

SUBJECT TEACHING GUIDE

897 - Introduction and General Concepts of Communications Networks

Master's Degree in Business and Information Technologies

Academic year 2023-2024

| 1. IDENTIFYING DATA | | | | | |
|----------------------------------|--|------------------|--------------------|------------------|--------------------|
| Degree | Master's Degree in Business and Information Technologies | | | Type and Year | Compulsory. Year 1 |
| Faculty | Faculty of Economics and Business Studies | | | | |
| Discipline | Obligatory Subjects | | | | |
| Course unit title and code | 897 - Introduction and General Concepts of Communications Networks | | | | |
| Number of ECTS credits allocated | 2,5 | Term | Semester based (1) | | |
| Web | | | | | |
| Language of instruction | Spanish | English Friendly | No | Mode of delivery | Face-to-face |

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|------------------|---|--|--|--|--|
| Department | DPTO. INGENIERIA DE COMUNICACIONES | | | | |
| Name of lecturer | JOSE ANGEL IRASTORZA TEJA | | | | |
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| Other lecturers | | | | | |

3.1 LEARNING OUTCOMES

- Students will be able to acquire the knowledge and competences necessary to understand the mechanisms that enable the transmission of data between communications devices. For this, the OSI reference model, techniques for flow control and error control as well as the most common protocols used in data networks will be studied.

4. OBJECTIVES

1. To know the OSI model for data transmission.
2. To understand the techniques of flow control between devices.
3. To understand the basic techniques of error handling and recovery.
4. To understand the need for the use of communications protocols.
5. To know the basics of networking services and applications.

6. COURSE ORGANIZATION

| CONTENTS | |
|----------|--|
| 1 | Part 1: General concepts of networks. |
| 2 | Part 2: Local Area Networks (LAN). |
| 3 | Part 3: Protocol and network services. |
| 4 | Tutorial sessions |
| 5 | Exam |

7. ASSESSMENT METHODS AND CRITERIA

| Description | Type | Final Eval. | Reassessn | % |
|---|-----------------------|-------------|-----------|--------|
| Final exam. | Written exam | Yes | Yes | 80,00 |
| Laboratory evaluation | Laboratory evaluation | No | No | 20,00 |
| TOTAL | | | | 100,00 |
| Observations | | | | |
| The evaluation of the subject will be carried out by means of a written multiple-choice exam. | | | | |
| Observations for part-time students | | | | |
| Part-time students will also take a written multiple-choice test. | | | | |

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

León-García, A.; Widjaja, I.: Redes de Comunicación. Conceptos Fundamentales y Arquitecturas Básicas, McGraw Hill, 2002.
 Halsall, Data Communications, Computer Networks and Opens Systems, (4ª edición), Addison Wesley, 1996.
 A.S. Tannenbaum, Computer Networks, (3ª edición), Prentice-Hall, 1996.