Evaluation and simulation of benefits on the Internet

Academic Year: (2025 / 2026) **Review date: 28/07/2025 13:58:47**

Department assigned to the subject: Telematic Engineering Department

Coordinating teacher:

Type: Electives ECTS Credits : 3.0

Year : Semester : 2

LEARNING OUTCOMES

KOPT1: To know and understand in depth advanced technologies in a specific field of engineering and information and communication technologies, which represent the state of the art in the area of study, including emerging trends and recent developments.
KOPT2: To interpret scientific and technical information sources to deepen knowledge in a specific area related to engineering and information and communication technologies.
SOPT1: To identify, assess their technical feasibility, and apply advanced tools, methodologies, and technological solutions used in a specific field of engineering and information and communication technologies to develop algorithms or systems that integrate cutting-edge and innovative technologies.
SOPT2: To apply analytical and design methodologies to solve advanced problems in a specific field of engineering and information and communication technologies, and evaluate the performance and limitations of different technological approaches, proposing improvements and alternatives.
COPT1: To conceive and develop projects that integrate advanced knowledge and provide innovative solutions in the field of engineering and information and communication technologies.

DESCRIPTION OF CONTENTS: PROGRAMME

1. Introduction to the modeling of communications networks and traffic in these networks.
2. Dimensioning and optimization of networks. Network analysis, capacity allocation problems, and problems of allocation of flows.
3. Advanced network simulation. Simulation of discrete events. Application of the simulation to the study of benefits and the dimensioning of networks.
4. Analysis and design of fault-tolerant networks resistant to disasters and cyberattacks.