

Specialisation Construction Learnerships

NQF4 Surveying

SAQA ID
61595

PURPOSE

The purpose of this learnership is to develop knowledge and skills in the management of records.

The focus of this programme is to equip the learner with knowledge and skills in the management of records, comprehension of written and verbal texts, business writing, problem solving, ethics, cultural awareness, self-management and self-development, as well as project teamwork and business policies and procedures.

The elective component enables the learner to specialize in areas of Administration such as reception, executive administration, project administration and human resources.

Core unit standards

- Position a tape for measuring
- Construct a Cartesian co-ordinate grid and plot points
- Plot tape and offset measurements on a plan
- Read a plan
- Set up a survey instrument to take observations
- Undertake tape and offset surveying
- Calculate the provisional position of a survey point from polar/traverse observations
- Determine quantities from plotted data
- Determine the elevation of a point by levelling
- Observe the position of a survey point by forward intersection
- Observe the position of a survey point by polar / traversing
- Observe the position of a survey point by resection
- Observe the position of a survey point by trilateration
- Observe the position of a survey point by using tacheometric methods
- Obtain information from a plan
- Perform computer aided survey draughting (CAD)
- Reduce tacheometric observations and produce a plan
- Set out pre-determined points
- Calculate the distance and direction between two co-ordinated survey points
- Calculate the final position of a survey point from polar / traverse observations
- Determine the elevation of a point by precise levelling
- Perform co-ordinate conversions
- Perform elementary co-ordinate transformations

Elective unit standards

- Set out control point for centre line and edge line marking for road marking
- Set out control points for marking symbols
- Use a Graphical User Interface (GUI)-based word processor to format documents
- Use a Graphical User Interface (GUI)-based word processor to create and edit
- Use a GUI-based word processor to enhance a document through the use of tables
- Use a Graphical User Interface (GUI)-based spreadsheet application to solve a given problem

Fundamental unit standards

- Apply knowledge of statistics and probability to critically interrogate and effectively
- Engage in sustained oral communication and evaluate spoken texts
- Read analyse and respond to a variety of texts
- Represent analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts
- Use language and communication in occupational learning programmes
- Use mathematics to investigate and monitor the financial aspects of personal,
- Write for a wide range of contexts