**REPUBLIC OF KENYA**

**COMPETENCY BASED CURRICULUM**

**FOR**

**PROJECT MANAGEMENT**

**LEVEL 6**

TVET CDACC
P.O. BOX 15745-00100
NAIROBI

## FOREWORD

The provision of quality education and training is fundamental to the Government's overall strategy for social economic development. Quality education and training will contribute to achievement Kenya's development blue print and sustainable development goals.

Reforms in the education sector are necessary for the achievement of Kenya Vision 2030 and meeting the provisions of the Constitution of Kenya 2010. The education sector had to be aligned to the Constitution and this resulted to the formulation of the Policy Framework for Reforming Education and Training. A key feature of this policy is the radical change in the design and delivery of the TVET training. This policy document requires that training in TVET be competency based, curriculum development be industry led, certification be based on demonstration of competence and mode of delivery allows for multiple entry and exit in TVET programmes.

These reforms demand that Industry takes a leading role in curriculum development to ensure the curriculum addresses its competence needs. It is against this background that this Curriculum has been developed.

It is my conviction that this curriculum will play a great role towards development of competent human resource for the Business sector's growth and sustainable development.

**PRINCIPAL SECRETARY, VOCATIONAL AND TECHNICAL TRAINING MINISTRY OF EDUCATION**

# PREFACE

Kenya Vision 2030 aims to transform the country into a newly industrializing, "middle-income country providing a high-quality life to all its citizens by the year 2030".  Kenya intends to create a globally competitive and adaptive human resource base to meet the requirements of a rapidly industrializing economy through life-long education and training. TVET has a responsibility of facilitating the process of inculcating knowledge, skills and attitudes necessary for catapulting the nation to a globally competitive country, hence the paradigm shift to embrace Competency Based Education and Training (CBET).

The Technical and Vocational Education and Training Act No. 29 of 2013 on Reforming Education and Training in Kenya, emphasized the need to reform curriculum development, assessment and certification. This called for a shift to CBET to address the mismatch between skills acquired through training and skills needed by industry as well as increase the global competitiveness of Kenyan labour force.

TVET Curriculum Development, Assessment and Certification Council (TVET CDACC) in conjunction with Project Management Sector Skills Advisory Committee (SSAC) have developed this curriculum.

This curriculum has been developed following the CBET framework policy; the CBETA standards and guidelines provided by the TVET Authority and the Kenya National Qualification Framework designed by the Kenya National Qualification Authority.

The curriculum is designed and organized with an outline of learning outcomes; suggested delivery methods, training/learning resources and methods of assessing the trainee's achievement. The curriculum is competency-based and allows multiple entry and exit to the course.

I am grateful to the Council Members, Council Secretariat, Project Management SSAC, expert workers and all those who participated in the development of this curriculum.

**CHAIRPERSON**

**TVET CDACC**

# ACKNOWLEDGEMENT

This curriculum has been designed for competency-based training and has independent units of learning that allow the trainee flexibility in entry and exit. In developing the curriculum, significant involvement and support was received from various organizations.

I recognize with appreciation the role of the SSAC in ensuring that competencies required by the industry are addressed in this curriculum. I also thank all stakeholders in the project management sector for their valuable input and all those who participated in the process of developing this curriculum.

I am convinced that this curriculum will go a long way in ensuring that workers in Business sector will acquire competencies that will enable them to perform their work more efficiently.

**COUNCIL SECRETARY/CEO**

**TVET CDACC**

# TABLE OF CONTENTS

# ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| A | Version control |
| BC | Basic Competency |
| CDACC | Curriculum Development, Assessment and Certification Council |
| CPU | Central Processing Unit |
| CR | Core Competency |
| ICT | Information Communication Technology |
| KCPE | Kenya Certificate of Primary Education |
| KCSE | Kenya Certificate of secondary Education |
| KNQA | Kenya National Qualifications Authority |
| OS | Occupational Standards |
| OSHA | Occupation Safety and Health Act |
| OSHS | Occupation Safety and Health Standards |
| PC | Personal Computer |
| PPE | Personal Protective Equipment |
| SOPs | Standard Operating Procedures |
| SSAC | Sector Skills Advisory Committee |
| TVET | Technical and Vocational Education and Training |

# KEY TO UNIT CODE

## BUS/ CU/ PM/BC/ 01 / 6/ A

Industry or sector

Curriculum

Occupational area

Type of Unit

Unit number

Competency level

Version control
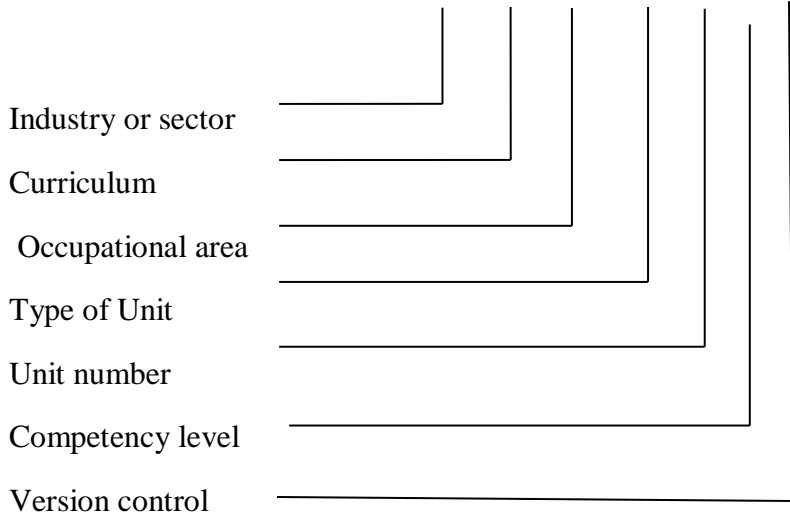
# COURSE OVERVIEW

Project Management Level 6 qualification consists of competencies that an individual must achieve to manage projects. It entails managing project inception phase, project design, project implementation, project risks, project financing, monitoring and evaluating projects, auditing and reviewing projects, managing project environment, project closure, project stakeholders and project scope.

This qualification consists of the following basic, common and core units of learning:

**BASIC UNITS OF LEARNING**

| Unit Code | Unit Title | Duration in Hours | Credit factors |
|---|---|---|---|
| BUS/CU/PM/BC/01/6/A | Communication Skills | 40 | 4 |
| BUS/CU/PM/BC/02/6/A | Numeracy Skills | 60 | 6 |
| BUS/CU/PM/BC/03/6/A | Digital Literacy | 60 | 6 |
| BUS/CU/PM/BC/04/6/A | Entrepreneurial Skills | 100 | 10 |
| BUS/CU/PM/BC/05/6/A | Employability Skills | 80 | 8 |
| BUS/CU/PM/BC/06/6/A | Environmental Literacy | 40 | 4 |
| BUS/CU/PM/BC/07/6/A | Occupational Safety And Health Practices | 40 | 4 |
| **Total** | | **420** | **42** |

**COMMON UNIT OF LEARNING**

| Unit Code | Unit title | Duration in hours | Credit factors |
|---|---|---|---|
| BUS/CU/PM/CC/01/6/A | Management of Procurement of Goods, Work And Services | 100 | 10 |
| **Total** | | **100** | **10** |

**CORE UNITS OF LEARNING**

| Unit Code | Unit Title | Duration | Credit |
|---|---|---|---|

| | | in Hours | factors |
|---|---|---|---|
| BUS/CU/PM/CR/01/6/A | Project inception | 100 | 10 |
| BUS/CU/PM/CR/04/6/A | Project financing | 180 | 18 |
| BUS/CU/PM/CR/02/6/A | Project design | 150 | 15 |
| BUS/CU/PM/CR/03/6/A | Project implementation | 180 | 18 |
| BUS/CU/PM/CR/05/6/A | Project risks | 180 | 18 |
| BUS/CU/PM/CR/06/6/A | Project monitoring and evaluation | 180 | 18 |
| BUS/CU/PM/CR/07/6/A | Project audit and review | 180 | 18 |
| BUS/CU/PM/CR/08/6/A | Project environmental management | 180 | 18 |
| BUS/CU/PM/CR/09/6/A | Project closure | 100 | 10 |
| BUS/CU/PM/CR/10/6/A | Project stakeholders | 80 | 8 |
| BUS/CU/PM/CR/11/6/A | Project scope | 90 | 9 |
| BUS/CU/PM/CR/12/6/A | Industrial attachment | 480 | 48 |
| **Total** | | **2080** | **208** |
| **GRAND TOTAL** | | **2600** | **260** |

The total duration of the course is **2600** hours, which include 480 Hours of industrial attachment.

