



Executive Summary

Qualification	Occupational Certificate: Data Science Practitioner
Purpose	<p>The Occupational Certificate: Data Science Practitioner prepares learners to collect, transform, analyse and communicate data to support organisational decision-making and solve business problems.</p> <p>Data Science Practitioners play a critical role in the data lifecycle by taking custody of data and converting large volumes of structured and unstructured information into meaningful insights. They support business intelligence and analytical environments by uncovering patterns, identifying trends and presenting findings in formats that assist organisations in making informed decisions.</p>
Qualification ID	118708
NQF Level	5
Minimum Credits	185
Duration	12-18 Months
Field	Information and Communication Technology
Subfield	Data Science and Analytics
Quality Partner	MICT SETA
Entry Requirements	NQF Level 4

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Qualification Overview

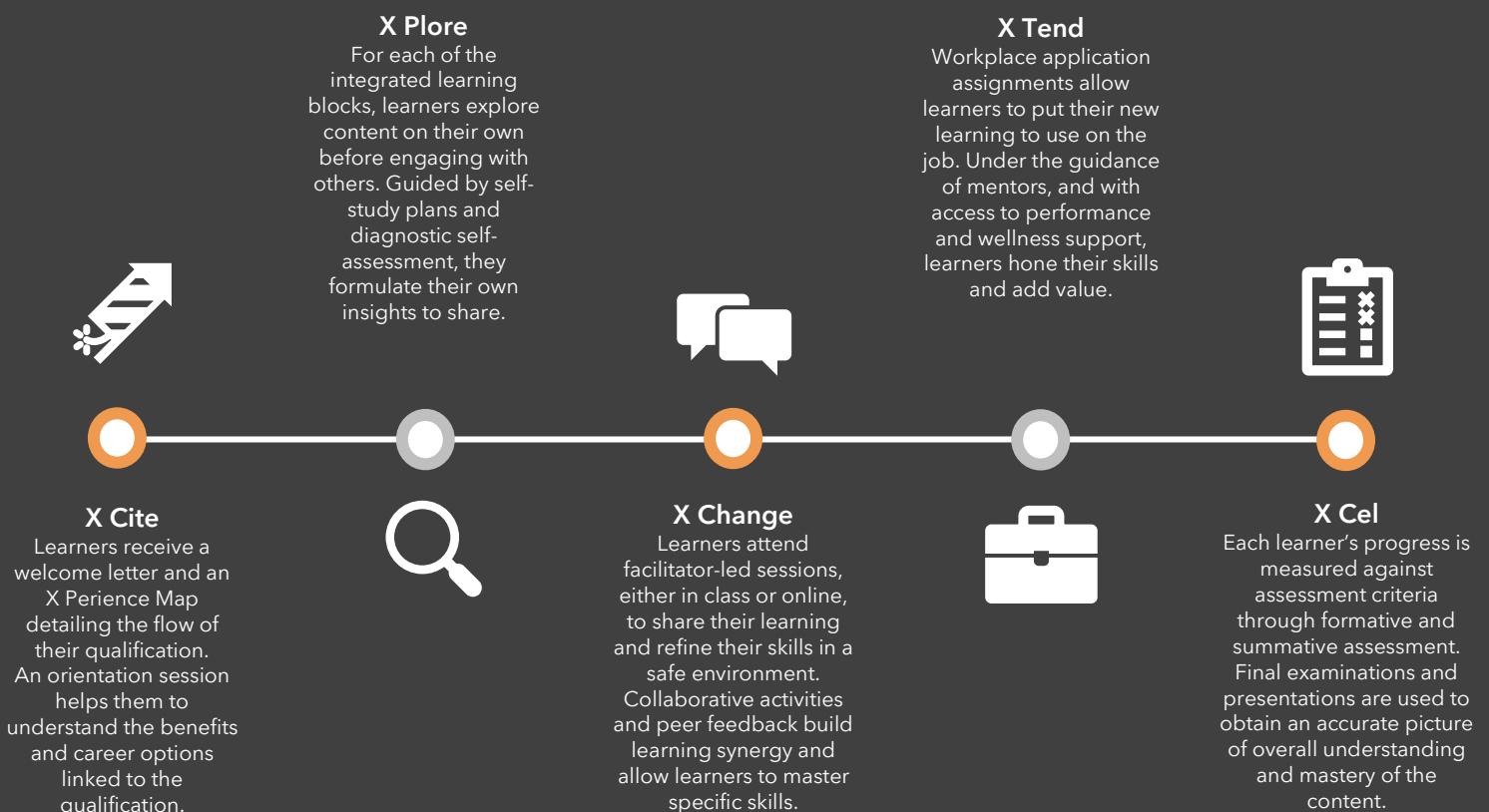
The programme develops both technical and analytical capability in data collection, statistics, visualisation, data storytelling and business problem solving.

Through an integrated combination of knowledge development, practical application and workplace exposure, learners develop the competence required to participate across the full data analytics lifecycle.

On completion learners will be able to:

- Collect and transform structured and unstructured data
- Apply analytical techniques to uncover patterns and trends
- Create visualisations and communicate insights effectively
- Apply statistical tools to support business decisions
- Present descriptive analytical reports and recommendations

The KLM Empowered Learning X Perience



Qualification Outline

The Occupational Certificate: Data Science Practitioner is structured into six integrated learning blocks, combining Knowledge Modules (KM), Practical Skill Modules (PM) and Work Experience Modules (WM).

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LOGICAL THINKING AND DIGITAL FOUNDATIONS (24 CREDITS)

ID	Title	Level	Credits
KM-02	Logical Thinking and Basic Calculations: Refresher	4	4
KM-03	Computers and Computing Systems	4	4
KM-04	Computing Theory	4	2
KM-10	Fundamentals of Design Thinking and Innovation	4	4
KM-11	4IR and Future Skills	4	1
PM-01	Apply Logical Thinking and Maths Refresher	4	3
PM-10	Collaborate Ethically and Effectively in the Workplace	5	2

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STATISTICAL FOUNDATIONS AND DATA PRINCIPLES (24 CREDITS)

ID	Title	Level	Credits
KM-01	Introduction to Data Science and Data Analysis	4	6
KM-05	Basic Statistics for Data Analytics	4	10
KM-06	Statistics Essentials for Data Analytics	5	4
PM-05	Apply Statistical Tools and Techniques	5	4

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DATA COLLECTION AND PRE-PROCESSING (28 CREDITS)

ID	Title	Level	Credits
PM-06	Collect and Pre-Process Large Amounts of Structured and Unstructured Data	5	12
WM-01	Data Collection and Pre-processing Processes	5	16

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DATA ANALYSIS AND PATTERN IDENTIFICATION (40 CREDITS)

ID	Title	Level	Credits
KM-07	Data Science and Data Analysis	5	12
PM-07	Apply Data Analysis Techniques to Uncover Patterns and Trends in Datasets	5	12
WM-02	Statistical Data Analysis Processes	5	16

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DATA VISUALISATION AND REPORTING (35 CREDITS)

ID	Title	Level	Credits
KM-08	Data Analysis and Visualisation	5	16
PM-03	Use Spreadsheets to Analyse and Visualise Data	4	3
PM-04	Use a Visual Analytics Platform to Analyse and Visualise Data	5	4
PM-08	Prepare and Present Descriptive Analytic Reports for Decision Making	5	12

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INTEGRATED ANALYTICS AND CAPSTONE PRACTICE (38 CREDITS)

ID	Title	Level	Credits
KM-09	Introduction to Governance, Legislation and Ethics	4	3
PM-02	Apply Code to Use a Software Toolkit/Platform in the Field of Study or Employment	4	4
PM-09	Participate in a Design Thinking for Innovation Workshop	5	3
WM-03	Data Visualisation and Reporting Processes	5	16
WM-04	Capstone Project using an Appropriate Toolkit	5	12

The Greatness Effect