OCCUPATIONAL CERTIFICATE

Software Engineer

SAQA ID	NQF LEVEL	CREDITS	DURATION	QUALITY PARTNER
119458	6	240	24 Months	MICT SETA

OVERVIEW

The Occupational Certificate: Software Engineer prepares learners to research, analyse, and evaluate software requirements, and to design, develop, deploy, test/debug, and maintain software applications across ICT and other industries. It is designed for individuals with workplace experience in systems development seeking formal recognition, as well as school leavers, qualifying learners, and professionals with prior exposure to systems development who want to pursue a software engineering career, leadership roles, or entrepreneurship.

WHAT YOU WILL BE ABLE TO DO

Apply knowledge to design software to meet clients' needs. Design and manipulate databases. Develop software to add value to the organisation. Test or debug source code.

MODULES

Knowledge Modules (75 Credits) 251201-001-00-KM-01: Software Engineering, Level 6, 20 Credits 251201-001-00-KM-02: Programming, Level 6, 20 Credits 251201-001-00-KM-03: Database Design and Information Systems, Level 6, 15 Credits 251201-001-00-KM-04: Fundamentals of Project Management in Relation to Software Engineering, Level 5, 5 Credits 251201-001-00-KM-05: Digital and Business Mathematics, Level 5, 15 Credits

Practical Skill Modules (70 Credits) 251201-001-00-PM-01: Document System Design, Level 6, 25 Credits 251201-001-00-PM-02: Design and Manipulate Databases, Level 5, 5 Credits 251201-001-00-PM-03: Programme and Deploy Applications, Level 6, 25 Credits 251201-001-00-PM-04: Test or Debug Source Code to Ensure Client's needs are met, Level 5, 15 Credits

Work Experience Modules (95 Credits) 251201-001-00-WM-01: Software Design, Level 6, 30 Credits 251201-001-00-WM-02: Database Design and Manipulation, Level 5, 20 Credits 251201-001-00-WM-03: Software Development, Level 6, 30 Credits 251201-001-00-WM-04: Software Testing, Level 5, 15 Credits

CAREER OPPORTUNITIES

Software Engineer (across ICT, Telecommunications, IT, Electronics, Financial Services, Insurance, and other IT-driven sectors) Software Tester (via related part-qualification exit pathway) Leadership or

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Entrepreneurial Roles in Software Engineering

ENTRY REQUIREMENTS

Any NQF Level 4 qualification.

ASSESSMENT

The assessment strategy comprises two stages:

Integrated Formative Assessment:Conducted internally by Skills Development Providers using curriculum-stipulated internal assessment criteria and weightings, which leads to entrance into the external assessment. External Integrated Summative Assessment (EISA):Conducted through the QCTO Assessment Quality Partner (MICT SETA), focusing on the Exit Level Outcomes and Associated Assessment Criteria upon proof of completed knowledge/practical modules, a record of completed work experience, and Foundational Learning Competences (FLC).

ACCREDITATION

Type	Accreditation number	Valid until
QCTO SDP	05-QCTO/SDP280426132319	22 Apr 2031
QCTO SDP	06-QCTO/SDP280426130745	22 Apr 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=software-engineer-119458