

# University of Pretoria Yearbook 2022

## The science of data analytics 353 (STK 353)

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