



Purpose and rationale

This qualification provides learners with the range of skills required to support manufacturing, engineering and technology processes.

Learning assumed to be in place

Communication and Mathematical Literacy at NQF Level 3. The fundamental concepts, theories and techniques of production systems; including those related to production planning, scheduling, and quality control and quality assurance practices at a NQF Level 3.

The qualified learner will be able:

- Measure, control and improve factors influencing production
- Contribute to budgeting processes in an operational unit to optimise resources
- Solve operational problems in a production process
- Promote, implement and maintain procedures that support quality assurance and control

Duration

1500 Notional hours of learning

Primary/Delegated Quality Assurance Functionary

MERSETA - Manufacturing, Engineering and Related Services Education and Training Authority

Modules and outcomes covered

Communication	Numeracy
<ul style="list-style-type: none"> • Use language and communication in occupational learning programmes (SAQA 119471) • Engage in sustained oral/signed communication and evaluate spoken /signed texts (SAQA 119462) • Write/present/sign for a wide range of contexts (SAQA 119459) • Read/review, analyse and respond to a variety of texts (SAQA 119469) 	<ul style="list-style-type: none"> • Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues (SAQA 7468) • Apply knowledge of statistics and probability to critically interrogate and effectively communicate findings on life related problems (SAQA 9015) • Represent analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts (SAQA 9016) • Participate in the estimation and preparation of cost budget for a project or sub project and monitor and control actual cost against budget (SAQA 120375)
Operations Management	Quality Management
<ul style="list-style-type: none"> • Schedule and monitor Production (SAQA 116287) • Formulate and implement an action plan to improve productivity within an organizational unit (SAQA 114877) • Co-ordinate the improvement or Productivity within a functional unit (SAQA 114884) • Demonstrate basic understanding of the primary labour legislation that impacts on a business unit (SAQA 13952) • Co-ordinate predictive and preventive maintenance (9895) • Solve operational problems in a manufacturing/assembly context (116284) 	<ul style="list-style-type: none"> • Apply integrated process control methods (SAQA 244100) • Monitor machining processes, interpret statistical process control charts and rectify production problems (SAQA 243025) • Monitor and control quality control practices in a manufacturing / engineering environment (SAQA 14586)
Communication (2 nd Language)	
<ul style="list-style-type: none"> • Use language and communication in occupational learning programmes (SAQA 119467) • Accommodate audience and context needs in oral communication (SAQA 119472) • Write/present/sign texts for a range of communicative contexts (SAQA 119465) • Interpret and use information from texts (SAQA 119457) 	