

Plan and Manage Production

1. Overview

This programme is designed to equip aspiring entrepreneurs and small business owners with essential production/operations management skills and the mathematical literacy required to apply these skills effectively. It integrates key operational planning techniques with mathematical tools for spatial reasoning, measurement, and estimation, empowering learners to design efficient systems, optimise resources, and ensure quality in a new venture context.

2. Programme Outcomes:

- Design an efficient production or operations layout for a new venture
- Develop and apply scheduling techniques for production processes
- Manage resources (people, materials, time) effectively within a small business or start-up
- Implement basic quality management practices in a new venture
- Accurately measure, estimate, and calculate quantities relevant to real-life and business operations
- Represent and interpret 2D and 3D shapes to assist in planning physical space and production layout
- Analyse and solve problems using geometric reasoning in both practical and theoretical contexts

Qualification:

Certificate of Completion

Duration:

2-Months

Programme Type:

Category B – Workplace-Based Learning Programme

&Programme ID:

PA0057

SAQA US:

263434 & 9016

NQF Level:

4

Credits:

10

Entry Requirements:

Communication & Mathematical Literacy at NQF 3

Training Options:

Online - Each participant will receive access to an online portal, where all programme materials and resources are available. Training is delivered fully online, and participants will join scheduled Microsoft Teams sessions facilitated by a trainer. This mode provides flexibility and allows learners to participate from any location.

Blended - Blended learning combines both online and face-to-face training. Participants receive access to an online portal for online content, resources, and self-paced activities. They also attend scheduled in-person contact sessions with a facilitator, either at the client's premises or providers campus. This approach offers the flexibility of online learning with the added support of guided, interactive sessions.

Face-to-Face - Each participant will receive training resources, which contains all programme materials and resources. Training is delivered through onsite contact sessions, either at the client's premises or providers campus, where a facilitator conducts the sessions in a classroom environment.

Minimum Participants Required:

(1) Online, (1) Blended & (1) Face-to-Face

**A choice of leveraged programmes for any person,
At any level, in any department, of any company, in any industry.**

3. Programme Content

- **(263434 US):** Plan and manage production/operations in a new venture
- **(9016 US):** Represent analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts

4. Topics

Module 1: Introduction to Production & Operations in a New Venture

- Understanding the production/operations function
- Key components: raw materials, transformation, finished goods
- Role of operations in a start-up or small business context

Module 2: Production/Operations Layout Design

- Types of layouts: process, product, fixed-position, cellular
- Flow of materials and people
- Space optimisation using 2D and 3D shapes
- Drawing basic layout plans using scale and measurement

Module 3: Production Scheduling

- Basics of scheduling and workflow
- Tools: Gantt charts, timelines, job sequences
- Capacity planning and time management

Module 4: Resource Management

- Material requirements planning (MRP)
- Managing inventory and storage
- Labour and equipment utilisation
- Cost control and minimising waste

Module 5: Quality Management in a New Venture

- Principles of quality management
- Basic quality checks and process control
- Customer satisfaction and product standards

We trust that the above is in order and look forward to hearing from you for Implementation

Module 6: Applied Mathematics in Production & Business

- Measuring and estimating quantities (length, area, volume, angles)
- Calculating dimensions, space, and motion in 2D and 3D
- Using geometry to plan operations layout and movement of materials
- Real-world applications: e.g., warehouse layout, machine placement, material use efficiency

5. Assessments

This programme includes a Portfolio of Evidence (POE) that must be submitted at the end of the programme. The POE include:

- **Knowledge Assessments:** To evaluate theoretical understanding.
- **Practical Assignments:** Hands-on tasks related to course topics.
- **Workplace Assignments and Logbook:** Application of skills in real-world settings.

Successful participants will receive a certificate of completion.

6. Workplace-Based Learning Programme

This WLP is a fusion of academic learning and practical work. The learning is directly applied to the workplace by using client-based mentors and extensive workplace-based portfolio work and assignments. Apart from the obvious benefits of a workplace directed qualification, each WLP qualifies for recognition as a Category B Skills Programme in the Learning Matrix of the Amended BEE codes, which allows for the salaries of participants to be recognized as part of the Skills Development Expenditure.

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