



PLANES DE ESTUDIO

TC2007

Quantitative Methods and Simulation

SPANISH

Course in which it's recommended to incorporate the use of information technologies.

CIP: 110101 Computer and Information Sciences,
General.

C-L-U: 3-0-8

Academic department that offers it:
Computer Technologies

Graduate Programs who offer them:

6 IEC05, 6 ISC05, 6 ISE05, 6 ISIO5, 7 INT11, 8 ISC11, 8 ITC11, 7 ITIC11, 7 ISC09, 6 ISC08, 6 ITC05, 6 ITC08, 7 ITC09, 6 ITE05, 5 ITIC05, 5 ITIC08
Certificates

Requirement:
(MA1006 and TC1018 or TC1005 or IN2022)

Equivalence:
None.

General aim of the course:

Upon completion of this course, students will be able to comprehend the characteristics of a stochastic process and identify different types of queuing models and the performance of various data link layer protocols. Students will be able to establish system and performance parameters in order to study the behavior of computer systems and telecommunication networks using simulations.

Teaching and learning techniques:
Problem-based Learning

Bibliography:

TEXT BOOKS:

- * Bolch, Gunter, Queueing networks and Markov chains : modeling and performance evaluation with computer science applications, New York : Wiley, 1990, 0471193666 : HRD\$98.95
- * Banks, Jerry, Discrete-event system simulation, 2nd ed, New Jersey : Upper Saddle River, N.J. : Prentice Hall, 2004, eng, 0132174499
- * Allen, Arnold O., Probability, statistics, and queueing theory : with computer science applications, 2nd ed., Massachusetts : Boston : Academic Press : Harcourt Brace Jovanovich, eng, 0120510510 (papel no ácido), 978012050511 (papel no ácido)