Topics in Probability and Stochastic Processes

This module aims to present some advanced probabilistic concepts and demonstrate their application to stochastic modelling of real-world situations. The topics covered include renewal theory, continuous-time Markov processes and Brownian motion. In addition to exposure to proofs and theoretical material, students develop practical skills through a large number of problems and worked examples.



[1]

M. A. Pinsky and S. Karlin, An introduction to stochastic modeling, 4th ed. Amsterdam: Academic Press, 2011.

[2]

S. M. Ross and MyiLibrary, Introduction to probability models, 9th ed. Amsterdam: Academic Press, 2007 [Online]. Available: http://catalogue.library.qmul.ac.uk/uhtbin/ezproxy.pl?url=http://lib.myilibrary.com?id=747 03