Course guides
240621 - 240621 - Logistics, Fleet Control and Sig

Unit in charge: Barcelona School of Industrial Engineering
Teaching unit: 723 - CS - Department of Computer Science.
Degree: BACHELOR’S DEGREE IN INDUSTRIAL TECHNOLOGY ENGINEERING (Syllabus 2010). (Optional subject).
BACHELOR’S DEGREE IN MATERIALS ENGINEERING (Syllabus 2010). (Optional subject).
BACHELOR’S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2010). (Optional subject).

Academic year: 2020  ECTS Credits: 4.5  Languages: English

LECTURER

Coordinating lecturer: Lluís Pérez Vidal
Others: Pérez Vidal, Lluis

PRIOR SKILLS

Computer programming at an intermediate level (1 semester).

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Transversal:
1. EFFECTIVE USE OF INFORMATION RESOURCES. Managing the acquisition, structure, analysis and display of information from the own field of specialization. Taking a critical stance with regard to the results obtained.

TEACHING METHODOLOGY

Participating classes.
Problem based learning.

LEARNING OBJECTIVES OF THE SUBJECT

The student will be able to manage and operate (at the user level) a GIS (Geographic Information System) package.

STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours medium group</td>
<td>45,0</td>
<td>40.00</td>
</tr>
<tr>
<td>Self study</td>
<td>67,5</td>
<td>60.00</td>
</tr>
</tbody>
</table>

Total learning time: 112.5 h
CONTENTS

1- The QGIS package: Introduction and tutorial

Description:
The QGIS Geographic Information System package

Specific objectives:
The student will be able to install the package on a computer. Then she will be able to capture date, store and process it. And draw results.

Related activities:
Computer hands-on experience with the program.

Full-or-part-time: 6h
Guided activities: 6h

ACTIVITIES

1. PYTHON

Description:
A short refresher on the main points of Python syntax

Specific objectives:
After this chapter the student will be able to write short scripts in Python

Material:
Computer

Delivery:
Search on a list.

Full-or-part-time: 2h
Laboratory classes: 2h

GRADING SYSTEM

Each student will be required to make a 30-minute presentation on a subject of her/his choice, but related to the course (This will account for 30% of the final grade). Then a written report (around 30 pages) on the same subject (40% of the final grade). And there will be an intermediate examination (30%).

EXAMINATION RULES.

The examinations will be done remotely and the results will be sent by e-mail to the teacher.

BIBLIOGRAPHY

Basic: