



SAQA ID 48573
NATIONAL
CERTIFICATE

Information Technology Data Engineering
NQF Level 5
120 Credits

Introduction & Course Curriculum

Introduction

This course covers everything you need to know to become a data engineer. You'll learn how to clearly identify and report issues, how to write SQL and Python code, and how to use a range of AWS tools to work with big data in the cloud. In this course, you'll learn all the technical details and tools that are used to process big data. You'll analyze and define the data storage and processing needs, gain the skills to build end to end pipelines, and learn how to work with large datasets in a distributed way.

Course Breakdown

- **Minimum Entry Requirements:** None
- **Language Policy:** English
- **NQF Level:** 5
 - **Credits:** 120
- **Delivery Mode:** Contact and Distance Learning
- **Duration:** 12 Months
- **SAQA ID:** #48872 (Learning Programme)

COURSE CURRICULUM

The certification comprises of a wide range of Data Engineering concepts covered across two semesters:

SEMESTER 1

- ✓ Fundamentals of Data Engineering
- ✓ Python (Data Structures, EDA etc.)
- ✓ Structured Query Language (SQL)
- ✓ Cloud Computing - AWS

SEMESTER 2

- ✓ Data Warehousing and ETL Processing
- ✓ Spark, Hive and Hadoop
- ✓ Data Pipelines (Theory and Practice)
- ✓ Data Quality and Governance