

Academic Year: (2023 / 2024)

Review date: 31-03-2023

Department assigned to the subject: Telematic Engineering Department

Coordinating teacher: MUÑOZ MERINO, PEDRO JOSE

Type: Compulsory ECTS Credits : 6.0

Year : 4 Semester : 1

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

General Knowledge on Telecommunication Systems and Networks

OBJECTIVES

Telecommunications legislation and policy:

The student will acquire knowledge related to:

- The basic principles of business and telecommunications policy, both globally and European and Spanish.
- National and international structures dedicated to the telecomm policy.
- The most relevant regulatory schemes for network operation and services.
- The development of the telecommunications market and the different players that are part of it.
- How legislation conditions and influences the evolution of the telecommunications sector.

Projects

The student will acquire knowledge related to:

- Principles, techniques and methodologies in which project management is based.
- The development of basic skills for the elaboration, direction, coordination, and techno-economic management of projects.

DESCRIPTION OF CONTENTS: PROGRAMME

Project management

- 1.- Project Management: General Concepts. Professional Responsibility of Project Management
- 2.- Project Life Cycle and project startup. PMI and Agile Methodology
- 3.- Project integration and scope
- 4.- Managing Project schedule
- 5.- Managing Project costs and procurement
- 6.- Managing Project risk and quality
- 7.- Human Resources and communication management
- 8.- Project monitoring, control and closure

Telecommunications legislation and policy:

- 1.- Introduction to the Telecommunication Sector
- 2.- Global framework of telecommunications
- 3.- Social and economical aspects of the Telecommunication Sector. Standardization Organisms
- 4.- Europe telecommunication Policy
- 5.- Implementation of the regulatory framework in Spain
- 6.- Interconnection
- 7.- Access infrastructures regulation
- 8.- Radio spectrum Management
- 9.- Internet governance
- 10.- Consumers rights and new services
- 11.- Internet of Things (IoT)
- 12.- Data management (Big Data, AI and Data Protection)
- 13.- Intellectual Property Rights and tv contents

LEARNING ACTIVITIES AND METHODOLOGY

Two types of training activities are proposed: Lectures and group work

Lectures on board with using transparencies or other media to illustrate certain concepts. The acquired

knowledge will be assessed by a final exam.

For the group work, the aim is to get experience in the application of the basic course content. It is important to understand that these activities require initiative and participation by the student (there will be concepts that students will have to study from some pointers and references). Sharing of work and discussion should serve to consolidate knowledge and develop the ability to analyze and communicate relevant information. Besides sharing of work will promote the exchange of views critical both between teacher and students and among students.

PROJECT MANAGEMENT (2 ECTS)

Lecture: 1 ECTS

Practice: 1 ECTS

Delivery of practice on the development of a project plan.

POLICY AND REGULATION (4 ECTS)

Lecture: 2 ECTS

Practice: 2 ECTS

Delivery of biweekly practices on the subject addressed in lectures.

ASSESSMENT SYSTEM

Through homeworks under individual and collective basis and a final examination

% end-of-term-examination:	50
% of continuous assessment (assignments, laboratory, practicals...):	50

BASIC BIBLIOGRAPHY

- Gido & Clements Successful Project Management, South-Western.
- Gobierno de España Código de las Telecomunicaciones. Recopilación de normativa de telecomunicaciones, BOE.
- Gobierno de España Ley General de Telecomunicaciones 9/2014, BOE.
- Gray and Larson Project Management: The Managerial Process, McGraw-Hill.
- Jorge Pérez Martínez, Zoraida Frías Barroso, Alberto Urueña López La evolución de Internet en España: del Tesis a la economía digital, Colegio Oficial de Ingenieros de Telecomunicación, 2018
- Juan José Montero Pascual Derecho de las telecomunicaciones, Tirant lo Blanch, 2007
- Kathy Schwalbe Information Technology Project Management, Cengage Learning.
- PMI Institute PMBOK Guide, PMI Institute.

BASIC ELECTRONIC RESOURCES

- BEREC . Body of European Regulators for Electronic Communications: <http://berec.europa.eu>
- CE . Comisión Europea: <http://ec.europa.eu>
- CE . Digital Single Market Strategy: <http://ec.europa.eu/digital-single-market/>
- CNMC . Comisión Nacional de los Mercados y la Competencia: [http:// www.cnmc.es](http://www.cnmc.es)
- ONTSI . Observatorio Nacional de las Telecomunicaciones y la Sociedad de la Información: <http://www.ontsi.red.es/ontsi/>
- ONTSI . Observatorio Nacional de las Telecomunicaciones y la Sociedad de la Información: <http://www.ontsi.red.es/ontsi/>
- PMI . Project Management institute: <http://www.pmi.org>
- Red.es . Entidad pública empresarial Red.es: <http://www.red.es>
- SESIAD . Secretaria de Estado para la Sociedad de la Información y la Agenda Digital: <http://www.minetad.gob.es/telecomunicaciones/>