**Entry Requirements**
An individual entering this course should have any of the following minimum requirements:

a) Kenya Certificate of Secondary Education (KCSE) mean grade C-(minus)

**Or**

b) Certificate in Project Management Level 5

**Or**

c) Equivalent qualifications as determined by Kenya National Qualifications Authority (KNQA)

**Industrial attachment**

An individual enrolled in this course will be required to undergo an attachment for a period of three months. An individual enrolled in one of the core units of learning will be required to undergo a month's attachment.

**Trainer qualification**

A trainer for this course should have a higher qualification than the level of this course

**Assessment**

The course will be assessed at two levels: internally and externally. Internal assessment is continuous and is conducted by the trainer who is monitored by an accredited internal verifier while external assessment is the responsibility of TVET CDACC.

**Certification**

A candidate will be issued with a Certificate of Competency for each core unit of competency. To attain the national certificate for Project Management Level 6, the candidate must demonstrate competence in all the units of competency as given in qualification pack.  TVET CDACC will issue these certificates in conjunction with training provider.

# BASIC UNITS OF LEARNING

# COMMUNICATION SKILLS

**UNIT CODE:** BUS/CU/PM/BC/01/6/A

**Relationship to Occupational Standards**
This unit addresses the Unit of Competency: Demonstrate Communication Skills

**Duration of Unit:** 40 hours

**Unit Description**
This unit covers the competencies required to demonstrate communication skills .It involves, meeting communication needs of clients and colleagues; developing communication strategies, establishing and maintaining communication pathways, conducting interviews, facilitating group discussion and representing the organization.

**Summary of Learning Outcomes**
1. Meet communication needs of clients and colleagues
2. Develop communication strategies
3. Establish and maintain communication pathways
4. Promote use of communication strategies
5. Conduct interview
6. Facilitate group discussion
7. Represent the organization

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Meet communication needs of clients and colleagues | • Communication process<br>• Modes of communication<br>• Medium of communication<br>• Effective communication<br>• Barriers to communication<br>• Flow of communication<br>• Sources of information<br>• Organizational policies<br>• Organization requirements for written and electronic communication methods<br>• Report writing | • Interview<br>• Written texts |

| | | | |
|---|---|---|---|
| | • Effective questioning techniques (clarifying and probing) <br> • Workplace etiquette <br> • Ethical work practices in handling communication <br> • Active listening <br> • Feedback <br> • Interpretation <br> • Flexibility in communication <br> • Types of communication strategies <br> • Elements of communication strategy | | |
| 2. Develop communication strategies | • Dynamics of groups <br> • Styles of group leadership <br> • Openness and flexibility in communication <br> • Communication skills relevant to client groups | • Interview <br> • Written texts | |
| 3. Establish and maintain communication pathways | • Types of communication pathways | • Interview <br> • Written texts | |
| 4. Promote use of communication strategies | • Application of elements of communication strategies <br> • Effective communication techniques | • Interview <br> • Written texts | |
| 5. Conduct interview | • Types of interview <br> • Establishing rapport <br> • Facilitating resolution of issues <br> • Developing action plans | • Interview <br> • Written texts | |
| 6. Facilitate group discussion | • Identification of communication needs <br> • Dynamics of groups <br> • Styles of group leadership <br> • Presentation of information | • Interview <br> • Written texts | |

| | • Encouraging group members participation<br>• Evaluating group communication strategies | |
|---|---|---|
| 7. Represent the organization | • Presentation techniques<br>• Development of a presentation<br>• Multi-media utilization in presentation<br>• Communication skills relevant to client groups | • Interview<br>• Written texts |

**Suggested Methods of Instruction**

- Discussion
- Role playing
- Simulation
- Direct instruction

**Recommended Resources**

- Desktop computers/laptops
- Internet connection
- Projectors
- Telephone

# NUMERACY SKILLS

**UNIT CODE:** BUS/CU/PM/BC/02/6/A

**Relationship to Occupational Standards**
This unit addresses the Unit of Competency: Demonstrate Numeracy Skills.

**Duration of Unit:** 60 hours

**Unit Description**
This unit describes the competencies required to demonstrate numeracy skills. It involves applying a wide range of mathematical calculations for work; applying ratios, rates and proportions to solve problems; estimating, measuring and calculating measurement for work; using detailed maps to plan travel routes for work; using geometry to draw and construct 2D and 3D shapes for work; collecting, organizing and interpreting statistical data; using routine formula and algebraic expressions for work and using common functions of a scientific calculator.

**Summary of Learning Outcomes**
1. Apply a wide range of mathematical calculations for work
2. Apply ratios, rates and proportions to solve problems
3. Estimate, measure and calculate measurement for work
4. Use detailed maps to plan travel routes for work
5. Use geometry to draw and construct 2D and 3D shapes for work
6. Collect, organize and interpret statistical data
7. Use routine formula and algebraic expressions for work
8. Use common functions of a scientific calculator

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Apply a wide range of mathematical calculations for work | • Fundamentals of mathematics<br>• Addition, subtraction, multiplication and division of positive and negative numbers<br>• Algebraic expressions | • Written tests<br>• Assignments<br>• Supervised exercises |

| | | • manipulation<br>• Forms of fractions, decimals and percentages<br>• Expression of numbers as powers and roots | |
|---|---|---|---|
| 2. | Apply ratios, rates and proportions to solve problems | • Rates, ratios and proportions<br>• Meaning<br>• Conversions into percentages<br>• Direct and inverse proportions determination<br>• Performing calculations<br>• Construction of graphs, charts and tables<br>• Recording of information | • Written tests<br>• Assignments<br>• Supervised exercises |
| 3. | Estimate, measure and calculate measurement for work | • Units of measurements and their symbols<br>• Identification and selection of measuring equipment<br>• Conversion of units of measurement<br>• Perimeters of regular figures<br>• Areas of regular figures<br>• Volumes of regular figures<br>• Carrying out measurements<br>• Recording of information | • Assignments<br>• Supervised exercises<br>• Written tests |
| 4. | Use detailed maps to plan travel routes for work | • Identification of features in routine maps and plans<br>• Symbols and keys used in routine maps and plans<br>• Identification and interpretation of orientation of map to North<br>• Demonstrate understanding of direction and location<br>• Apply simple scale to estimate length of objects, or distance to location or object | • Written<br>• Practical test |

| | | | |
|---|---|---|---|
| | | • Give and receive directions using both formal and informal language | |
| | | • Planning of routes | |
| | | • Calculation of distance, speed and time | |
| 5. | Use geometry to draw and construct 2D and 3D shapes for work | • Identify two dimensional shapes and routine three dimensional shapes in everyday objects and in different orientations | |
| | | • Explain the use and application of shapes | |
| | | • Use formal and informal mathematical language and symbols to describe and compare the features of two dimensional shapes and routine three dimensional shapes | |
| | | • Identify common angles | |
| | | • Estimate common angles in everyday objects | |
| | | • Evaluation of unknown angles | |
| | | • Use formal and informal mathematical language to describe and compare common angles | |
| | | • Symmetry and similarity | |
| | | • Use common geometric instruments to draw two dimensional shapes | |
| | | • Construct routine three dimensional objects from given nets | |

| | | | |
|---|---|---|---|
| 6. | Collect, organize and interpret statistical data | <ul><li>Classification of data<ul><li>Grouped data</li><li>Ungrouped data</li></ul></li><li>Data collection<ul><li>Observation</li><li>Recording</li></ul></li><li>Distinguishing between sampling and census</li><li>Importance of sampling</li><li>Errors in sampling</li><li>Types of sampling and their limitations e.g.<ul><li>Stratified random</li><li>Cluster</li><li>Judgmental</li></ul></li><li>Tabulation of data<ul><li>Class intervals</li><li>Class boundaries</li><li>Frequency tables</li><li>Cumulative frequency</li></ul></li><li>Diagrammatic and graphical presentation of data e.g.<ul><li>Histograms</li><li>Frequency polygons</li><li>Bar charts</li><li>Pie charts</li><li>Cumulative frequency curves</li></ul></li><li>Interpretation of data</li></ul> | <ul><li>Assignments</li><li>Supervised exercises</li><li>Written tests</li></ul> |
| 7. | Use routine formula and algebraic expressions for work | <ul><li>Solving linear equations</li><li>Linear graphs</li><li>Plotting</li><li>Interpretation</li><li>Applications of linear graphs</li><li>Curves of first and second degree</li><li>Plotting</li></ul> | <ul><li>Assignments</li><li>Supervised exercises</li><li>Written tests</li></ul> |

| | • Interpretation | |
|---|---|---|
| 8. Use common functions of a scientific calculator | • Identify and use keys for common functions on a calculator<br>• Calculate using whole numbers, money and routine decimals and percentages<br>• Calculate with routine fractions and percentages<br>• Apply order of operations to solve multi-step calculations<br>• Interpret display and record result | • Written<br>• Practical test |

