University of Pretoria Yearbook 2020

The science of data analytics 353 (STK 353)

Qualification	Undergraduate
Faculty	Faculty of Economic and Management Sciences
Module credits	25.00
Programmes	BCom Investment Management
	BCom Statistics
	BCom Statistics and Data Science
	BIT Information Systems
	BSc Computer Science
	BSc Applied Mathematics
	BSc Mathematical Statistics
	BSc Mathematics
	BSc Physics
	BScAgric Agricultural Economics and Agribusiness Management
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.