uc3m | Universidad Carlos III de Madrid

Stochastic Dynamical Systems

Academic Year: (2018 / 2019) **Review date: 11-04-2018**

Department assigned to the subject: Statistics Department

Coordinating teacher:

Type: Electives ECTS Credits : 6.0

Year : 4 Semester :

DESCRIPTION OF CONTENTS: PROGRAMME

1. Introduction to Stochastic Processes
2. Discrete Markov Chains
3. Continuous time Markov Chains
4. Renewal Processes
5. Queuing theory
6. Random Graphs
7. Case studies:

Monte Carlo Algorithm, PageRank Algorithm, Call centers, Social networks.

% end-of-term-examination:	60
% of continuous assessment (assigments, laboratory, practicals…):	40