



University of Pretoria Yearbook 2022

Introduction to statistical learning 720 (EKT 720)

Qualification	Postgraduate
Faculty	Faculty of Economic and Management Sciences
Module credits	15.00
NQF Level	08
Programmes	BComHons <i>Mathematical Statistics</i> BScHons <i>Mathematical Statistics</i>
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	RAL 780 or WST 311, 312, 321
Contact time	1 lecture per week, 1 web-based period per week
Language of tuition	Module is presented in English
Department	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.

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