University of Pretoria Yearbook 2016

Time-series analysis 321 (WST 321)

Qualification	Undergraduate
Faculty	Faculty of Economic and Management Sciences
Module credits	18.00
Programmes	BCom Econometrics
	BCom Statistics
	BSc(Computer Science) Computer Science
	BSc Actuarial and Financial Mathematics
	BSc Applied Mathematics
	BSc Environmental and Engineering Geology
	BSc Geology
	BSc Mathematical Statistics
	BSc Mathematics
Service modules	Faculty of Economic and Management Sciences
	Faculty of Natural and Agricultural Sciences
Prerequisites	WST 211, WST 221, WST 311 GS, WTW 211 GS and WTW 218 GS
Contact time	1 practical per week, 2 lectures per week
Language of tuition	Double Medium
Academic organisation	Statistics
Period of presentation	Semester 2

Module content

Stationary and non-stationary univariate time-series. Properties of autoregressive moving average (ARMA) and autoregressive integrated moving average (ARIMA) processes. Identification, estimation and diagnostic testing of a time-series model. Forecasting. Multivariate time-series. Practical statistical modelling and analysis using statistical computer packages.