





# NQF 3 FACT SHEET NATIONAL CERTIFICATE: FOOD AND BEVERAGE PACKAGING OPERATIONS

SAQA registered qualification ID: 57694

# **OVERVIEW**

A person acquiring this qualification will be able to produce a packaged food or beverage product by operating, controlling and maintaining a primary or secondary packaging process within a food manufacturing environment whilst applying food safety, personal safety, quality assurance and monitoring critical control points. This qualification, although developed specifically for the food and beverage industry, also provides the flexibility for learners to articulate to other manufacturing environments such as fast-moving consumable products, as well as the pharmaceutical and chemical industries. The level of flexibility within the range of electives will allow the individual to pursue a career within an applied technical packaging environment, in the specific contexts of dairy, confectionery, food processing, coffee, tea, spice manufacturing, carbonated soft drinks and distilling and brewing.

## **MODULE CONTENT:**

### **FUNDAMENTALS:**

## **NUMERACY:**

#### **FOUNDATIONAL PRINCIPLES:**

- Convert numbers between the decimal number system and the binary number system.
- Work with numbers in different ways to express size and magnitude.
- Demonstrate the effect of error in calculations.
- Measure, estimate and calculate physical quantities in practical situations.
- Explore, describe and represent, interpret and justify geometrical relationships and conjectures.
- Financial calculations:
  - Use mathematics to plan and control personal, regional, and/or national budgets, and income and expenditure.
  - Use simple and compound interest to make sense of and define a variety of situations.
  - Use mathematics to debate aspects of the national economy.

#### STATISTICAL ANALYSIS:

- Pose questions, collect and organise data.
- Represent, analyse and interpret data using various techniques.
- Use random events to explore and apply probability concepts in simple life.

#### COMMUNICATION:

#### **FOUNDATIONAL PRINCIPLES:**

- Use a range of reading and/ or viewing strategies to understand the literal meaning of specific texts.
- Use strategies for extracting implicit messages in texts.
- Respond to selected texts in a manner appropriate to the context.
- Explore and explain how language structures and features may influence a reader/ viewer.

#### WRITTEN COMMUNICATION:

- Write / sign for a specific audience and purpose.
- Use language structures and features to produce coherent and cohesive texts for a wide range of contexts.
- Draft own writing/ signing and edit to improve clarity and correctness.

#### **SPOKEN COMMUNICATION:**

- Interact successfully in oral/ signed communication.
- Use strategies that capture and retain the interest of an audience.
- Identify and respond to manipulative use of language.

## OCCUPATIONAL / BUSINESS COMMUNICATION:

- Access and use available learning resources.
- Use learning strategies.
- Manage occupational learning materials.
- Conduct basic research and analyse, and present findings.
- Function in a team.
- Reflect on how characteristics of the workplace and occupational context affect learning.

## **CORE AND ELECTIVES:**

## CORE:

#### **QUALITY:**

- Demonstrate an understanding of the concept of micro-organisms in a food handling environment, demonstrate and understanding of the growth and reproduction of micro-organisms in a food handling environment
- Identify good manufacturing practices to control microbiological contamination during food handling.
- Demonstrate an understanding of the relevant quality control and quality assurance system for a food or sensitive consumer product operation.
- Measure and record quality control practices in a food or sensitive consumer product operation.
- Report on quality in a food or sensitive consumer product operation.
- Demonstrate an understanding of a CCP in a food handling environment, monitor and record a CCP, and take action when a non-conformance is detected against the critical limits of a CCP.

#### **BASIC OPERATIONS:**

- Distinguishing between problems, challenges and matters requiring a decision.
- Investigating techniques for solving problems and making decisions.
- Identifying a problem in a real-life situation.
- Applying a problem-solving process or technique to propose a solution or make a decision.
- Demonstrate an understanding of machine inputs and outputs.
- Demonstrate an understanding of the start-up procedures of a processing machine.
- Demonstrate an understanding of adjustments made to a process machine while in operation.
- Demonstrate an understanding of the shut-down procedures of process machine.

