

ENGINEERING

FURTHER EDUCATION & TRAINING CERTIFICATE: PRODUCTION TECHNOLOGY

COURSE INFORMATION

SAQA ID: 58779

NQF Level: 4

Learnership Duration: 12 months

Credits: 143

Contact Sessions: Minimum Contact Session, including remediation (if required) and Portfolio Building, for this Qualification is **29 Days**

Accrediting SETA: Manufacturing, Engineering and Related Services Sector Education & Training Authority

PURPOSE

The combination of learning outcomes that comprise this qualification will provide the qualifying learner with vocational knowledge and skills appropriate to the context of production technology. This qualification provides learners with the range of learning and skills required to be able to perform a series of activities to support manufacturing, engineering and technology processes. Learners will acquire a range of skills in the identification of production parameters in manufacturing, engineering and technology industries and basic strategies to achieve them.

ENTRY CRITERIA

- Communication NQF Level 3
- Mathematical Literacy NQF Level 3
- Apply the fundamental concepts, theories and techniques of production systems, NQF Level 3
- Apply the fundamental concepts relating to production planning, scheduling and control, NQF Level 3
- Apply quality control and quality assurance practices for efficient and effective production processes, NQF Level 3

QUALIFICATION RULES

The qualifying learner will achieve this qualification by complying with the following rules of combination for the accumulation of credits totalling 143:

- Fundamental unit standards totalling 56 credits are compulsory (with communication in two different South African languages).
- Core unit standards totalling 67 credits are compulsory.
- Elective unit standards totalling a minimum of 20 credits.

EQUIPMENT NEEDED

- Access to training a facility with minimum of 60 % capacity of the following machining processes: end forming, degreasing, cleaning, boring and grooving, broaching, heating and curing, deburring, cutting, packaging and wrapping, lathing, conveying and feeding

MARKET INFORMATION

Target Market: Production Assistant, Production Controller, Production Supervisor, Plant Controller, Administration Clerk, Operators, Operations Co-ordinator, Stock Controllers, Receiving Staff
Target Industries: Manufacturing • Engineering

COURSE INFORMATION

- **Mentor Requirements:** Mentor must have at least 5 years' experience working within machine production environment.
- **Workplace Approval:** MERSETA approval required.
- **Workplace Requirements:** Learners must be exposed to all Outcomes related to this qualification.

SKILLS OUTCOMES

- 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.

GENERAL INFORMATION



Credit Accumulation Transfer (CAT): CAT exemption is only applicable to approved learners. Approved learners will have reduced contact days. Learners who do not meet the CAT requirements will be required to complete Part 1 and Part 2 of every Cluster.



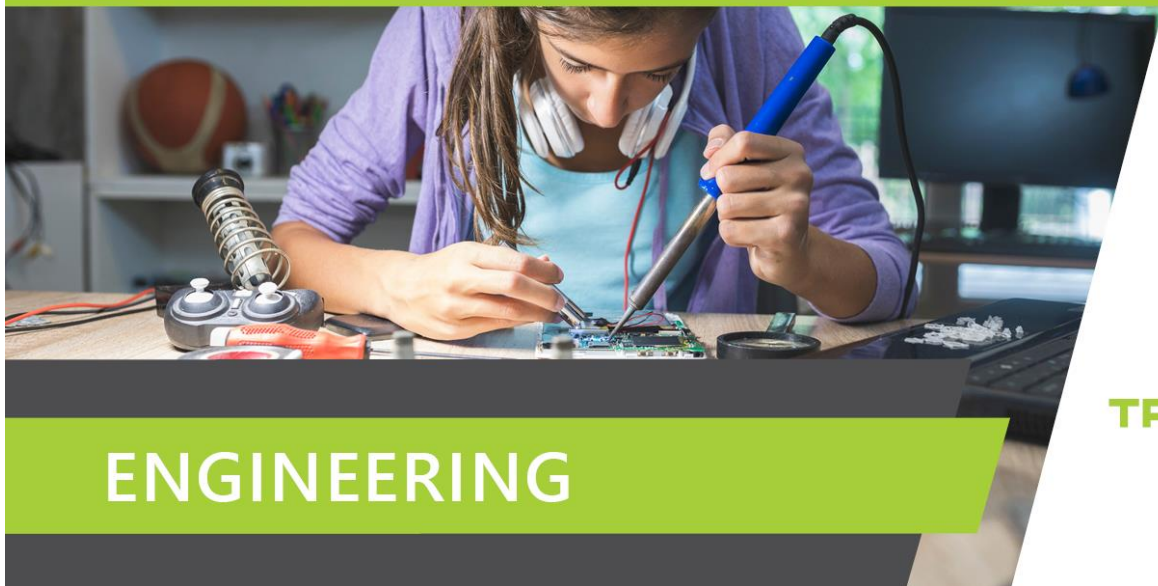
FISA Requirements: Final Integrated Summative Assessment is requirement for the successful completion of this learnership.



