



# Ithuta JV

Holhutha Ka Tsebo  
Learning from Experience

## Course Content: Construction Project Management

### 1. Introduction

- 1.1. Different Perspectives of Construction Management
- 1.2. Professional Services
- 1.3. The Role of the Project Manager
- 1.4. Design and Construction

### 2. Principles of Project Management

- 2.1. Basic Concepts
- 2.2. Defining Project Management
- 2.3. Project Management Process Groups
- 2.4. Project Management Processes
- 2.5. Process Group Interactions
- 2.6. Initiating Processes
- 2.7. Planning Processes
- 2.8. Executing Processes
- 2.9. Monitoring and Controlling Processes
- 2.10. Closing Processes
- 2.11. Project Management Knowledge Areas
- 2.12. Key Issues in Project Management
- 2.13. Project Management of Construction Projects

### 3. Principles of Construction Management

- 3.1. Overview and Facets of Construction Project Management
- 3.2. Governance
- 3.3. Scope of Services
- 3.4. Code of Conduct
- 3.5. Required Competencies
- 3.6. Roles in Construction Management
- 3.7. Key Issues
- 3.8. Legal Issues
- 3.9. Construction Planning
- 3.10. Selection of Construction and Technology
- 3.11. Defining Work Tasks
- 3.12. Estimating Task Durations
- 3.13. Estimating Resource Requirements
- 3.14. Construction Scheduling
- 3.15. Critical Path Scheduling
- 3.16. Activity Floats
- 3.17. Project Schedule Representations
- 3.18. Cost Estimation
  - 3.18.1. Unit Method of Cost Estimation



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- 3.18.2. Types of Construction Estimates
- 3.18.3. Computer Aided Cost Estimation
- 3.19. Cost Control
  - 3.19.1. Overview of Cost Control
  - 3.19.2. Cost Control Problems
- 3.20. The Role of Project Schedule and Budget
- 3.21. Earned Value
- 3.22. Quality Assurance
  - 3.22.1. Work and Material Specifications
  - 3.22.2. Quality Inspections
  - 3.22.3. Quality Control

## **4. Occupational Health and Safety**

- 4.1. Duties of Employers
- 4.2. OH and S Policy Statement
- 4.3. OH and S Plan
- 4.4. Governance
- 4.5. Organisation and Management
- 4.6. Responsibilities
  - 4.6.1. Construction Manager
  - 4.6.2. Health and Safety Officer
  - 4.6.3. Health and Safety Representatives
  - 4.6.4. Health and Safety Committees
  - 4.6.5. First Aiders and Employees
  - 4.6.6. Sub Contractors
- 4.7. Competency Requirements
- 4.8. Vendors/Suppliers
- 4.9. Communication
- 4.10. Training
- 4.11. Legal Compliance
- 4.12. Risk Management
- 4.13. OH and S Performance Monitoring
- 4.14. OH and S Awareness
- 4.15. Incident and Accident Reporting
- 4.16. Managing Sub Contractors



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## **5. Construction Risk Management**

- 5.1. Sources of Risks
- 5.2. Risk
  - 5.2.1. Systems Risk
  - 5.2.2. Key Risk Issues
  - 5.2.3. Different Perspectives of Construction Risk
  - 5.2.4. The Risk Management Process
    - 5.2.4.1. Identification of Risks
    - 5.2.4.2. Hazard Studies
    - 5.2.4.3. Evaluation of Risks
    - 5.2.4.4. Risk Response
    - 5.2.4.5. Risk Matrix
    - 5.2.4.6. Risk Register
    - 5.2.4.7. Risk Management Checklist

## **6. Contract Management**

- 6.1. Overview of Contract Law
- 6.2. Construction Pricing and Contracts
- 6.3. Risk Allocation
- 6.4. Types of Construction Contracts
- 6.5. General Conditions of Contract (2004)
- 6.6. Standard Forms of Contract
- 6.7. FIDIC 1999 Suite of Standard Forms of Contract
- 6.8. NEC/EEC 3<sup>rd</sup> Edition
- 6.9. Guidelines for Contract Management

## **7. Construction Information Management**

- 7.1. Overview
- 7.2. Types of Information
- 7.3. Computerised Information Databases
- 7.4. Information Transfer and Flows
- 7.5. Features and Benefits of Construction Project Management
- 7.6. IT Frameworks
- 7.7. IT System Evaluation Criteria
- 7.8. Available Construction Management Software

## **8. Appendices**

- 8.1. Glossary of Terms
- 8.2. Checklists and Templates