

# Study in the field of

# BUSINESS ANALYTICS

## BUSINESS ANALYSTS are able to...



- Apply data analytics skills to function at highly competitive levels;
- Make decisions based on data-driven evidence;
- Analyse and manage business functions and processes;
- Gain insights from data analysis that inform decision-making;
- Using decision and mathematical modelling tools;
- Present data and information using visualisation techniques and software.

## Study

Undergraduate – BCom (Management Sciences)  
Focal area: Business Analytics

2 Year

### Business Analytics 214 & 244

Modeling with linear programming, graphical methods, spreadsheet solutions, sensitivity and applications using spreadsheets. Decision modelling: Basic concepts, multi-criterion decision analysis, decision trees, utility theory, analytical hierarchy process. Types of social networks, graph visualization, network relationships, network evolution and marketing research.

Prerequisite subjects: Statistics 186, Probability theory and Statistics 114 or 144, or Statistical methods 176

3 Year

### Business Analytics 318 & 348

Basic web page scripting and web page analysis, introduction to and technologies required for large data set-analytics, analysis of extracted data, considerations in data warehousing and data stream processing and analytics. Data and information visualization: Identify data types, meta data descriptions, applying appropriate charts, graphs or mapping techniques. Quality control, performance measurement and performance management: control cards, dashboards, balanced scorecards, Six Sigma. Business report writing. Applications using applicable software.

Prerequisite subjects: Statistics 186, Probability theory and Statistics 114 or 144, or Statistical methods 176

## Focus Additional opportunities: Bridging to BCom Operations Research

The Science of Better

**Operations researchers** use analytics and optimisation techniques to make a difference in the world. We apply maths to complex problems to find meaningful, data-driven insights and improvements. Operations research: the science of better, evidence-based decision making.

It is possible to bridge into operations research from business analytics by means of online modules in mathematics and linear programming.

## Career Consultant, analyst, data scientist, researcher

**Business intelligence, consulting, advanced analytics:** Business Modelling Associates, McKinsey & Company, PBT Group, OpSI, Pivot Sciences, XTranda, Spatial Edge.

**Retail:** Takealot, PEP, Shoprite, Pepkor

**Banks:** Capitec Bank, Rand Merchant Bank, First National Bank, Commonwealth Bank

**Researcher / lecturer:** Universities (local / abroad), CSIR

**Other exciting alternative industries:** PIC Solutions, WiGroup, Broadreach, Sasol, RCS Group, DXC Technology, f(x) Software Development, Discovery, Medscheme

Potential employers



## Talk to us

**EMAIL:**  
Prof. Stephan Visagie  
svisagie@sun.ac.za

**WEB:**  
Department of Logistics  
[www.sun.ac.za/english/faculty/economy/logistics/](http://www.sun.ac.za/english/faculty/economy/logistics/)