**Suggested Methods of Instruction**
- Group discussions
- Demonstration by trainer
- Practical work by trainee
- Exercises

**Recommended Resources**
- Calculators
- Rulers, pencils, erasers
- Charts with presentations of data
- Graph books
- Dice

# DIGITAL LITERACY

**UNIT CODE:** BUS/CU/PM/BC/03/6/A

**Relationship to Occupational Standards**
This unit addresses the Unit of Competency: Demonstrate Digital Literacy

**Duration of Unit:** 60 hours

**Unit Description**
This unit describes competencies required to demonstrate digital literacy. It involves in identifying computer software and hardware, applying security measures to data, hardware, software in automated environment, computer software in solving task, internet and email in communication at workplace, desktop publishing in official assignments and preparing presentation packages.

**Summary of Learning Outcomes**
1. Identify computer software and hardware
2. Apply security measures to data, hardware, software in automated environment
3. Apply computer software in solving tasks
4. Apply internet and email in communication at workplace
5. Apply desktop publishing in official assignments
6. Prepare presentation packages

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Identify computer hardware and software | • Concepts of ICT<br>• Functions of ICT<br>• History of computers<br>• Components of a computer<br>• Classification of computers | • Written tests<br>• Oral presentation |
| 2. Apply security measures to data, hardware, software in automated | • Data security and control<br>• Security threats and control measures<br>• Types of computer crimes | • Written tests<br>• Oral presentation<br>• Project |

| | | | |
|---|---|---|---|
| | environment | • Detection and protection against computer crimes<br>• Laws governing protection of ICT | |
| 3. | Apply computer software in solving tasks | • Operating system<br>• Word processing<br>• Spread sheets<br>• Data base design and manipulation<br>• Data manipulation, storage and retrieval | • Oral questioning<br>• Project |
| 4. | Apply internet and email in communication at workplace | • Computer networks<br>• Network configurations<br>• Uses of internet<br>• Electronic mail (e-mail) concept | • Oral questioning<br>• Written report |
| 5. | Apply desktop publishing in official assignments | • Concept of desktop publishing<br>• Opening publication window<br>• Identifying different tools and tool bars<br>• Determining page layout<br>• Opening, saving and closing files<br>• Drawing various shapes using DTP<br>• Using colour pellets to enhance a document<br>• Inserting text frames<br>• Importing and exporting text<br>• Object linking and embedding<br>• Designing of various publications<br>• Printing of various publications | • Oral questioning<br>• Written report<br>• Project |

| 6. Prepare presentation packages | • Types of presentation packages<br>• Procedure of creating slides<br>• Formatting slides<br>• Presentation of slides<br>• Procedure for editing objects | • Oral questioning<br>• Written report<br>• Project |
|---|---|---|

**Suggested Methods of Instruction**
- Instructor led facilitation of theory
- Demonstration by trainer
- Practical work by trainee
- Viewing of related videos
- Project
- Group discussions

**Recommended Resources**
- Computers
- Printers
- Storage devices
- Internet access

# ENTREPRENEURIAL SKILLS

**UNIT CODE:** BUS/CU/PM/BC/04/6/A

## Relationship to Occupational Standards

This unit addresses the Unit of Competency: Demonstrate Entrepreneurial Skills

**Duration of unit:** 100 hours

## Unit Description

This unit covers the competencies required to demonstrate understanding of entrepreneurship. It involves demonstrating understanding of an entrepreneur, entrepreneurship and self-employment. It also involves identifying entrepreneurship opportunities, creating entrepreneurial awareness, applying entrepreneurial motivation and developing business innovative strategies.

## Summary of Learning Outcomes

1. Demonstrate understanding of who an entrepreneur
2. Demonstrate knowledge of entrepreneurship and self-employment
3. Identify entrepreneurship opportunities
4. Create entrepreneurial awareness
5. Apply entrepreneurial motivation
6. Develop business innovative strategies
7. Develop Business plan

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Demonstrate knowledge of entrepreneurship and self-employment | • Importance of self-employment <br> • Requirements for entry into self-employment <br> • Role of an Entrepreneur in business <br> • Contributions of Entrepreneurs to National development <br> • Entrepreneurship culture in Kenya <br> • Born or made entrepreneurs | • Individual/group assignments <br> • Projects <br> • Written tests <br> • Oral questions <br> • Third party report |
| 2. Identify entrepreneurship opportunities | • Business ideas and opportunities <br> • Sources of business ideas <br> • Business life cycle <br> • Legal aspects of business <br> • Assessment of product demand <br> • Business environment <br> • Factors to consider when evaluating business environment <br> • Technology in business | • Individual/group assignments <br> • Projects <br> • Written tests <br> • Oral questions <br> • Third party report <br> • Interviews |
| 3. Create entrepreneurial awareness | • Forms of businesses <br> • Sources of business finance <br> • Factors in selecting source of business finance <br> • Governing policies on Small Scale Enterprises (SSEs) <br> • Problems of starting and operating SSEs | • Individual/group assignments <br> • Projects <br> • Written tests <br> • Oral questions <br> • Third party report <br> • Interviews |

| | | |
|---|---|---|
| 4. Apply entrepreneurial motivation | • Internal and external motivation<br>• Motivational theories<br>• Self-assessment<br>• Entrepreneurial orientation<br>• Effective communications in entrepreneurship<br>• Principles of communication<br>• Entrepreneurial motivation | • Case studies<br>• Individual/group assignments<br>• Projects<br>• Written tests<br>• Oral questions<br>• Third party report<br>• Interviews |
| 5. Develop business innovative strategies | • Innovation in business<br>• Small business Strategic Plan<br>• Creativity in business development<br>• Linkages with other entrepreneurs<br>• ICT in business growth and development | • Case studies<br>• Individual/group assignments<br>• Projects<br>• Written tests<br>• Oral questions<br>• Third party report<br>• Interviews |
| 6. Develop Business Plan | • Business description<br>• Marketing plan<br>• Organizational/Management plan<br>• Production/operation plan<br>• Financial plan<br>• Executive summary<br>• Presentation of Business Plan | • Case studies<br>• Individual/group assignments<br>• Projects<br>• Written tests<br>• Oral questions<br>• Third party report<br>• Interviews |

**Suggested Methods of Instruction**

- Direct instruction
- Project
- Case studies
- Field trips
- Discussions
- Demonstration
- Question and answer
- Problem solving
- Experiential

- Team training

**Recommended Resources**
- Case studies
- Business plan templates
- Computers
- Overhead projectors
- Internet
- Mobile phone
- Video clips
- Films
- Newspapers and Handouts
- Business Journals
- Writing materials

# EMPLOYABILITY SKILLS

**UNIT CODE:** BUS/CU/PM/BC/05/6/A

**Relationship to Occupational Standards**

This unit addresses the Unit of Competency: Demonstrate Employability Skills

**Duration of Unit:** 80 hours

**Unit Description**

This unit covers competencies required to demonstrate employability skills. It involves conducting self-management, demonstrating interpersonal communication, critical safe work habits, leading a workplace team, planning and organizing work, maintaining professional growth and development, demonstrating workplace learning, problem solving skills and managing ethical performance.

