

## SUBJECT TEACHING GUIDE

G1490 - Applications of Signal Processing

Degree in Telecommunication Technologies Engineering

Academic year 2019-2020

| 1. IDENTIFYING DATA              |   |                  |                    |                  |                  |
|----------------------------------|---|------------------|--------------------|------------------|------------------|
| Degree                           | Degree in Telecommunication Technologies Engineering                                  |                  |                    | Type and Year    | Optional. Year 4 |
| Faculty                          | School of Industrial Engineering and Telecommunications                               |                  |                    |                  |                  |
| Discipline                       | Speciality Optional Subjects  |                  |                    |                  |                  |
| Course unit title and code       | G1490 - Applications of Signal Processing   |                  |                    |                  |                  |
| Number of ECTS credits allocated | 6   | Term             | Semester based (2) |                  |                  |
| Web                              | <a href="https://gtas.unican.es/docencia/aps">https://gtas.unican.es/docencia/aps</a> |                  |                    |                  |                  |
| Language of instruction          | Spanish   | English Friendly | Yes                | Mode of delivery | Face-to-face     |

|                  |  |  |  |  |  |
|------------------|--|--|--|--|--|
| Department       | DPTO. INGENIERIA DE COMUNICACIONES   |  |  |  |  |
| Name of lecturer | JAVIER VIA RODRIGUEZ   |  |  |  |  |
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| Office           | Edificio Ing. de Telecomunicación Prof. José Luis García García. Planta: - 2. DESPACHO S274 (S274) |  |  |  |  |
| Other lecturers  |  |  |  |  |  |

### 3.1 LEARNING OUTCOMES

- Supervised learning: regression and classification
- Unsupervised learning: clustering
- Data analysis
- Data processing

#### 4. OBJECTIVES

- Supervised learning: regression and classification
- Unsupervised learning: clustering
- Data analysis
- Data processing

#### 6. COURSE ORGANIZATION

##### CONTENTS

|   |  |
|---|--|
| 1 | This is a practical course. The work will be based on a practical signal processing / data science / machine learning problem, which will be used to introduce some of the main topics in signal processing and machine learning: regression, classification, clustering, etc. |
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#### 7. ASSESSMENT METHODS AND CRITERIA

| Description                                | Type | Final Eval. | Reassessn | %      |
|--|------|-------------|-----------|--------|
| Assignments.                               | Work | No          | Yes       | 100,00 |
| TOTAL                                      |      |             |           | 100,00 |
| Observations                               |      |             |           |        |
| The assignments will be presented in class |      |             |           |        |
| Observations for part-time students        |      |             |           |        |

#### 8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC