

# Occupational Certificate: Software Engineer NQF6

## Overview

1. A **Software Engineer** plays a crucial role in **researching, analysing, and meeting software requirements, designing and developing software applications**, and ensuring their functionality through rigorous testing and maintenance. Learners completing this qualification will gain skills in designing software to meet specific client needs, database design and manipulation, software development for organizational value addition, and thorough testing of source code for meeting client specifications.

There is a critical need for **Human Capital Development** in driving South Africa's **4IR** agenda, particularly focusing on big data analysis, cloud computing, and machine learning technologies.

**What is an Occupational Qualification?** An Occupational Qualification is a specialised certification that prioritises hands-on learning and real-world work experience. It consists of 3 parts;

Part 1

Theory Modules  
Runs with Part 2

Theory Exam

Part 2

Practical Modules  
Runs with Part 1

Workbook, Observation & Assessment

Part 3

Workplace Modules  
External or Onsite

Observation & Logbook

External Integrated Summative Assessment  
EISA

## Admission Requirements

- Grade 12 (Competency in the English language & Mathematical Literacy) **OR**,
- NQF Level 4 qualification **OR**,

**IMPORTANT:** If you don't meet the minimum entry requirement, you can still apply for special admission, regardless of what formal education you have. Please note that there are terms and conditions for this application, and all approvals will be made at the discretion of the Academic Board.

## Articulation Option

**Vertical Articulation:**

- Bachelor of Information Technology in Business Systems, NQF Level 7

## Career Opportunities

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

## Study Kit

Your study kit is included in your fees and will contain:



- **Free WIFI** (On-Campus only).
- Orientation kit
- Access to **PERLEGO** online library
- Access to our **myAIE** student portal and student support team via phone, email and tickets.

## Hardware Requirement

Please note that you are required to have your own computer for this qualification. **AIE**, in partnership with **Dell** and **TripleH** committed to supplying every student with a **Dell laptop** to support our **DigitalCampus** initiative. Available exclusively to **AIE students**, devices can now be financed with your tuition fees. We provide three models:

## Duration

**Full Time**

- **Full Time, Contact** (Hybrid) Learning, 12 Months
- **Full Time, Online** Learning, 12 Months
- Classes conducted over 10 sessions/week (± 3.5 days/week)

**Part-Time**

- **Part Time, Flexi Online** Learning, 12 Months
- (2 x evening classes, 18:00 to 20:00, Mon & Wed OR Tues & Thur)

\* Class structures are subject to change without notification.

[Learn More](#)

## Regulatory Information

AIE (Academic Institute of Excellence) has been granted provisional registration as a private college in terms of Section 31(3) of the CET Act and Regulation 12(4), with registration number 2018/FE07/003 for a period of three years. This programme is accredited, and quality assured by the Quality Council for Trades and Occupations (QCTO), Accreditation Number: 01-QCTO/SDP240324190422.

**Integrated Formative Assessment:**

The skills development provider will use the curriculum to guide them on the stipulated internal assessment criteria and weighting. They will also apply the scope of practical skills and applied knowledge as stipulated by the internal assessment criteria. This formative assessment together with work experience leads to entrance into the integrated external summative assessment.

**Integrated summative assessment:**

An external integrated summative assessment, conducted through the relevant QCTO Assessment Quality partner is required for the issuing of this qualification. The external integrated summative assessment will focus on the exit level outcomes and associated assessment criteria.

The external integrated summative assessment will be conducted through a theoretical assessment and the evaluation of practical tasks at decentralised approved assessment sites in a simulated environment and conducted by an assessor(s) registered with the relevant AQP.

## Important Notes

International Certification registration fees are NOT included in the course fees.