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.

Pinsky MA, Karlin S. An introduction to stochastic modeling. 4th ed. Amsterdam: Academic Press; 2011.

2.

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