**Summary of Learning Outcomes**

1. Conduct self-management
2. Demonstrate interpersonal communication
3. Demonstrate critical safe work habits
4. Lead a workplace team
5. Plan and organize work
6. Maintain professional growth and development
7. Demonstrate workplace learning
8. Demonstrate problem solving skills
9. Manage ethical performance

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Conduct self-management | • Self-awareness<br>• Formulating personal vision, mission and goals<br>• Strategies for overcoming life challenges<br>• Managing emotions<br>• Emotional intelligence<br>• Assertiveness versus | • Written tests<br>• Oral questioning<br>• Interviewing<br>• Portfolio of evidence<br>• Third party report |

| | | • aggressiveness | |
|---|---|---|---|
| | | • Expressing personal thoughts, feelings and beliefs | |
| | | • Developing and maintaining high self-esteem | |
| | | • Developing and maintaining positive self-image | |
| | | • Setting performance targets | |
| | | • Monitoring and evaluating performance | |
| | | • Articulating ideas and aspirations | |
| | | • Accountability and responsibility | |
| | | • Good work habits | |
| | | • Self-awareness | |
| | | • Values and beliefs | |
| | | • Self-development | |
| | | • Financial literacy | |
| | | • Healthy lifestyle practices | |
| | | • Adopting safety practices | |
| 2. Demonstrate interpersonal communication | • Meaning of interpersonal communication | • Written tests |
| | • Listening skills | • Oral questioning |
| | • Types of audience | • Interviewing |
| | • Public speaking | • Portfolio of evidence |
| | • Writing skills | • Third party report |
| | • Negotiation skills | |
| | • Reading skills | |
| | • Meaning of empathy | |
| | • Understanding customers' needs | |
| | • Establishing | |

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|---|---|---|---|
| | | communication networks<br>• Assertiveness<br>• Sharing information | |
| 3. Demonstrate critical safe work habits | | • Stress and stress management<br>• Time concept<br>• Punctuality and time consciousness<br>• Leisure<br>• Integrating personal objectives into organizational objectives<br>• Resources mobilization<br>• Resources utilization<br>• Setting work priorities<br>• Developing healthy relationships<br>• HIV and AIDS<br>• Drug and substance abuse<br>• Managing emerging issues | • Written tests<br>• Oral questioning<br>• Interviewing<br>• Portfolio of evidence<br>• Third party report |
| 4. Lead a workplace team | | • Leadership qualities<br>• Power and authority<br>• Team building<br>• Determination of team roles and objectives<br>• Team parameters and relationships<br>• Individual responsibilities in a team<br>• Forms of communication<br>• Complementing team activities<br>• Gender and gender mainstreaming<br>• Human rights<br>• Developing healthy relationships | • Written tests<br>• Oral questioning<br>• Interviewing<br>• Portfolio of evidence<br>• Third party report |

| | | | |
|---|---|---|---|
| | | • Maintaining relationships<br>• Conflicts and conflict resolution<br>• Coaching and mentoring skills | |
| 5. Plan and organize work | | • Functions of management<br>• Planning<br>• Organizing<br>• Time management<br>• Decision making concept<br>• Task allocation<br>• Developing work plans<br>• Developing work goals/objectives and deliverables<br>• Monitoring work activities<br>• Evaluating work activities<br>• Resource mobilization<br>• Resource allocation<br>• Resource utilization<br>• Proactive planning<br>• Risk evaluation<br>• Problem solving<br>• Collecting, analysing and organising information<br>• Negotiation | • Written tests<br>• Oral questioning<br>• Interviewing<br>• Portfolio of evidence<br>• Third party report |
| 6. Maintain professional growth and development | | • Avenues for professional growth<br>• Training and career opportunities<br>• Assessing training needs<br>• Mobilizing training resources<br>• Licenses and certifications for professional growth and development<br>• Pursuing personal and | • Written tests<br>• Oral questioning<br>• Interviewing<br>• Portfolio of evidence<br>• Third party report |

| | | | |
|---|---|---|---|
| | | organizational goals | |
| | | • Managing work priorities and commitments | |
| | | • Recognizing career advancement | |
| 7. Demonstrate workplace learning | | • Managing own learning<br>• Mentoring<br>• Coaching<br>• Contributing to the learning community at the workplace<br>• Cultural aspects of work<br>• Networking<br>• Variety of learning context<br>• Application of learning<br>• Safe use of technology<br>• Taking initiative/proactivity<br>• Flexibility<br>• Identifying opportunities<br>• Generating new ideas<br>• Workplace innovation<br>• Performance improvement<br>• Managing emerging issues<br>• Future trends and concerns in learning | • Written tests<br>• Oral questioning<br>• Interviewing<br>• Portfolio of evidence<br>• Third party report |
| 8. Demonstrate problem solving skills | | • Critical thinking process<br>• Data analysis tools<br>• Decision making<br>• Creative thinking<br>• Development of creative, innovative and practical solutions<br>• Independence in identifying and solving problems<br>• Solving problems in teams | • Written tests<br>• Oral questioning<br>• Interviewing<br>• Portfolio of evidence<br>• Third party report |

| | | |
|---|---|---|
| | • Application of problem-solving strategies<br>• Testing assumptions<br>• Resolving customer concerns | |
| 9. Manage ethical performance | • Meaning of ethics<br>• Ethical perspectives<br>• Principles of ethics<br>• Ethical standards<br>• Organization code of ethics<br>• Common ethical dilemmas<br>• Organization culture<br>• Corruption, bribery and conflict of interest<br>• Privacy and data protection<br>• Diversity, harassment and mutual respect<br>• Financial responsibility/accountability<br>• Etiquette<br>• Personal and professional integrity<br>• Commitment to jurisdictional laws<br>• Emerging issues in ethics | • Written tests<br>• Oral questioning<br>• Interviewing<br>• Portfolio of evidence<br>• Third party report |

**Suggested Methods of Instruction**
- Demonstrations
- Simulation/Role play
- Group Discussion
- Presentations
- Assignments
- Q&A

**Recommended Resources**

- Computers
- Stationery
- Charts
- Video clips
- Audio tapes
- Radio sets
- TV sets
- LCD projectors

# ENVIRONMENTAL LITERACY

**UNIT CODE**: BUS/CU/PM/BC/05/6/A

**Relationship to Occupational Standards**:
This unit addresses the Unit of Competency: Demonstrate Environmental Literacy

**Duration of Unit:** 40 hours

## Unit Description
This unit describes the competencies required demonstrate environmental literacy.it involves controlling environmental hazard, controlling environmental pollution, complying with workplace sustainable resource use, evaluating current practices in relation to resource usage, identifying environmental legislations/conventions for environmental concerns, implementing specific environmental programs, monitoring activities on environmental protection/programs, analysing resource use and developing resource conservation plans.

## Summary of Learning Outcomes
1. Control environmental hazard
2. Control environmental Pollution
3. Demonstrate sustainable resource use
4. Evaluate current practices in relation to resource usage
5. Identify Environmental legislations/conventions for environmental concerns
6. Implement specific environmental programs
7. Monitor activities on Environmental protection/Programs
8. Analyze resource use
9. Develop resource conservation plans

## Learning Outcomes, Content and Methods of Assessment

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Control environmental hazard | • Purposes and content of Environmental Management and Coordination Act 1999 | • Written questions<br>• Oral questions |

| | | |
|---|---|---|
| | • Storage methods for environmentally hazardous materials<br>• Disposal methods of hazardous wastes<br>• Types and uses of PPE in line with environmental regulations<br>• Occupational Safety and Health Standards (OSHS) | |
| 2. Control environmental Pollution control | • Types of pollution<br>• Environmental pollution control measures<br>• Types of solid wastes<br>• Procedures for solid waste management<br>• Different types of noise pollution<br>• Methods for minimizing noise pollution | • Written questions<br>• Oral questions<br>• Role play |
| 3. Demonstrate sustainable resource use | • Types of resources<br>• Techniques in measuring current usage of resources<br>• Calculating current usage of resources<br>• Methods for minimizing wastage<br>• Waste management procedures<br>• Principles of 3Rs (Reduce, Reuse, Recycle)<br>• Methods for economizing or reducing resource consumption | • Written questions<br>• Oral questions<br>• Role play |
| 4. Evaluate current practices in relation to resource usage | • Collection of information on environmental and resource efficiency systems and procedures, | • Written questions<br>• Oral questions<br>• Role play |

| | | |
|---|---|---|
| | • Measurement and recording of current resource usage<br>• Analysis and recording of current purchasing strategies.<br>• Analysis of current work processes to access information and data<br>• Identification of areas for improvement | |
| 5. Identify Environmental legislations/conventions for environmental concerns | • Environmental issues/concerns<br>• Environmental legislations /conventions and local ordinances<br>• Industrial standard /environmental practices<br>• International Environmental Protocols (Montreal, Kyoto)<br>• Features of an environmental strategy | • Written questions<br>• Oral questions |
| 6. Implement specific environmental programs | • Community needs and expectations<br>• Resource availability<br>• 5s of good housekeeping<br>• Identification of programs/Activities<br>• Setting of individual roles /responsibilities<br>• Resolving problems /constraints encountered<br>• Consultation with stakeholders | • Written questions<br>• Oral questions<br>• Role play |

| 7. Monitor activities on Environmental protection/Programs | • Periodic monitoring and Evaluation of activities<br>• Gathering feedback from stakeholders<br>• Analyzing data gathered<br>• Documentation of recommendations and submission<br>• Setting of management support systems to sustain and enhance the program<br>• Monitoring and reporting of environmental incidents to concerned /proper authorities | • Oral questions<br>• Written tests<br>• Practical test |
|---|---|---|
| 8. Analyze resource use | • Identification of resource consuming processes<br>• Determination of quantity and nature of resource consumed<br>• Analysis of resource flow through different parts of the process.<br>• Classification of wastes for possible source of resources. | • Written tests<br>• Oral questions<br>• Practical test |
| 9. Develop resource Conservation plans | • Determination of efficiency of use/conversion of resources<br>• Causes of low efficiency of use of resources<br>• Plans for increasing the efficiency of resource use | • Written tests<br>• Oral questions<br>• Practical test |

