

University of Pretoria Yearbook 2017

Introduction to statistical learning 720 (EKT 720)

Qualification	Postgraduate
Faculty	Faculty of Economic and Management Sciences
Module credits	15.00
Programmes	BComHons Mathematical Statistics BComHons Statistics BScHons Mathematical Statistics
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	RAL 780 or WST 311, 312, 321, 322
Contact time	1 web-based period per week, 1 lecture per week
Language of tuition	Module is presented in English
Academic organisation	Statistics
Period of presentation	Semester 2

Module content

The emphasis is on the theoretical understanding and practical application of advances in statistical modelling. The following topics are covered: Single equation models: Nonparametric regression. Bootstrap procedures within regression analysis, k-nearest neighbour classification. Modelling categorical dependent variables - Logit/Probit models. Multiple outputs. Linear regression of an indicator matrix. Ridge regression. Non-linear regression modelling. Some new developments in regression and classification. Simultaneous equation models: Specification, identification and estimation of simultaneous equation models.

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.