso WindNRG (documento compartido en campus virtual).


- Cañabate, A.. MRPII (documento compartido en campus virtual).

- Cañabate, A.. Planificación de la producción (documento compartido en campus virtual).