**Suggested Methods of Instruction**

- Instructor led facilitation of theory
- Practical demonstration of tasks by trainer
- Practice by trainees
- Observations and comments and corrections by trainers

**Recommended Resources**
- Standard operating and/or other workplace procedures manuals
- Specific job procedures manuals
- Environmental Management and Coordination Act 1999
- Machine/equipment manufacturer's specifications and instructions
- Personal Protective Equipment (PPE)
- ISO standards
- Company environmental management systems (EMS)
- Montreal Protocol
- Kyoto Protocol

# OCCUPATIONAL SAFETY AND HEALTH PRACTICES

**UNIT CODE:** BUS/CU/PM/BC/01/7/A

**Relationship to Occupational Standards**
This unit addresses the Unit of Competency: Demonstrate Occupational Safety and Health Practices

**Duration of Unit:** 40 hours

**Unit Description**
This unit specifies the competencies required to demonstrate occupational health and safety practices. It involves identifying workplace hazards and risk, identifying and implementing appropriate control measures to hazards and risks and implementing OSH programs, procedures and policies/guidelines.

**Summary of Learning Outcomes**
1. Identify workplace hazards and risk
2. Control OSH hazards
3. Implement OSH programs

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Identify workplace hazards and risks | • Identification of hazards in the workplace and/or the indicators of their presence<br>• Evaluation and/or work environment measurements of OSH hazards/risk existing in the workplace<br>• Gathering of OSH issues and/or concerns | • Oral questions<br>• Written tests<br>• Portfolio of evidence<br>• Third party report |

| 2. Control OSH hazards | • Prevention and control measures e.g. use of PPE<br>• Risk assessment<br>• Contingency measures | • Oral questions<br>• Written tests<br>• Portfolio of evidence<br>• Third party report |
|---|---|---|
| 3. Implement OSH programs | • Company OSH program, evaluation and review<br>• Implementation of OSH programs<br>• Training of team members and advice on OSH standards and procedures<br>• Implementation of procedures for maintaining OSH-related records | • Oral questions<br>• Written tests<br>• Portfolio of evidence<br>• Third party report |

**Suggested Methods of Instruction**
- Assigments
- Discussion
- Q&A
- Role play
- Viewing of related videos

**Recommended Resources**
- Standard operating and/or other workplace procedures manuals
- Specific job procedures manuals
- Machine/equipment manufacturer's specifications and instructions
- Personal Protective Equipment (PPE) e.g.
  - Mask
  - Face mask/shield
  - Safety boots
  - Safety harness
  - Arm/Hand guard, gloves
  - Eye protection (goggles, shield)

- Hearing protection (ear muffs, ear plugs)
- Hair Net/cap/bonnet
- Hard hat
- Face protection (mask, shield)
- Apron/Gown/coverall/jump suit
- Anti-static suits
- High-visibility reflective vest

# COMMON UNIT OF LEARNING

# PROCUREMENT OF GOODS, WORK AND SERVICES

**UNIT CODE:** BUS/CU/PM/CC/01/6/A

**Relationship to Occupational Standards**
This unit addresses the unit of competency: Manage procurement for goods, works and services

**Duration of Unit:** 100 Hours

**Unit Description**
This unit describes the competencies required by a project manager to develop and prepare procurement plan and budget, participate in procurement procedures, contract negotiations, allocation and preparation of procurement report.

**Summary of Learning Outcomes**
1. Develop and prepare procurement plan and budget
2. Participate in procurement procedures, contract negotiations and allocation
3. Participate in preparation of procurement report

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Develop and prepare procurement plan and budget | <ul><li>Meaning of procurement plan in project management</li><li>Organizational procedures and relevant legislations in procurement</li><li>Purpose and importance of procurement plan</li><li>Steps in the development of procurement plans</li><li>Factors to consider in procurement planning (goods, works and services)</li><li>Market survey and analysis<ul><li>Technical specifications</li></ul></li></ul> | <ul><li>Oral questioning</li><li>Written tests</li><li>Case study</li></ul> |

| | | |
|---|---|---|
| | ○ Prices<br>○ Availability<br>• Meaning of procurement budget<br>• Steps in preparation of procurement budget<br>• Factors to consider in preparation of procurement budget<br>• Use of ICT in procurement (e-procurement) | |
| 2. Participate in procurement procedures, contract negotiations and allocation of goods, works and services | • Meaning of contract and tender in procurement<br>• Types of procurement<br>• Procurement process<br>• Types of tenders<br>• Preparation of expression of interest documents and proposals<br>• Contract negotiation and awarding<br>• Relevant regulations in tendering and procurement process<br>• Bidding processes | • Oral questioning<br>• Written tests<br>• Case study |
| 3. Participate in preparation of procurement evaluation report | • Meaning of procurement evaluation report<br>• Steps in preparation of procurement report<br>• Factors to consider in preparation of procurement report<br>• Sources of information in procurement report<br>• Dissemination of reports | • Oral questioning<br>• Written tests<br>• Case study |

**Suggested Methods of Instruction**
- Instructor led facilitation of theory
- Demonstration by trainer
- Field work by the trainee
- Field trips
- Viewing of related videos
- Expert guest speakers

- Case studies

**Recommended Resources**
- Computers with relevant e-procurement software and applications
- Communication devices
- Recorders
- Internet
- Cameras
- Stationery
- Transport means
- Sample documents
  - Expression of interest documents
  - Proposals
  - Relevant legislations

# CORE UNITS OF LEARNING

# PROJECT INCEPTION

**UNIT CODE:** BUS/CU/PM/CR/01/6/A

**Relationship to Occupational Standards**
This unit addresses the unit of competency: Manage project inception phase

**Duration of Unit:** 100 Hours

**Unit Description**
This unit covers the competencies required to manage project inception phase. It involves performing situation analysis, developing concept note, developing business case, carrying out feasibility study, developing benefits management plan, preparing project proposal, seeking project approval and disseminate project approval report to relevant stakeholders, documenting source selection criteria and preparing project acceptance and closure criteria.

**Summary of Learning Outcomes**
1. Perform situation analysis
2. Develop concept note
3. Develop business case
4. Carry out feasibility study
5. Develop Benefits Management plan
6. Prepare project proposal
7. Seek project approval and disseminate project approval report to relevant stakeholders
8. Document Source Selection criteria
9. Prepare Project Acceptance and Closure criteria

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Perform situation analysis | • Importance of situational analysis<br>• Methods of situational analysis<br>• Process of situational analysis<br>  ✓ select stakeholder target<br>  ✓ conduct problem analysis<br>  ✓ identify alternatives<br>  ✓ situation analysis report | • Oral questioning<br>• Written tests |

| 2. | Develop concept note | • Meaning of a concept note<br>• Format of a concept note<br>• Components of a concept note<br>• Development of a concept note<br>• Project research | • Oral questioning<br>• Written tests |
|----|----|----|----|
| 3. | Develop business case | • Statement of the problem<br>• Problem statement analysis<br>• Alternative solutions<br>• Cost benefit analysis | • Oral questioning<br>• Written tests<br>• Case study |
| 4. | Carry out feasibility study | • The meaning of feasibility study<br>• Importance of feasibility study in project management<br>• Purpose of feasibility study<br>• Selection of scope in feasibility study<br>• Tools of carrying out feasibility study e.g.<br>   • Questionnaire<br>   • Statistics and data analysis<br>• Methods of carrying out feasibility study e.g.<br>   • Interviews<br>   • Focus group discussion<br>• Feasibility study report writing | • Direct observation<br>• Oral questioning<br>• Written tests |
| 5. | Develop Benefits Management plan | • Project benefits<br>• Benefits owners<br>• Benefit schedule<br>• Benefit sustainability plan | • Oral questioning<br>• Written tests |
| 6. | Prepare project proposal | • Meaning of project proposal<br>• Components of a project proposal<br>• Format of project proposal<br>• Factors to consider in proposal writing | • Oral questioning<br>• Written tests |
| 7. | Seek project approval and disseminate | • Feasibility study report evaluation<br>• Project approval by the relevant stakeholders | • Oral questioning<br>• Written tests |

| | | |
|---|---|---|
| approval report to relevant stakeholders | • Feasibility study report dissemination methods e.g. Sending feasibility study analysis | |
| 8. Prepare supplier selection criteria | • Supplier prequalification criteria<br>• Process of supplier prequalification<br>• Evaluation of suppliers | • Oral questioning<br>• Written tests |
| 9. Prepare Project Acceptance and Closure criteria | • Closure criteria<br>• Acceptance criteria<br>• Process of developing acceptance criteria<br>• Process of developing closure criteria | • Oral questioning<br>• Written tests |

