# SUBJECT TEACHING GUIDE

## G818 - COMPUTING SYSTEMS

## Degree in Telecommunication Technologies Engineering

### Academic year 2023-2024

| 1. IDENTIFYING DATA | | | | |
|---|---|---|---|---|
| Degree | Degree in Telecommunication Technologies Engineering | | Type and Year | Compulsory. Year 2 |
| Faculty | School of Industrial Engineering and Telecommunications | | | |
| Discipline | Subject Area: Computer Systems<br>Module in Common with the Telecommunications Branch | | | |
| Course unit title and code | G818 - COMPUTING SYSTEMS | | | |
| Number of ECTS credits allocated | 6 | Term | Semester based (2) | |
| Web | https://moodle.unican.es/ | | | |
| Language of instruction | Spanish | English Friendly | Yes | Mode of delivery | Face-to-face |

| Department | DPTO. MATEMATICA APLICADA Y CIENCIAS DE LA COMPUTACION |
|---|---|
| Name of lecturer | PEDRO CORCUERA MIRO QUESADA |
| E-mail | pedro.corcuera@unican.es |
| Office | E.T.S. de Ingenieros Industriales y de Telecomunicación. Planta: - 4. DESPACHO PROFESORES (S4044) |
| Other lecturers | ROBERTO ORTIZ GARCIA<br>JOSE DEMETRIO GOMEZ VAQUERO |

| 3.1 LEARNING OUTCOMES |
|---|
| - - Introduction to the Linux operating system.<br>  - Analysis, design and implementation of information systems using object oriented programming and web programming.<br>  - Skills to design, development and management databases. |

## 4. OBJECTIVES

Introduction to the Linux operating system.

Introduction to object oriented programming.

Introduction to client side web programming.

Introduction to the design and development of databases in support to informatics system.

## 6. COURSE ORGANIZATION

| CONTENTS | |
|---|---|
| 1 | Introduction to Linux.<br>Object oriented programming. |
| 2 | Client side web programming. |
| 3 | Relational databases. SQL language. |

## 7. ASSESSMENT METHODS AND CRITERIA

| Description | Type | Final Eval. | Reassessn | % |
|---|---|---|---|---|
| Continuous evaluation based on portfolio problems delivered by using Moodle platform within the virtual classroom. | Laboratory evaluation | No | Yes | 100,00 |
| TOTAL | | | | 100,00 |

| Observations |
|---|
| The supplementary examination will examine all material |

| Observations for part-time students |
|---|
| The evaluation will be carried out continuously. |

## 8. BIBLIOGRAPHY AND TEACHING MATERIALS

**BASIC**

1. Programming : principles and practice using C++, Bjarne Stroustrup, Addison-Wesley

2. Starting Out with C++ from Control Structures to Objects, Tony Gaddis, Pearson

3. Web Programming, Step by Step, M. Stepp, J. Miller, V. Kirst, Lulu

4. Fundamentos de bases de datos, Abraham Silberschatz, Henry F. Korth, S. Sudarshan, McGraw-Hill