



University of Pretoria Yearbook 2020

Simulation and computation 710 (STC 710)

Qualification Postgraduate

Faculty [Faculty of Economic and Management Sciences](#)

Module credits 15.00

Programmes [BComHons Mathematical Statistics](#)

[BComHons Statistics and Data Science](#)

[BScHons Mathematical Statistics](#)

[BScHons Statistics and Data Science](#)

Prerequisites STK 353

Contact time 1 lecture per week

Language of tuition Module is presented in English

Department Statistics

Period of presentation Semester 1

Module content

Efficient programming, Monte Carlo simulation, sampling of discrete and continuous probability models, General transformation methods, Accept-reject methods, Monte Carlo integration, importance sampling, numerical optimisation, Metropolis-Hastings algorithm, GIBBS sampling.

The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.