**Suggested Methods of Instruction**
- Instructor led facilitation of theory
- Demonstration by trainer
- Field work by the trainee
- Field trips
- Viewing of related videos

**Recommended Resources**
- Sample Questionnaires
- Computers
- Communication devices
- Recorders
- Internet
- Cameras
- Stationery
- Transport means
- Meeting venues

# PROJECT FINANCING

**UNIT CODE:** BUS/CU/PM/CR/02/6/A

**Relationship to Occupational Standards**
This unit of learning addresses the unit of competency: Manage project financing

**Duration of Unit:** 180 hours

**Unit Description**
This unit covers the competencies required to manage project financing. It involves developing financing structures and options, managing project financing risks, supervising and monitoring the utilization of funds.

**Summary of Learning Outcomes**
1. Develop financing structures and options
2. Manage project financing risks
3. Supervise and monitor the utilization of funds

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Develop financing structures and options | <ul><li>Meaning of project finance</li><li>Sources of project finance</li><li>Types of project finance e.g donations</li><li>Selection of a project financier</li><li>Meaning of a project financing structure</li><li>Factors to consider in developmentof a project financing structure</li><li>Steps in development of a project financing structure</li><li>Project fundraising</li><li>Proposal writing</li></ul> | <ul><li>Oral questioning</li><li>Written tests</li><li>Case study</li></ul> |
| 2. Manage project financing risks | <ul><li>Types of project finance risks</li><li>Risk register</li><li>Mitigation plans</li></ul> | <ul><li>Oral questioning</li><li>Written tests</li><li>Case study</li></ul> |

| | | | |
|---|---|---|---|
| | | • Monitoring and evaluation of mitigation plan | • |
| 3. | Supervise and monitor the utilization of funds | • Meaning of funds utilization<br>• Activities monitoring and budget up dates<br>• Financial documentation<br>• Periodic financial reports and audits | • Oral questioning<br>• Written tests<br>• Case study |

**Suggested Methods of Instruction**
- Instructor led facilitation of theory
- Demonstration by trainer
- Group discussion
- Field trips
- Viewing of related videos and models
- Dual training

**Recommended Resources**
- Calculators
- Computers
- Auditing software
- Projectors
- Communication devices
- Recorders
- Internet
- Stationery
- Transport means
- Meeting venues

# PROJECT DESIGN AND PLANNING

**UNIT CODE:** BUS/CU/PM/CR/03/6/A

**Relationship to Occupational Standards**
This unit addresses the unit of competency: Manage project design and planning.

**Duration of Unit:** 100 Hours

**Unit Description**
This unit covers the competencies required to manage project design and planning. It involves identifying and managing project design team, developing project design plan, developing project implementation plan and identifying project resources.

**Summary of Learning Outcomes**
1. Identify and manage project design team
2. Develop project design plan
3. Develop project implementation plan
4. Identify project resources

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Identify and manage project design team | <ul><li>Meaning of a project design team</li><li>Purpose and importance of a project design team</li><li>Project team organization e.g skilled, unskilled</li><li>Delegation and supervision of responsibilties</li><li>Project team feedback report</li><li>Project team meetings co-ordination</li><li>Project team training and motivation</li><li>Design thinking</li></ul> | <ul><li>Direct observation</li><li>Oral questioning</li><li>Written tests</li></ul> |
| 2. Develop project design plan | <ul><li>Meaning of project design plan</li><li>Meaning of project budgeting</li><li>Factors to consider in project</li></ul> | <ul><li>Direct observation</li><li>Oral questioning</li><li>Written tests</li></ul> |

| | | planning and budgeting | |
|---|---|---|---|
| | | • Purpose and importance of project design plan | |
| | | • Structure of project design plan | |
| | | • Purpose and importance of project budget | |
| | | • Processes of developing a project budget | |
| 3. | Develop project implementati on plan | • Meaning of implementation plan<br>• Purpose and importance of implementation plan<br>• Factors to consider in preparation of implementation plan<br><br>• Resource management procedures<br><br>• Preparation of a resource management schedule<br><br>• Preparation of work plans e.g.<br><br>    o Gant charts<br><br>• Structure of implementation plan<br><br>• Stakeholders participation in approval of implemention plan | • Direct observation<br>• Oral questioning<br>• Written tests |
| 4. | Develop project schedule | • Activity list<br>• Activity relationships<br>• Project scheduling tools<br>• Schedule compresion techniques<br>• Resource utilization schedule | • Direct observation<br>• Oral questioning<br>• Written tests |
| 5. | Identify project resources | • Resource breakdown structure<br>• Resource requirments<br>  ✓ Types<br>  ✓ Quantities<br>  ✓ Calendar<br>  ✓ Availability | • Direct observation<br>• Oral questioning<br>• Written tests<br>• |
| 6. | determine project implementati | • budget items<br>• methods of budgeting | • Direct observation<br>• Oral questioning |

| on budget | • procedure for budget approval<br>• methods of controlling cost<br>• cost control measures | • Written tests |
|---|---|---|

**Suggested Methods of Instruction**

- Instructor led facilitation of theory
- Demonstration by trainer
- Group discussion
- Case studies
- Field trips
- Viewing of related videos and models
- Dual training

**Recommended Resources**

- Computers
- Projectors
- Communication devices
- Recorders
- Internet
- Cameras
- Stationery
- Transport means
- Meeting venues

# PROJECT IMPLEMENTATION

**UNIT CODE:** BUS/CU/PM/CR/04/6/A

**Relationship to Occupational Standards**
This unit addresses the unit of competency: Manage project implementation

**Duration of Unit:** 180 hours

**Unit Description**
This unit covers the competencies required manage project implementation .It involves identifying and managing project implementation team, acquiring and managing project resources, managing project stakeholders, project take off and commissioning, monitoring and controlling the project activities.

**Summary of Learning Outcomes**
1. Identify and manage project implementation team
2. Acquire and manage project resources
3. Manage project stakeholders
4. Project take off and Commissioning
5. Monitor and control the project activities

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Identify and manage project implementation team | • Meaning of a project implementation team<br>• Purpose and importance of a project implementation team<br>• Project implementation team organization e.g skilled, unskilled<br>• Delegation and supervision of responsibilities<br>• Project team feedback report<br>• Project implementation team meetings co-ordination<br>• Project implementation team training and motivation | • Oral questioning<br>• Written tests<br>• Case study |

| | | |
|---|---|---|
| 2. Acquire and manage project resources | • meaning of project resources<br>• types of project resources<br>• purpose and importance of project resources<br>• resource management schedules<br>• format<br>• components | • Oral questioning<br>• Written tests<br>• Case study |
| 3. Manage project stakeholders | • Meaning of stakeholders<br>• Identification of project stakeholders and their needs<br>• Stakeholder communication plan<br>   o Format<br>   o Components<br>   o Frequency | • Oral questioning<br>• Written tests<br>• Case study |
| 4. Project take off and commissioning | • Meaning of project take off and commissioning<br>• Factors to consider in project take off and commissioning<br>• Reasons of project commissioning | • Oral questioning<br>• Written tests<br>• Case study |
| 5. Monitor and control project activities | • Meaning of project monitoring and control<br>• Importance of project activities monitoring and control<br>• Monitoring tools and methods<br>   o Development and use of Logical framework<br>• Project activities classification and timelines e.g Work breakdown structure<br>• Earned value analysis<br>• Progressive quality and standards analysis<br>• Project progressive reports | • Oral questioning<br>• Written tests<br>• Case study |

**Suggested Methods of Instruction**

- Instructor led facilitation of theory
- Demonstration by trainer
- Case studies
- Group discussion
- Field trips
- Viewing of related videos and models
- Dual training

**Recommended Resources**
- Computers
- Projectors
- Communication devices
- Recorders
- Internet
- Cameras
- Stationery
- Transport means
- Meeting venues

# PROJECT RISKS

**UNIT CODE:** BUS/CU/PM/CR/05/6/A

**Relationship to Occupational Standards**
This unit of learning addresses the unit of competency: Manage project risks

**Duration of Unit:** 180 hours

**Unit Description**
This unit covers the competencies required to manage project risks. It involves identifying and analysing project risks, establishing risk treatment controls, monitoring project risks and assessing risk management outcomes.

