

## SUBJECT TEACHING GUIDE

### G285 - Fundamentals of Computation

#### Degree in Telecommunication Technologies Engineering

#### First Degree in Telecommunication Technologies Engineering

Academic year 2024-2025

| 1. IDENTIFYING DATA              |   |                  |                    |                  |                              |
|----------------------------------|---|------------------|--------------------|------------------|------------------------------|
| Degree                           | Degree in Telecommunication Technologies Engineering<br>First Degree in Telecommunication Technologies Engineering                      |                  |                    | Type and Year    | Core. Year 1<br>Core. Year 1 |
| Faculty                          | School of Industrial Engineering and Telecommunications   |                  |                    |                  |                              |
| Discipline                       | Subject Area: Computer Science<br>Basic Training Module   |                  |                    |                  |                              |
| Course unit title and code       | G285 - Fundamentals of Computation  |                  |                    |                  |                              |
| Number of ECTS credits allocated | 6   | Term             | Semester based (1) |                  |                              |
| Knowledge Field                  |   |                  |                    |                  |                              |
| Web                              | <a href="http://personales.unican.es/crespoj/computacion/entrada.html">http://personales.unican.es/crespoj/computacion/entrada.html</a> |                  |                    |                  |                              |
| 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 | JAVIER GONZALEZ VILLA   |
| E-mail           | <a href="mailto:javier.gonzalezvilla@unican.es">javier.gonzalezvilla@unican.es</a>          |
| Office           | E.T.S. de Ingenieros de Caminos, Canales y Puertos. Planta: + 1. DESPACHO PROFESORES (1026) |
| Other lecturers  | JOSE LUIS CRESPO FIDALGO<br>ROBERTO ORTIZ GARCIA  |

#### 4. OBJECTIVES

|   |
|---|
| Structured programming  |
| Algorithm synthesis   |
| Error prevention and debugging strategies                       |
| Problem solving based on basic concepts about computer function |
| Basic SQL syntax for handling databases                         |

#### 6. SUBJECT PROGRAM

| CONTENTS |   |
|----------|---|
| 1        | Computer system functioning introduction<br>SQL   |
| 2        | C language programming: input, output, sequential files, flow control, numeric and char arrays up to 2D, structures |

#### 7. ASSESSMENT METHODS AND CRITERIA

| Description   | Type   | Final Eval. | Reassessn | %      |
|---|--------|-------------|-----------|--------|
| Programs along the course.  | Others | No          | Yes       | 100,00 |
| TOTAL   |        |             |           | 100,00 |
| Observations  |        |             |           |        |
| Should any prevailing requirements forbid face-to-face evaluation, number, weights, conditions and exercise types would vary. |        |             |           |        |
| Observations for part-time students   |        |             |           |        |
| Part-time and other students may opt for the makeup exam.   |        |             |           |        |

#### 8. BIBLIOGRAPHY AND TEACHING MATERIALS

|                          |
|--------------------------|
| BASIC                    |
| Apuntes de la asignatura |