

Academic Year: (2024 / 2025)

Review date: 03-07-2021

Department assigned to the subject: Telematic Engineering Department

Coordinating teacher: SANTAELLA VALLEJO, JUAN

Type: Compulsory ECTS Credits : 6.0

Year : 1 Semester : 2

OBJECTIVES

The following competences have to be acquired:

CG3: Capacity for managing, planning and supervise multidisciplinary teams

CG5: Capacity for developing, strategic planning, steering, coordinating and technical and economic managing projects in every scope of telecommunications engineering following the appropriate environmental and quality criteria

CG6: Capacity for executive management, technical management and project management of research, development and innovation projects in enterprises and in technology centres

CG10: Capacity for applying the economic, human resource and project management principles as well as the legislation, regulation and standardization of telecommunications

CG13: Knowledge, understanding and capacity for applying the required legislation in the exercise of profession of Telecommunications Engineer

CE17: Capacity for developing, steering, coordinating and technical and economic managing projects about:

telecommunications systems, networks, infrastructures, services and facilities including supervision and coordination of its partial sub-projects of their corresponding ancillary work, such as common telecommunications facilities in buildings or residential premises, including projects of digital home, telecommunication facilities in transport and environment, with its ancillary installations of power supply and electromagnetic emissions evaluation and compatibility

DESCRIPTION OF CONTENTS: PROGRAMME

Concept, Phases and structures of the organization of a project

Integrated Management of Projects

Contracting and subcontracting Projects

Projects Evaluation

General Planning

Programming Projects: PERT Methodology and precedents

Programming techniques with limited resources. Heuristics

Programming Techniques for balancing resources expenditure

Advance Monitoring: PERT-cost methodology

Classical Organization of Documents

Telecommunication Standards

Multidisciplinary Projects Concurrent Engineering

Practical cases: Projects with energy supply, evaluation of electromagnetic compatibility about:

1. Telecommunication systems, networks, infrastructures and services including supervision and coordination of partially subcontracted projects

2. Digital Home

3. Infrastructures for transport and Energy management

LEARNING ACTIVITIES AND METHODOLOGY

Learning activities include:

Tutorials, solving doubts classes for reduced number of participants, presentations made by the

students, individual tutorial and personal assignments, including problems setting, testing and exams, oriented to the appropriation of technical background

Individual tutoring and individual assignment

ASSESSMENT SYSTEM

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

The evaluation process will take into account the learning objectives starting from the individual and collective workpackage of the students. A permanent evaluation of the activities should be made through exercises, problems, examinations, workshop activities and further learning activities. The final score will be include individual and collective activities of the students. The final examination will provide the 50% of the final score, and the remaining will be integrated by the results of the rest of the activities