**Summary of Learning Outcomes**
1. Identify project risks
2. Analyse project risks
3. Establish risk treatment and controls
4. Monitor and control project risks
5. Assess risk management outcomes

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Identify project risks | • Meaning of project risks<br>• Objectives of risk management<br>• Difference between risks and assumptions<br>• Purpose of risk management<br>• Methods of risk identification<br>• Classification of risks | • Oral questioning<br>• Written tests<br>• Observation<br>• Case study |
| 2. Analyze project risks | • Meaning of project risk analysis<br>• Importance of risk analysis<br>• Risk analysis tools<br>    o SWOT Analysis<br>    o PESTEL Analysis<br>• Elements of risk analysis | • Oral questioning<br>• Written tests<br>• Case study |

| | | | | |
|---|---|---|---|---|
| | | • Prioritization of project risks<br>    ○ Classification criteria<br>    ○ Ranking of project risks<br>• Risk analysis documentation | | |
| 3. | Establish risk treatment and controls | • Meaning of risk treatment and control<br>• Identification of risk controls<br>• Stakeholder involvement in risk control<br>• Methods of risk treatment<br>• Project risk planning and mitigation options | • Oral questioning<br>• Written tests<br>• Case study |
| 4. | Monitor and control project risks | • Meaning of project risk monitoring and control<br>• Purpose of risk monitoring and control<br>• Methods of risk monitoring<br>• Risk review processes<br>• Risk mitigation tools<br>• Risk monitoring and control reporting<br>    ○ Feedback<br>    ○ Updating risk mitigation plans | • Oral questioning<br>• Written tests<br>• Case study |
| 5. | Assess risk management outcomes | • Meaning of risk assessment<br>• Purpose of risk assessment<br>• Methods of risk assessment<br>• Documentation of risk assessment outcomes<br>• Project risk assessment outcome reporting<br>    ○ Lessons learnt<br>    ○ Areas of improvement<br>    ○ Recommendations | • Oral questioning<br>• Written tests<br>• Case study |

**Suggested Methods of Instruction**
- Instructor led facilitation of theory
- Demonstration by trainer

- Group discussion
- Field trips
- Viewing of related videos
- Case studies
- Expert guest speakers

**Recommended Resources**
- Calculators
- Computers
- Projectors
- Communication devices
- Internet
- Stationery
- Transport means

# PROJECT MONITORING AND EVALUATION

**UNIT CODE:** BUS/CU/PM/CR/06/6/A

**Relationship to Occupational Standards**
This unit addresses the unit of competency: Monitor and Evaluate Projects

**Duration of Unit:** 180 hours

**Unit Description**
This unit covers the competencies to monitor and evaluate projects. It involves reviewing project design, identifying performance indicators, developing M & E System, developing M&E methods and tools, budgeting for M&E, identifying M&E project team and conducting monitoring & Evaluation.

**Summary of Learning Outcomes**
1. Review project design
2. Identify performance indicators
3. Develop M & E System
4. Develop M&E methods and tools
5. Budget for M&E
6. Identify M&E project team
7. Conduct monitoring & Evaluation

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Review project design | • Methods of project design <br>   ✓ Theory of change <br>   ✓ Project design thinking <br> • Types of log frames <br> • Process of developing log frame | • Oral questioning <br> • Written tests |
| 2. Identify performance indicators | • Perfomance indicators <br> • Types of indicators <br> • Methods of measuring perfomance indicators <br> • Process of developing indicators <br> • Qualities of good indicators | • Oral questioning <br> • Written tests |

| 3. Develop M & E System | • Assumptions and preconditions<br>• Components of M & E systems<br>• Characteristics M & E systems | • Oral questioning<br>• Written tests |
|---|---|---|
| 4. Develop M&E methods and tools | • Meaning of M&E tools<br>• Types of M&E tools<br>    o Questionnaires<br>    o Interview guides<br>    o Observation guidelines<br>• Development of M&E tools<br>• Application of M&E tools | • Oral questioning<br>• Written tests |
| 5. Budget for M&E | • Meaning of budget<br>• Budgetary/expenditure items<br>• Criteria for allocation of funds<br>• Budget preparation<br>• Preparation of M&E expenditure report | • Oral questioning<br>• Written tests |
| 6. Identify M&E project team | • Preparation of job descriptions<br>• Preparation of job specifications | • Oral questioning<br>• Written tests |
| 7. Conduct monitoring & Evaluation | • Elements of<br>• Methods of conducting monitoring<br>• Difference between monitoring and evaluation<br>• Types of monitoring<br>• Types of evaluation<br>• Commissioning an evaluation and monitoring<br>• Reporting and dissemination | • |

**Suggested Methods of Instruction**
- Instructor led facilitation of theory
- Demonstration by trainer
- Field work by the trainee
- Field trips
- Viewing of related videos
- Expert guest speakers
- Case studies

**Recommended Resources**

- Computers with relevant software and applications
- Communication devices
- Recorders
- Internet
- Cameras
- Stationery
- Transport means
- Sample documents
    - Project plan
    - Proposals
    - Sample M&E reports
    - Relevant legislations and M&E guides

# PROJECT AUDITING AND REVIEW

**UNIT CODE:** BUS/CU/PM/CR/07/6/A

**Relationship to Occupational Standards**
This unit addresses the unit of competency: audit and review Projects
**Duration of Unit: 180** hours

**Unit Description**
This unit covers the competencies required to audit and review projects. It involves developing audit plan, developing audit tools, developing audit budget, conducting audit, following up on audit recommendations and conducting project review.

**Summary of Learning Outcomes**
1. Develop audit plan
2. Develop audit tools
3. Develop audit budget
4. Conduct audit
5. Follow-up on audit recommendations
6. Conduct project review

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Develop audit plan | • Components of audit plan<br>• Format of audit plan | • Oral questioning<br>• Written tests |
| 2. Develop audit tools | • Meaning of audit tools<br>• Types of audit tools<br>   o Questionnaires<br>   o Interview guides<br>   o Observation guidelines<br>   o Documentation templates<br>• Development of audit tools<br>• Application of audit tools | • Oral questioning<br>• Written tests<br>• Case study |
| 3. Develop audit budget | • Meaning of budget<br>• Budgetary/expenditure items<br>• Criteria for allocation of funds<br>• Budget preparation | • Oral questioning<br>• Written tests<br>• Case study |

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| | • Preparation of audit budget versus actual analysis report | |
| 4. Conduct audit | • Audit procedures<br>  o Preliminary analytics<br>  o Substantive procedures<br>    ▪ Document review<br>    ▪ Interviews<br>  o Final analytics<br>  o Close out procedures/ conclusion<br>• Audit review meetings<br>  o Entrance meetings<br>  o Show-me meetings<br>  o Progress meetings<br>  o Exit meetings<br>• Audit report writing<br>  o Financial statements<br>  o Audit opinion<br>  o Management letter/ internal control report | • Oral questioning<br>• Written tests<br>• Case study |
| 5. Follow-up on audit recommendations | • Audit recommendation implementation schedule<br>• Monitoring of implementation recommendation<br>• Impact of implementations | • Oral questioning<br>• Written tests<br>• Case study |
| 6. Conduct project review | • Types of project review<br>• Project review parameters<br>  ✓ Trends<br>  ✓ Variances<br>• Project review tools and methodology<br>• Project review teams | • Oral questioning<br>• Written tests<br>• Case study |

**Suggested Methods of Instruction**
• Instructor led facilitation of theory

- Demonstration by trainer
- Field work by the trainee
- Field trips
- Viewing of related videos
- Expert guest speakers
- Case studies

**Recommended Resources**
- Computers with relevant software and applications
- Communication devices
- Recorders
- Internet
- Cameras
- Stationery
- Transport means
- Sample documents
    - Project plan
    - Proposals
    - Sample M&E reports
    - Relevant legislations and M&E guides

