



University of Pretoria Yearbook 2016

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 |
| Contact time | 1 web-based period per week, 1 lecture per week |
| Language of tuition | 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.