

University of Pretoria Yearbook 2022

Time-series analysis 321 (WST 321)

Qualification Undergraduate

Faculty Faculty of Economic and Management Sciences

Module credits 18.00

NQF Level 07

Programmes BCom (Statistics and Data Science)

BCom

BCom (Econometrics)

BSc (Computer Science)

BSc (Meteorology)

BSc (Actuarial and Financial Mathematics)

BSc (Applied Mathematics)

BSc (Chemistry)

BSc (Mathematics)

BSc (Physics)

Service modules Faculty of Economic and Management Sciences

Faculty of Natural and Agricultural Sciences

Prerequisites WST 211, WST 221, WTW 211 GS and WTW 218 GS

Contact time 1 practical per week, 2 lectures per week

Language of tuition Module is presented in English

Department Statistics

Period of presentation Semester 2

Module content

Note: Only one of the modules WST 321 or STK 320 may be included in any study programme.

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, including that of social responsibility phenomena.

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