# PROJECT ENVIRONMENTAL MANAGEMENT

**UNIT CODE:** BUS/CU/PM/CR/08/6/A

**Relationship to Occupational Standards**

This unit addresses the unit of competency: Manage project environment

**Duration of Unit:** 180 hours

**Unit Description**

This unit covers the competencies required to manage project environment. It involves identifying project environment, performing project environment analysis, developing project environment monitoring plan and monitoring project environment

**Summary of Learning Outcomes**

1. Identify project environment
2. Perform project environment analysis
3. Develop project environment monitoring plan
4. Monitor project environment

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Identify project environment | • Internal environmental factors<br>• External environmental factors<br>• Organisational process assets | • Oral questioning<br>• Written tests<br>• Case study |
| 2. Perform project environment analysis | • Impact of environmental factors on the project<br>• Impact of organisational process assets on the project | • Oral questioning<br>• Written tests<br>• Case study |
| 3. Develop project environment monitoring plan | • Components of an environmental management plan<br>• Tools for monitoring project environment<br>• Methods of monitoring project environment | • Oral questioning<br>• Written tests<br>• Case study Case study |

| 4. | Monitor project environment | • Monitoring tools<br>• Monitoring the environment<br>• Monitoring report | • Oral questioning<br>• Written tests<br>• Case study |
|----|------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------|

**Suggested Methods of Instruction**

- Instructor led facilitation of theory
- Demonstration by trainer
- Group discussion
- Field trips
- Viewing of related videos and models
- Dual training

**Recommended Resources**

- Computers
- Projectors
- Communication devices
- Recorders
- Internet
- Cameras
- Stationery
- Transport means
- Meeting venues

# PROJECT CLOSURE

**UNIT CODE:** BUS/CU/PM/CR/09/6/A

**Relationship to Occupational Standards**
This unit addresses the unit of competency: Manage project closure

**Duration of Unit:** 100 hours

**Unit Description**
This unit covers the competencies required to manage project closure. It involves, planning for project closure review meeting, completing documentation and signing off, reviewing project sustainability ,releasing resources, archiving project documents, preparing project closure reports, preparing project transition and celebrating success.

**Summary of Learning Outcomes**
1. Plan for Project Closure Review Meeting
2. Complete documentation and Signoff
3. Review project sustainability
4. Release Resources
5. Archive Project Documents
6. Prepare project closure reports
7. Prepare project transition
8. Celebrate Success

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Plan for project closure review meeting | • Project closure requirnments<br>• Types of meetings<br>• Methods of documentation of lessons learnt<br>• | • Oral questioning<br>• Written tests |
| 2. Complete documentation and signoff | • Documents required for project closure<br>• Verification of closure documents<br>• Handling claims and | • Oral questioning<br>• Written tests<br>• |

| | | |
|---|---|---|
| | discrepanciess(delete 1.8 in os) | |
| 3. Review project sustainability plan | • Meaning of sustainability plan<br>• Components of a sustainability plan<br>• Format of a sustainability plan<br>• Preparation of a sustainability plan<br>• Application/ implementation of sustainability plan(exchange 2.3 and 2.4 in os) | • Oral questioning<br>• Written tests<br>• |
| 4. Release project resources | • Procedures for releasing project resources<br>• Asset management procedure | • Oral questioning<br>• Written tests<br>• |
| 5. Archive project documents | • Record retention and data protection requirements<br>• Core documents to be archeived<br>• Methods of document archival<br>• Access rights and user privileges | • Oral questioning<br>• Written tests |
| 6. Prepare project closure reports | • Format of project closure report<br>• Components of project closure report<br>• Methods of dissemination of project closure report | • Oral questioning<br>• Written tests |
| 7. Prepare project transition | • Transition plan<br>• maintainance and support requirment plan<br>  ✓ Service level agreement<br>  ✓ Key perfomance indicators<br>  ✓ Underpinning contract<br>• Patent<br>• Copyright<br>• intelluctual property | • Oral questioning<br>• Written tests<br>• |
| 8. Debrief project team | • Methods of debriefing project team<br>• Benefits of debriefing project | • Oral questioning<br>• Written tests<br>• |

| | team | |
| --- | --- | --- |

**Suggested Methods of Instruction**

- Instructor led facilitation of theory
- Demonstration by trainer
- Group discussion
- Field trips
- Viewing of related videos and models
- Dual training

**Recommended Resources**

- Computers
- Projectors
- Communication devices
- Recorders
- Internet
- Cameras
- Stationery
- Transport means
- Meeting venues

# PROJECT STAKEHOLDERS

**UNIT CODE:** BUS/CU/PM/CR/10/6/A

**Relationship to Occupational Standards**

This unit addresses the unit of competency: Manage project stakeholders

**Duration of Unit:** 80 hours

**Unit Description**

The unit covers the competencies required to manage project stakeholders. It involves identifying stakeholders, undertaking stakeholder analysis, managing stakeholder communication and undertaking stakeholder's engagement

**Summary of Learning Outcomes**

1. Identify stakeholders
2. Undertake stakeholder analysis
3. Manage stakeholder communication
4. Undertake stakeholder's engagement

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Identify stakeholders | <ul><li>Project stakeholders</li><li>Types of stakeholders</li><li>Role of stakeholders</li></ul> | <ul><li>Oral questioning</li><li>Written tests</li><li>Case study</li><li>Scenario</li></ul> |
| 2. Undertake stakeholder analysis engagement | <ul><li>Stakeholder engagement assessment matrix</li><li>Stakeholder relationship</li><li>Stakeholder engagement strategy</li><li>Methods of monitoring stakeholder engagement</li></ul> | <ul><li>Oral questioning</li><li>Written tests</li><li>Case study</li><li>Scenario</li></ul> |
| 3. Manage stakeholder communication | <ul><li>Methods of communication</li><li>Communications requirements</li><li>Communications management</li></ul> | <ul><li>Oral questioning</li><li>Written tests</li><li>Case study</li></ul> |

| | strategy | • Scenario |
|---|---|---|
| 4. Prepare project closure reports | • Components of Project closure report<br>• Format of Project closure reports<br>• Reporting and dissemination | • Oral questioning<br>• Written tests<br>• Case study<br>• Scenario |

**Suggested Methods of Instruction**
- Instructor led facilitation of theory
- Demonstration by trainer
- Group discussion
- Field trips
- Viewing of related videos and models
- Dual training

**Recommended Resources**
- Computers
- Projectors
- Communication devices
- Recorders
- Internet
- Cameras
- Stationery
- Transport means
- Meeting venues

# PROJECT SCOPE

**UNIT CODE:** BUS/CU/PM/CR/11/6/A

**Relationship to Occupational Standards**
This unit addresses the unit of competency: Manage project scope

**Duration of Unit:** 90 hours

**Unit Description**
This unit covers the competencies required to manage project scope. It involves collecting project requirements, defining project scope, creating work break down structure and validating project scope.

**Summary of Learning Outcomes**
1. Collect project requirements
2. Define project scope
3. create work break down structure
4. Validate project scope

**Learning Outcomes, Content and Methods of Assessment**

| Learning Outcome | Content | Methods of Assessment |
|---|---|---|
| 1. Collect project requirements | <ul><li>Types of project closure</li><li>Causes of project closure</li><li>Project requirements</li><li>Requirements traceability matrix</li><li>Methods of obtaining requirements</li></ul> | <ul><li>Oral questioning</li><li>Written tests</li><li>Case study</li></ul> |
| 2. Define project scope | <ul><li>Project boundaries</li><li>Requirements analysis</li><li>Inclusions and exclusions</li><li>Project Scope statement</li></ul> | <ul><li>Oral questioning</li><li>Written tests</li><li>Case study</li></ul> |
| 3. create work break down structure | <ul><li>Components of a WBS</li><li>Types of WBS</li><li>Process of creating WBS</li></ul> | <ul><li>Oral questioning</li><li>Written tests</li><li>Case study</li></ul> |

| | | |
|---|---|---|
| 4. Validate project scope | • Methods of validation<br>• Variances and trends<br>• Preventive and corrective actions<br>• Approval and signoff | • Oral questioning<br>• Written tests<br>• Case study |

**Suggested Methods of Instruction**
- Instructor led facilitation of theory
- Demonstration by trainer
- Group discussion
- Field trips
- Viewing of related videos and models
- Dual training

**Recommended Resources**
- Computers
- Projectors
- Communication devices
- Recorders
- Internet
- Cameras
- Stationery
- Transport means
- Meeting venues