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, M.A. and Karlin, S. 2011. An introduction to stochastic modeling. Academic Press.

[2]

Ross, S.M. and MyiLibrary 2007. Introduction to probability models. Academic Press.