OCCUPATIONAL CERTIFICATE

Data Science Practitioner

SAQA ID	NQF LEVEL	CREDITS	DURATION	QUALITY PARTNER
118708	5	185	12 Months	MICT SETA

OVERVIEW

The Occupational Certificate: Data Science Practitioner prepares learners to collect, transform, and analyse structured and unstructured data, uncover patterns and trends, and present descriptive analytic reports to solve business problems. It is designed for school leavers, TVET college graduates, new sector entrants, and experienced practitioners without formal recognition who want to build foundational data science and analytics competencies.

WHAT YOU WILL BE ABLE TO DO

Collect large amounts of structured and unstructured data from primary and secondary sources and extract and transform them into a usable format. Apply data analysis techniques to uncover patterns and trends in datasets (resultant sets of data that can be viewed as tables or as a "spreadsheet of data") to solve business-related problems. Prepare and present descriptive analytics reports on patterns and trends using computer programming languages and explain those patterns and trends through e.g., visualization and storytelling etc., using data visualisation tools.

MODULES

Knowledge Modules (66 Credits) 251102-001-00-KM-01: Introduction to Data Science and Data Analysis, Level 4, 6 Credits 251102-001-00-KM-02: Logical Thinking and Basic Calculations: Refresher, Level 4, 4 Credits 251102-001-00-KM-03: Computers and Computing Systems, Level 4, 4 Credits 251102-001-00-KM-04: Computing Theory, Level 4, 2 Credits 251102-001-00-KM-05: Basic Statistics for Data Analytics, Level 4, 10 Credits 251102-001-00-KM-06: Statistics Essentials for Data Analytics, Level 5, 4 Credits 251102-001-00-KM-07: Data Science and Data Analysis, Level 5, 12 Credits 251102-001-00-KM-08: Data Analysis and Visualisation, Level 5, 16 Credits 251102-001-00-KM-09: Introduction to Governance, Legislation and Ethics, Level 4, 3 Credits 251102-001-00-KM-10: Fundamentals of Design Thinking and Innovation, Level 4, 4 Credits 251102-001-00-KM-11: 4IR and Future Skills, Level 4, 1 Credit

Practical Skill Modules (59 Credits) 251102-001-00-PM-01: Apply Logical Thinking and Maths Refresher, Level 4, 3 Credits 251102-001-00-PM-02: Apply Code to Use a Software Toolkit/Platform in the Field of Study or Employment, Level 4, 4 Credits 251102-001-00-PM-03: Use Spreadsheets to Analyse and Visualise Data, Level 4, 3 Credits 251102-001-00-PM-04: Use a Visual Analytics Platform to Analyse and

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Visualise Data, Level 5, 4 Credits 251102-001-00-PM-05: Apply Statistical Tools and Techniques, Level 5, 4 Credits 251102-001-00-PM-06: Collect and Pre-Process Large Amounts of Unruly Data, Level 5, 12 Credits 251102-001-00-PM-07: Apply Data Analysis Techniques to Uncover Patterns and Trends in Datasets, Level 5, 12 Credits 251102-001-00-PM-08: Prepare and Present Descriptive Analytic Reports for Decision Making, Level 5, 12 Credits 251102-001-00-PM-09: Participate in a Design Thinking for Innovation Workshop, Level 5, 3 Credits 251102-001-00-PM-10: Collaborate Ethically and Effectively in the Workplace, Level 5, 2 Credits

Work Experience Modules (60 Credits) 251102-001-00-WM-01: Data Collection and Pre-processing Processes, Level 5, 16 Credits 251102-001-00-WM-02: Statistical Data Analysis Processes, Level 5, 16 Credits 251102-001-00-WM-03: Data visualisation and Reporting Processes, Level 5, 16 Credits 251102-001-00-WM-04: Capstone Project Using an Appropriate Toolkit, Level 5, 12 Credits

CAREER OPPORTUNITIES

Data Analyst Assistant Junior Data Analyst Data Miner Data Modeller Data Custodian Management Information Analyst

ENTRY REQUIREMENTS

NQF Level 4 with Mathematics.

ASSESSMENT

The assessment strategy comprises two stages:

Integrated Formative Assessment:Conducted internally by the skills development provider using curriculum-stipulated internal assessment criteria and weightings, which alongside work experience grants entrance into the external assessment. External Integrated Summative Assessment (EISA):Conducted through the QCTO Assessment Quality Partner (MICT SETA) via a theoretical assessment and the evaluation of practical tasks at decentralised approved assessment sites in a simulated environment by registered assessors, focusing on the exit level outcomes and associated assessment criteria.

ACCREDITATION

Type	Accreditation number	Valid until
Assessment centre	06-QCTO/AC-TTC170926213751	17 Aug 2031
QCTO SDP	06-QCTO/SDP070126095654	04 Jan 2031
QCTO SDP	07-QCTO/SDP280426125921	23 Apr 2031
QCTO SDP	07-QCTO/SDP280426131458	22 Apr 2031

Verify any accreditation and download letters at www.gcc-sd.com/accreditations

Run this qualification as a learnership

Request a proposal: www.gcc-sd.com/request-a-proposal?qualification=data-science-practitioner-118708

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