



*Institute for Quality*

Education, Training and Development

Empowerment through Education



# NC: Chemical Operations Level 3

## Course Information

## NATIONAL CERTIFICATE :CHEMICAL OPERATIONS

SAQA ID : 78528 LP 66209

NQF LEVEL 3

CREDITS 120

This qualification addresses the training needs of learners wishing to progress beyond NQF Level 2 in chemical process operations. The competence obtained from this qualification provides the foundation needed to take responsibility for a significant process in the chemical operations industry. It also provides the basis upon which further related learning and career development can take place.

Through the employment of competent operating personnel, employers and, in turn, the field and sub-field have confidence that this critical work in the industry is efficiently carried out.

Social development and economic transformation are enhanced through efficient production. Career development and personal job satisfaction of operating personnel are facilitated through the learning process used to achieve the competency specified.

### **COURSE EXPECTATION**

This is a learnership, and therefore has a theory and workplace component.

- Learners are expected to complete the theory at the training provider.
- The workplace component must be complete at a recognised workplace.
- The activities at the workplace will be determined by the workplace tasks that need to be completed.

Training Provider

Workplace

### **SELECTION WORPLACE**

Learners are required to ensure that they have secured a workplace. Whilst IQ supports learners in this endeavour, it is the learners responsibility.

The workplace selected must be in line with the course undertaken.

Learners will be provided with a pack that includes:

- Letter of request for placement
- Placement guidelines for Employer organisations



### **YOUR COURSE COMPRISE OF THE FOLLOWING**

Complete Learner orientation on the programme expectations.

- Mentor guidelines for the workplace mentors.
- Work integrated guidelines for the workplace.
- Learner orientation guide.
- Process meetings map with employers and mentors.
- Training plan including the schedule of assessments
- Process map for the qualification.
- Learner guides, workbooks and log books
- E-learning lessons/ PC Tablet (with audio voice lessons)
- Training videos to support lessons showing practical applications

## ASSESSMENT

Assessments are an important part of your learning as it serves as a measure to identify if you have achieved the competencies required in this course.

Various assessment methods are used during the course of your programme. All these are collated into a Portfolio of Evidence which is used for the final summative assessment.

Each module of your study will have an assessment of some form. The workplace is assessed through a logbook. This comprises a list of tasks which needs to be completed and signed off by your workplace mentor.

## DELIVERY MODAITY

The delivery modality is flexible and designed according to the needs of the client. The following are some of the options:

### Option 1

- Lessons are presented on a PC Tablet. These are recorded.  
All the learner guides and workbooks are on the PC Tablet.

### Option 2

- E-learning. Lessons are on the e-learning platform and learners progress through them.

### Option 3

Face to face tuition according to a training plan.



03Q030077321203

## PROGRAMME MODULE

ID	UNIT STANDARD TITLE	NQF LEVEL	CREDITS
244241	Apply knowledge of chemical reactions in a processing environment	NQF Level 03	6
244086	Apply quality procedures in a process plant	NQF Level 03	6
244092	Demonstrate understanding of solid-vapour and surface based separation processes	NQF Level 03	10
244091	Identify and interpret instrument control loops	NQF Level 03	8
244098	Perform statistical process control in a process environment	NQF Level 03	4
244093	Read and interpret process and instrumentation diagrams	NQF Level 03	4
244085	Respond to emergencies in a process environment	NQF Level 03	6
244087	Solve operating problems in a process plant	NQF Level 03	5
244084	Use operating instructions to control process plant conditions	NQF Level 03	10
119472	Accommodate audience and context needs in oral/signed communication	NQF Level 03	5
119457	Interpret and use information from texts	NQF Level 03	5
119467	Use language and communication in occupational learning programmes	NQF Level 03	5
119465	Write/present/sign texts for a range of communicative contexts	NQF Level 03	5
9012	Investigate life and work related problems using data and probabilities	NQF Level 03	5
9013	Describe, apply, analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts	NQF Level 03	4
7456	Use mathematics to investigate and monitor the financial aspects of personal, business and national issues	NQF Level 03	5
9010	Demonstrate an understanding of the use of different number bases and measurement units and an awareness of error in the context of relevant calculations	NQF Level 03	2

CORE

FUNDAMENTAL

**ELECTIVE**

259622	Describe the functions of the workplace health and safety representative	NQF Level 02	3
244088	Act as the Safety Watcher during the performance of maintenance activities	NQF Level 03	3
244108	Apply safety, health and environment protection procedures in a process plant	NQF Level 03	6
10170	Demonstrate understanding of employment relations in an organisation	NQF Level 03	3
263495	Monitor and control the production of chemicals in a chemical process plant	NQF Level 03	15
244094	Perform and support maintenance functions	NQF Level 03	5