

University of Pretoria Yearbook 2022

The science of data analytics 353 (STK 353)

Qualification	Undergraduate
Faculty	Faculty of Economic and Management Sciences
Module credits	25.00
NQF Level	07
Programmes	BCom (Informatics) Information Systems BCom (Statistics and Data Science) BCom (Investment Management) BIT (Information Systems) BSc (Computer Science) BSc (Meteorology) BSc (Applied Mathematics) BSc (Chemistry) BSc (Mathematical Statistics) BSc (Mathematics) BSc (Physics)
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	STK 210, STK 220, WST 212 or WST 211, WST 221, WST 212
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Module is presented in English
Department	Statistics
Period of presentation	Semester 2

Module content

Data exploration. Data wrangling. Statistical coding. Algorithmic thinking. Sampling: basic techniques in probability, non-probability, and resampling methods. Text mining and analytics. Machine learning: classification and clustering. Statistical concepts are demonstrated and interpreted through practical coding and simulation within a data science framework.

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