



LEARN TO PLAN AND MANAGE OUTPUTS AND OPTIMISE RESOURCES THROUGH THE DEPLOYMENT OF STRATEGY AND THE EFFECTIVE USE OF SYSTEMS, TOOLS AND TECHNIQUES WITHIN A MANUFACTURING OR SERVICE ENVIRONMENT

Entry requirements

- National Senior Certificate with an achievement rating of (40-49%) or better in four recognised National Senior Certificate (NSC) subjects and a minimum of 30% in English. This excludes Life Orientation
Or
- NC(V) with Diploma admission at Level 4 with a minimum of 50% in English and two other fundamental subjects and 60% in three compulsory vocational modules
Or
- A learnership at NQF 4 provided the learner has successfully completed Academic Literacy
- Recognition of prior learning in accordance with PMI's RPL policy applies to this qualification
- Competence on Mathematics/Mathematical Literacy at NQF 4

Certification

Learners who successfully complete the programme will be awarded a Diploma in Operations Management from PMI.

Who will benefit from this programme?

This qualification is designed for high-level management who want to improve productivity, reduce production costs and optimise operations through technology and managerial skills. Current or aspiring production managers, project managers, operations managers and business owners within a service or manufacturing industry will benefit from this qualification.

Duration

PMI's Diploma in Operations Management must be completed in a minimum of three years or a maximum of six years.

Accreditation

The programme is accredited by the Council on Higher Education.

Modules covered

Year 1

Operations Management I <ul style="list-style-type: none"> • The Operations Management function • How Operations Performance can affect the business • Work Study • Lean Synchronisation • Layout and Design • Planning and Control in Operations • Capacity and its determinants 	Quality Management I <ul style="list-style-type: none"> • The Quality Management approach • Ethics and values within the Quality Management approach • Current Quality Management Systems (QMS) and their implementation • Continuous Process Improvement • Quality Management tools • Statistical Process Control (SPC) and Techniques
Human Resource Management I <ul style="list-style-type: none"> • Human Resource Management in a global economy and critical people issues • Organising human resources for organisational success • Job design and analysis • Internal staffing and career management • Recruitment and selection • Induction • Performance management • Training and development • Disciplinary procedures portfolio of evidence 	Applied Mathematics I <ul style="list-style-type: none"> • Algebraic Expressions and the Number System • Equations and Inequalities • The Cartesian Plane, Gradients and basic functions • Plot and interpret basic functions • Percentages, Ratios and Proportions • Mathematical models • Probability • Fundamental Business Statistics
Business Finance <ul style="list-style-type: none"> • The financial function within an enterprise • Basic Accounting Concepts and Calculations • Interpretation of core financial statements • Financial analysis ratios • Financial break-even analysis • The budgetary requirements of an enterprise • Inventory Control 	Fundamentals of Project Management <ul style="list-style-type: none"> • Definition of Project Management • The types of Management • The role of the Project Manager • Project Leadership and Entrepreneurship • Project Teams • The Project Management Process • The Project Plan
Logistics Management I <ul style="list-style-type: none"> • Supply Chain Logistics Management • Supply Chain Logistics Operations • Supply Chain Logistics Design • Supply Chain Logistics Administration 	

Year 2

Operations Management II <ul style="list-style-type: none"> • Process design • Product design • Location and overall capacity • Process technologies • Queuing systems • Project planning and control 	Quality Management II <ul style="list-style-type: none"> • Environmental Management System (EMS) • Quality by design • Product liability • Total Productive Maintenance (TPM) • Failure Mode and Effect Analysis (FMEA)
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Manufacturing Technology	Project Management Techniques
<ul style="list-style-type: none"> • Introduction to Industry 4.0 • Integration of Lean Manufacturing and Industry 4.0 • Sustainable Manufacturing in Industry 4.0 • Industry 4.0 readiness and maturity of Manufacturing Enterprises • Framework for Industry 4.0 and Beyond • Influence of Industry 4.0 on the Business Sector 	<ul style="list-style-type: none"> • The Project Life-cycle • Project Feasibility • The Critical Path Method • Project Cost Management • Project Control • Project Risk Management • Project Communication Management • Project Management in the Fourth Industrial Revolution
Business Statistics	Supply Chain Management I
<ul style="list-style-type: none"> • Algebraic Expressions, Equations and Inequalities • Fundamental Probability • Location and Transport Feasibility Methods • Basic Capacity and Line Balancing • Forecasting Techniques • Regression Analysis Techniques • Linear Programming using both graphical and simplex methods to solve problems 	<ul style="list-style-type: none"> • The progression to Professional Supply Chain Management • Portfolio Relationships • New Product Development • Purchasing Descriptions and Specifications • Managing for Quality in a Supply Chain context • Outsourcing and Sourcing • Ethics in Supply Chain Management
Research Design	
<ul style="list-style-type: none"> • The characteristics of Research • Research Purpose • Steps in the Research Process • Ethics in Research • Defining the problem/question and the research topic • Work Plan and Budget • Data collection methods and tools • Legitimate evidence and support • Academic report writing 	

Year 3

Operations Management III	Quality Management III
<ul style="list-style-type: none"> • Production Design and Development • Operations improvement • Failure and recovery from failure • The human factor in the production/ operations function • World class manufacturing • Lean manufacturing • Computers in manufacturing • Strategic operations management • Occupational Health and Safety Portfolio of Evidence • Risk Analysis • Corrective Action Report • Follow-up Risk Analysis 	<ul style="list-style-type: none"> • TQM strategies and techniques • Organisational and managerial aspects of quality management • The concepts and practice of continuous improvement • Process models • Benchmarking • Business re-engineering

Operations Process Design & Improvement	Supply Chain Management II
<ul style="list-style-type: none"> • Quality Principles and the core philosophy of Six Sigma • The eight principles of Total Quality Management (TQM) and its foundation for Six Sigma • System Processes, Process Variation and Application of Six Sigma's DMAIC Tools • Lean Principles and the identification of seven categories of Waste • The effect of tools of Process Improvements 	<ul style="list-style-type: none"> • Customer Relationship Management • Global Supply Chains • Supply Chain Networks • Operations Analysis • Collaboration in Supply Chain Management • Supply Chain Performance • Risk and Sustainability of Supply Chains
Operations Research	
<ul style="list-style-type: none"> • Plan a workplace based Research Project • Conduct Literature Research • Design a Research Strategy and Tools • Ethical Practice in Research • Write a Research Report • Viva Voce to defend the Research 	