Recognition of Prior Learning (RPL): RPL is not available for this qualification



Additional Language: This qualification requires evidence in an additional South African Language. Refer to TF language policy for guidelines.



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UNIT STANDARDS

Cluster 1 Quality Control

Outcome	SAQA ID	Name of Unit Standard	Credits
Core	114884	Co-ordinate the improvement of productivity within a functional unit	8
Core	13952	Demonstrate basic understanding of the Primary labour legislation that impacts on a business unit	8
Elective	13235	Maintain the quality assurance system	5
Core	14586	Monitor and control quality control practices in a manufacturing/engineering environment	8

- Recommended training days for Cluster 1 = 6 days

Cluster 2 Productivity Standards

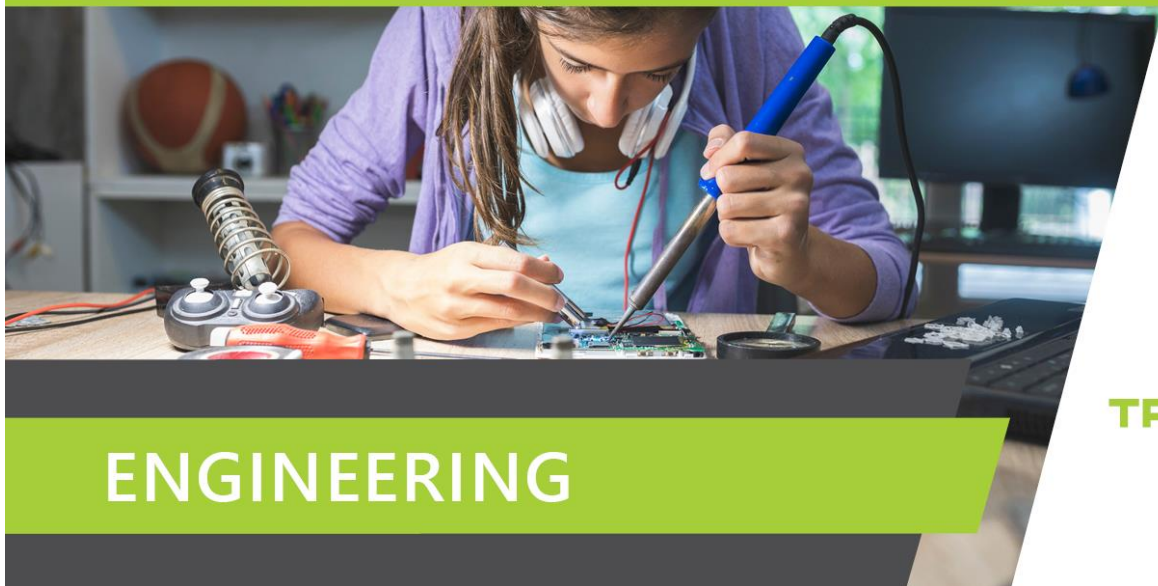
Outcome	SAQA ID	Name of Unit Standard	Credits
Core	114877	Formulate and implement an action plan to improve productivity within an organisational unit	8
Core	120375	Participate in the estimation and preparation of cost budget for a project or sub project and monitor and control actual cost against budget	6
Core	116287	Schedule and monitor production	12
Core	116284	Solve operational problems in a manufacturing/assembly context	10
Core	243025	Monitor machining process, interpret statistical process control <u>charts</u> , and rectify production problems	7

- Recommended training days for Cluster 2 = 9 days

Cluster 3 Communication Skills

Outcome	SAQA ID	Name of Unit Standard	Credits
Fundamental	119472	Accommodate audience and context needs in oral/signed communication	5
Fundamental	119457	Interpret and use information from texts	5
Fundamental	119467	Use language and communication in occupational learning programmes	5
Fundamental	119465	Write/present/sign texts for a range of communicative contexts	5
Fundamental	119459	Write/present/sign for a wide range of contexts	5
Fundamental	119471	Use language and communication in occupational learning programmes	5
Fundamental	119462	Engage in sustained oral/signed communication and evaluate spoken/signed texts	5
Fundamental	119469	Read/view, analyse and respond to a variety of texts	5

- Recommended training days for Cluster 3 = 8 days



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Cluster 4 Numeracy Skills

Outcome	SAQA ID	Name of Unit Standard	Credits
Fundamental	9016	Represent analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts	4
Fundamental	7468	Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues	6
Fundamental	9015	Apply knowledge of statistics and probability to critically interrogate and effectively communicate findings on life-related problems	6

- Recommended training days for Cluster 4 = 3 days

Cluster 5 Working in a Production environment

Outcome	SAQA ID	Name of Unit Standard	Credits
Elective	116218	Explain the planning and scheduling of tasks in a production environment	3
Elective	116292	Demonstrate an understanding of the principles of manufacturing and assembly logistics planning	12

- Recommended training days for Cluster 5 = 3 days