270106 - EDO - Digital Strategy for Organisations

Coordinating unit: 270 - FIB - Barcelona School of Informatics
Teaching unit: 732 - OE - Department of Management
Academic year: 2018
Degree: BACHELOR'S DEGREE IN INFORMATICS ENGINEERING (Syllabus 2010). (Teaching unit Optional)
ECTS credits: 6
Teaching languages: Catalan

Teaching staff

Coordinator: - Antonio Cañabate Carmona (antonio.canabate@upc.edu)
Others: - Ferran Sabate Garriga (ferran.sabate@upc.edu)

Requirements

- Corequisite NE

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.

Generical:
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.
270106 - EDO - Digital Strategy for Organisations

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>Total learning time: 150h</th>
<th>Hours large group: 15h</th>
<th>10.00%</th>
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<tbody>
<tr>
<td></td>
<td>Hours medium group: 15h</td>
<td>10.00%</td>
</tr>
<tr>
<td></td>
<td>Hours small group: 30h</td>
<td>20.00%</td>
</tr>
<tr>
<td></td>
<td>Guided activities: 6h</td>
<td>4.00%</td>
</tr>
<tr>
<td></td>
<td>Self study: 84h</td>
<td>56.00%</td>
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</tbody>
</table>
The digital strategy in organizations. A comprehensive vision of IT to support business strategy

Degree competences to which the content contributes:
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

Degree competences to which the content contributes:
Description: Most usual sales and marketing processes will be review and the type of software applications that support them

ICT in financial administration

Degree competences to which the content contributes:
Description: Most usual financial administration processes will be review and the type of software applications that support them

ICT in logistics and distribution

Degree competences to which the content contributes:
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

Degree competences to which the content contributes:
Description: Most usual human resources processes will be review and the type of software applications that support them

ICT in manufacturing and operations

Degree competences to which the content contributes:
Description:
Most usual manufacturing and operations processes will be review and the type of software applications that support them
## Planning of activities

| The digital strategy in organizations | Hours: 10h  
Theory classes: 1h  
Practical classes: 1h  
Laboratory classes: 2h  
Guided activities: 0h  
Self study: 6h |
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Reading theoretical material and the case proposed. Group discussion and completion of exercises and case</td>
</tr>
<tr>
<td><strong>Specific objectives:</strong></td>
<td>1</td>
</tr>
</tbody>
</table>

| ICT in sales and marketing            | Hours: 29h  
Theory classes: 3h  
Practical classes: 3h  
Laboratory classes: 6h  
Guided activities: 1h  
Self study: 16h |
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</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Reading theoretical material and the case proposed. Discussion and building a solution for the case with the proposed software</td>
</tr>
<tr>
<td><strong>Specific objectives:</strong></td>
<td>2</td>
</tr>
</tbody>
</table>

| ICT in financial administration      | Hours: 27h  
Theory classes: 3h  
Practical classes: 3h  
Laboratory classes: 6h  
Guided activities: 1h  
Self study: 14h |
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<thead>
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<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Reading theoretical material and the case proposed. Discussion and building a solution for the case with the proposed software</td>
</tr>
<tr>
<td><strong>Specific objectives:</strong></td>
<td>3</td>
</tr>
</tbody>
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| ICT in logistics and distribution    | Hours: 27h  
Theory classes: 3h  
Practical classes: 3h  
Laboratory classes: 6h  
Guided activities: 1h  
Self study: 14h |
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</table>
## Description:
Reading theoretical material and the case proposed. Discussion and building a solution for the case with the proposed software

### Specific objectives:
4

## ICT in the area of human resources

<table>
<thead>
<tr>
<th>Hours</th>
<th>20h</th>
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<tbody>
<tr>
<td>Theory classes</td>
<td>2h</td>
</tr>
<tr>
<td>Practical classes</td>
<td>2h</td>
</tr>
<tr>
<td>Laboratory classes</td>
<td>4h</td>
</tr>
<tr>
<td>Guided activities</td>
<td>0h</td>
</tr>
<tr>
<td>Self study</td>
<td>12h</td>
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</table>

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

### Specific objectives:
5

## ICT in manufacturing and operations

<table>
<thead>
<tr>
<th>Hours</th>
<th>27h</th>
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</thead>
<tbody>
<tr>
<td>Theory classes</td>
<td>3h</td>
</tr>
<tr>
<td>Practical classes</td>
<td>3h</td>
</tr>
<tr>
<td>Laboratory classes</td>
<td>6h</td>
</tr>
<tr>
<td>Guided activities</td>
<td>1h</td>
</tr>
<tr>
<td>Self study</td>
<td>14h</td>
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</table>

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

### Specific objectives:
6

## written exam

<table>
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<tr>
<th>Hours</th>
<th>10h</th>
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<tbody>
<tr>
<td>Theory classes</td>
<td>0h</td>
</tr>
<tr>
<td>Practical classes</td>
<td>0h</td>
</tr>
<tr>
<td>Laboratory classes</td>
<td>0h</td>
</tr>
<tr>
<td>Guided activities</td>
<td>2h</td>
</tr>
<tr>
<td>Self study</td>
<td>8h</td>
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Qualification 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:

\[ NF = 80\% \times ns + 20\% \times NExamen \]

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