- Demonstrate an understanding of production documentation.
- Performing routine first line maintenance on production machinery and equipment.

#### **ELECTIVES:**

# ELECTIVES FOR PACKAGING – CHOSEN ACCORIDING TO THE TYPE OF PACKAGING OPERATION

# PACKAGING SPECIFIC ELECTIVES FOR PRIMARY PACKAGING (CHOOSE AT LEAST ONE STREAM):

- Demonstrate an understanding of, prepare and start, operate, shutdown, prepare for and perform changeovers on:
- Filling and closing equipment
- Forming, filling, and sealing equipment
- Wrapping equipment and
- Canning equipment

# ADDITIONAL ELECTIVES FROM PRIMARY PACKAGING OPERATIONS (CHOOSE AS APPLICATION AND TOMAKE UP CREDITS FOR PRIMARY PACKAGING:

- Demonstrate an understanding of, prepare and start, operate, shutdown, prepare for and perform changeovers on:
  - Labeling equipment
  - Coding equipment
  - Inspection equipment and
  - Container washing equipment

# ELECTIVES FOR SECONDARY PACKAGING (CHOOSE AS APPLICABLE AND TO MAKE UP TOTAL CREDITS OF THE QUALIFICATION):

- Demonstrate an understanding of, prepare and start, operate, shutdown, prepare for and perform changeovers on:
  - operation of shrink-wrapping equipment;
  - receiving stock; and
  - dispatching stock.

# **UNIT STANDARDS:**

		ID	UNIT STANDARD TITLE	NQF LEVEL	CREDITS	DURATION
FUNDMANETALS	Numeracy	7456	Use mathematics to investigate and monitor the financial aspects of personal, business and national issues	3	5	10 DAYS
		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	3	2	
		9012	Investigate life and work-related problems using data and probabilities	3	5	
		9013	Describe, apply, analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts	3	4	
	Communication	119457	Interpret and use information from texts	3	5	
		119472	Accommodate audience and context needs in oral/signed communication	3	5	
		119467	Use language and communication in occupational learning programmes	3	5	
		119465	Write/present/sign texts for a range of communicative contexts	3	5	
CORE	Quality	120235	Demonstrate an understanding of the concept of microbiology in a food handling environment	3	6	10 DAYS
		119802	Perform quality control practices in a food or sensitive consumer product operation	3	6	
		120239	Monitor critical control points (CCPs) as an integral part of a hazard analysis critical control point (HACCP) system	3	6	
	Basic operations	9913	Perform first line maintenance	3	14	
		12315	Demonstrate an understanding of basic machine operations in a manufacturing and or packaging environment	3	7	
		114952	Apply problem-solving techniques to make a decision or solve a problem in a real-life context	3	2	
ELECTIVES	Primary packaging (choose at least 1 stream)	242779	Operate filling process on a food automated packaging line AND	3	18	15 DAYS
		242777	Operate a closing process on a food automated packaging line	3	6	
		242785	Operate a forming, filling and sealing process on a food automated packaging line	4	18	
		242792	Operate a wrapping process on a food automated packaging line	4	18	
		123312	Operate and control the filling and sealing of cans for food products	3	12	
ELECTIVES	Primary packaging (choose as applicable and to make up credits)	242778	Operate a labelling process on a food automated packaging line	4	10	
		242791	Operate a coding process on a food automated packaging line	4	4	
		242790	Operate an inspection process on a food automated packaging line	4	4	
		242782	Operate a washing process on a food automated packaging line	3	8	
ELECTIVES	Secondary packaging (choose as applicable and to make up credits)	242784	Operate shrink-wrapping equipment on a food automated packaging line	3	4	
		114892	Dispatch stock	3	10	
		114896	Receive stock	3	12	
					MIN. 120 CREDITS	35 DAYS