uc3m Universidad Carlos III de Madrid

Project management and telecommunications policy

Academic Year: (2020 / 2021) Review date: 21-04-2022

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 enteerprises 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, neworks, infrastructures, services and facilities including including supervision and coordination of its partial sub-projects of their corresponding ancillary work, such us 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 emisions evaluation and compatibility

DESCRIPTION OF CONTENTS: PROGRAMME

Concept, Phases ans structures of the organization of a project

Integrated Management of Projects

Conctracting and subcontracting Projects

Projects Evaluation General Planing

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. Telecomunication sytems, networks, infrastructures and services includin supervision and coordination of partially subcontracted projects
- 2. Digital Home
- 3. Infrastrucutures 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 personnal assignements, incding problems setting, testing and exams, oriented to the approriation of technical background

Individual tutoring and individual assignement

ASSESSMENT SYSTEM

The evaluation process will take into account the learning objectives starting from the individual and colective 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

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