

### Manufacturing and Resource Management Skills



**Bizzco ID SP04**  
**SAQA ID SP 0907/14-17**  
**NQF Level 4**  
**Min Credits 47**  
**Duration 6 - 12 Months**  
**MERSETA Accredited**

#### **ENTRY REQUIREMENTS?**

**Communication, Mathematical Literacy & Computer Literacy at NQF level 3**

#### **COURSE DESCRIPTION**

Lean manufacturing, also known as Just in Time (JIT) or agile manufacturing, is an operating strategy that seeks to maximize operational effectiveness by creating value in the eyes of the end user/customer. Lean manufacturing principles can improve operating performance by focusing on the uninterrupted flow of products and materials through the value stream. This skills programme covers elements of JIT, as well as short-term planning and quality management.

#### **WHO IS THIS COURSE FOR?**

This skills programme is for those entering or performing a role in junior management in the manufacturing environment who wish to improve their knowledge in TQM.

In the event that the learner requires SETA registration, the learner would need to be employed by a company. Please contact us for more information.

#### **SUPPORTING DOCUMENTS NEEDED?**

**Certified copy of ID**  
**Certified copy of highest qualification**  
**Employment letter/contract\***

*\*Only needed for SETA registration*



#### **DELIVERY METHODS**

**Online, Facilitated or Blended**

Speak to us about other methods of training delivery and corporate customization!

#### **Online**

Interactive self-study 2- 3 hours per day over the 12-month period.

#### **Blended**

8 - 32 Facilitation hours, depending on group size.

#### **Facilitated**

64 Facilitation hours, total of 8 days of training.

**Manufacturing and Resource Management Skills****COURSE STRUCTURE****Module 01****Lessons****Inventory in the Supply Chain**

Identification of different types of inventory and implementing performance metrics to measure our inventory.

01 Introduction into Supply Chain Management

02 Measuring Inventory Across the Supply Chain

03 Inventory Performance Measurements

04 Functions and Reasons for Holding Inventory

**Module 02****Lessons****Controlling Inventory**

For businesses which manufacture and sell products, the management of the inventory which they own is critical to the success of the business.

01 Inventory for Manufacturing, Using BOM'S

02 Types of Inventory

03 Value of Inventory

04 Excess, Obsolete, Surplus Inventory

**Module 03****Lessons****Problem Solving**

Knowing how to identify and solve problems, how to interpret statistics and how to optimise space usage are some of the key skills you will learn.

01 Defining and Investigating Problems

02 Using Problem Solving Techniques

03 Select and Evaluate Solutions to Problems

04 Applying Statistics

**Module 04****Lessons****Motivate & Build a Team**

Knowing the purpose of a team, the team dynamics, how to set goals and motivate a team is important to create a team that believes in TEAM .

01 Team Leader and the Purpose of a Team

02 Strengthening and Motivating a Team

03 Implementing a Performance Plan

04 Performance Management and Feedback

**Manufacturing and Resource Management Skills****Module 05****MRP**

Medium term planning looks at building a sales plan which is supported by a production plan and the right strategies for manufacture.

**Lessons**

01	Understanding Demand
02	Sales & Operations Planning
03	Production Scheduling Environment
04	Material Requirements Planning

**Module 06****CRP**

The lowest level of the planning hierarchy is the execution and control of production. This includes scheduling for daily jobs for manufacturing, daily management and optimising of resources.

**Lessons**

01	Understanding Capacity Requirements Planning
02	Capacity Measurements and Levelling the Load
03	Production Activity Control
04	Measuring Production Performance

**Module 07****Lean Manufacturing & JIT**

Lean management is not only for businesses involved in manufacturing, but also for businesses who want to streamline their processes by eliminating waste and non-value added activities.

**Lessons**

01	Waste and Wate Elimination
02	JIT and Lean Manufacturing
03	Principles of Flow Shop Operations
04	Theory of Constraints and Continuous Improvement

**Module 08****Total Quality Management (TQM)**

There is much more to quality than just producing product without any defects. Achieving and managing consistently high levels of quality means continually pursuing excellence.

**Lessons**

01	Principles and Dimensions of Quality
02	Quality at the Source
03	Quality Inspection, Tools & Techniques
04	Quality Cost Management, Benchmarking & Statistical Control Tools

**Manufacturing and Resource Management Skills****UNIT STANDARD INFORMATION**

Type	US ID	US Title	NQF	Credits
NA	242819	Motivate and Build a Team	NQF Level: 04	10
NA	242822	Employ a systematic approach to achieving objectives	NQF Level: 04	10
NA	377360	Discuss Just in Time (JIT) and Lean Manufacturing	NQF Level: 03	5
NA	377381	Apply Total Quality Management (TQM)	NQF Level: 04	8
NA	377440	Perform capacity requirements planning (CRP)	NQF Level: 04	8
NA	9015	Apply knowledge of statistics and probability to critically interrogate and effectively communicate findings on life related problems	NQF Level: 04	6

