DEGREE CURRICULUM

PROGRAMMING AND COMMUNNICATIONS I

Academic year 2013-14

Subject's general information

Subject name	Programming and Communnications I
Code	102133
Semester	1r Q Continued Evaluation
Typology	Optative
ECTS credits	6
Theoretical credits	0
Practical credits	0
Department	Computer Science and Industrial Engineering
Important information on data processing	Consult this link for more information.

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Learning objectives

See competences section.

Competences

Strategic competences UdL:
  - UdL2. Knowledge of an foreign language.
  - UdL3. Knowledge of ICT.
Transversal competences EPS:
  - EPS4. Have the learning abilities needed to start superior studies or improve the academic learning with a certain autonomous degree.
  - EPS9. Ability to work in teams, both as a unidisciplinary and multidisciplinary.
Specific competences GEEIA:
  - GEEIA3 Basic knowledge on using and programming computers, operating systems, databases and software with applications in engineering.
  - GEEIA28. Applied knowledge of industrial computing and communications.
  - GEEIA-EPS34. Knowledge of the fundamentals of computer systems and applications.

Subject contents

Basic algorithmic structures.
Basic data structures.
Iterative and recursive design.
Descendant design.

Methodology

Learning activities
Face to face activities (40%): The percentages associated to each one of the activities are computed over 100%
Master class (42,5%)
Problems (25%)
Laboratory (25%)
Tests and evaluation (7,5%)
Autonomous work (60%): The percentages associated to each one of the activities are computed over 100%
Work (40%)
Cases of study (10%)
Study (40%)

Development plan

Basic algorithmic structures. (3 weeks)
Basic data structures. (3 weeks)
Iterative and recursive design. (4 weeks)
Descendant design. (5 weeks)

Evaluation

Evaluation system
Written tests (40%)
Practices (60%)

Bibliography

Resources and information:

Python Doc: http://docs.python.org/2.7/

Raspberry Pi: http://www.raspberrypi.org/