32148 - AXCP - Evaluation of Packet Switched Networks

Coordinating unit: 230 - ETSETB - Barcelona School of Telecommunications Engineering
Teaching unit:
Academic year: 2015
Degree: MASTER'S DEGREE IN NETWORK ENGINEERING (Syllabus 2006). (Teaching unit Optional)
MASTER'S DEGREE IN PHOTOGRAPHIC ENGINEERING, NANOPHOTONICS AND
BIOPHOTONICS (Syllabus 2010). (Teaching unit Optional)
MASTER'S DEGREE IN NETWORK ENGINEERING (Syllabus 2009). (Teaching unit Optional)
ECTS credits: 2,5
Teaching languages: English

Teaching staff
Coordinator: MONICA AGUILAR IGARTUA
Others: MONICA AGUILAR IGARTUA
ESTEVE PALLARÈS SEGARRA
ISABEL MARTIN FAUS

Prior skills
General knowledge about communication networks: Internet protocols, mechanisms and algorithms implemented in communication networks. Basic knowledge about Markov processes.

Teaching methodology
This course includes lectures, discussion, exercises and practices in the laboratory.

Learning objectives of the subject
Review of the main concepts about Quality of Service on communication networks.
Evaluate a packet switched network using a fluid flow model with On-Off sources.
Evaluate multimedia services using Reward Markov Chains.
### Content

| -Review of the main concepts about Quality of Service on communication networks. | **Learning time:** 62h 30m  
  Theory classes: 14h  
  Practical classes: 8h  
  Laboratory classes: 2h  
  Guided activities: 2h  
  Self study : 36h 30m |


| -Evaluation of multimedia services using Reward Markov Chains | **Learning time:** 62h 30m  
  Theory classes: 14h  
  Practical classes: 8h  
  Laboratory classes: 2h  
  Guided activities: 2h  
  Self study : 36h 30m |

### Qualification system

40% exposition and discussion in class  
40% exercises  
20% practices

### Bibliography