

PROJECT MANAGEMENT PRINCIPLES

ISCED UNIT CODE: 0688 451 05A

TVET CDACC UNIT CODE: ICT/CU/SD/CC/03/5/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: **Apply Project Management Principles**

Duration of Unit: 110 Hours

Unit Description

This unit covers the competencies required to apply project management principles. It involves executing project initiation, performing project planning, performing project monitoring, and performing project closure.

Summary of Learning Outcomes

Learning Outcomes	Duration (Hours)
1. To execute project initiation	20
2. To perform project planning	40
3. To perform project monitoring	40
4. To perform project closure	10
TOTAL	110

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Execute project initiation	1.1. Identification of Project scope 1.1.1. Key Components Listing 1.1.1.1. Project goals and objectives 1.1.1.2. Deliverables 1.1.1.3. Inclusions and exclusions 1.1.1.4. Constraints and assumptions 1.1.2. Scope formulation process 1.1.2.1. Review client or stakeholder needs. 1.1.2.2. Document the project requirements. 1.1.2.3. Define project boundaries 1.1.2.4. Confirm scope with stakeholders 1.2. Determination of Project deliverables 1.2.1. Internal Deliverables 1.2.2. External Deliverables 1.2.3. Steps to Determine project deliverables: 1.2.3.1. Identifying key outcomes 1.2.3.2. Breaking down the	● Practical Activities ● Project work ● Demonstration ● Group Work ● Observation ● Third Party report ● Portfolio of Evidence ● Written tests

	project 1.2.3.3. Defining milestones 1.2.3.4. Clarifying project acceptance criteria 1.3. Identification of project objectives 1.3.1. SMART Objectives: 1.4. Project initiation document (PID) preparation. 1.4.1. Key Sections of the PID: 1.4.1.1. Project Purpose and Justification 1.4.1.2. Project Scope 1.4.1.3. Project Deliverables 1.4.1.4. Project Objectives: 1.4.1.5. Stakeholder Analysis 1.4.1.6. Project Organization 1.4.1.7. Project Timeline and Milestones 1.4.1.8. Budget and Resource Plan 1.4.1.9. Risk Assessment 1.4.1.10. Quality Management 1.4.2. Importance of the PID:	
2. Perform project planning	2.1. Preparation of Project budget 2.1.1. Steps of preparing budget 2.1.2. Budgeting techniques 2.2. Determination of Project schedule 2.2.1. Steps of preparing schedule 2.2.2. Project scheduling tools	● Practical Activities ● Project work ● Demonstration ● Group Work ● Observation ● Third Party report ● Portfolio of Evidence

	2.2.2.1. Critical path method 2.2.2.2. Program Evaluation and Review Technique (PERT) 2.3. Allocation of Project resources 2.3.1. Identify resources 2.3.2. Allocate based on availability 2.3.3. Balance resources 2.3.4. Monitor and adjust 2.4. Determination Project work breakdown structures (WBS) 2.4.1. Identify major project deliverables 2.4.2. Divide deliverables into smaller tasks 2.4.3. Assign resources and timelines 2.4.4. Use a numbering system 2.5. Preparation of Project quality plan 2.5.1. Quality objectives 2.5.2. Quality assurance activities 2.5.3. Quality control measures 2.5.4. Acceptance criteria 2.6. Formation of Project team. 2.6.1. Identify required skills 2.6.2. Select team members 2.6.3. Define roles and responsibilities	● Written tests
--	--	---

	2.6.4. Build team collaboration 2.7. Project team Roles and responsibilities 2.7.1. Define responsibilities 2.7.2. Assign roles 2.7.3. Document roles and responsibilities 2.7.4. Get sign-off 2.8. Preparation of Project plan. 2.8.1. Project objectives 2.8.2. Scope statement 2.8.3. Schedule 2.8.4. Resource plan 2.8.5. Risk management plan 2.8.6. Communication plan 2.8.7. Change management plan 2.8.8. Project Approval	
3. Perform project monitoring	3.1. Tracking Project costs 3.1.1. Steps to Track Costs: 3.1.1.1. Set a baseline budget: 3.1.1.2. Record actual expenses: 3.1.1.3. Compare planned vs. actual costs 3.1.1.4. Use Earned Value Management 3.1.1.5. Report cost status 3.1.2. Tools for Tracking Costs 3.2. Monitoring Project deliverables and objectives	● Practical Activities ● Project work ● Demonstration ● Group Work ● Observation ● Third Party report ● Portfolio of Evidence ● Written tests

	3.2.1. Define key deliverables 3.2.2. Set up a monitoring schedule 3.2.3. Track against the project plan 3.2.4. Use performance indicators 3.2.5. Report to stakeholders 3.2.6. ISO quality Standards 3.3. Monitoring Project team performance 3.3.1. Steps to Monitor Team Performance 3.4. Assessing Project risks 3.4.1. Steps to Assess Risks: 3.4.1.1. Identify potential risks 3.4.1.2. Evaluate risk impact and probability 3.4.1.3. Prioritize risks 3.4.1.4. Conduct a SWOT analysis 3.4.2. Types of Project Risks: 3.4.2.1. Technical risks 3.4.2.2. Schedule risks 3.4.2.3. Budget risks 3.4.2.4. Resource risks. 3.5. Managing Project risks. 3.5.1.1. Steps to manage risks	
4. Perform project closure	4.1. Performing Project review 4.1.1. Key Objectives of a Project Review	● Practical Activities ● Project work ● Demonstration

	4.1.2. Steps to Perform a Project Review 4.1.3. Post-Project Review Techniques 4.2. Review of Final project budget 4.2.1. Steps to Review the Final Budget 4.2.2. Key Considerations 4.3. Preparation of detailed project review report 4.3.1. Key Components of the Project Review Report 4.3.2. Purpose of the report	● Group Work ● Observation ● Third Party report ● Portfolio of Evidence ● Written tests
--	--	---

Suggested Delivery Methods

- Instructor led facilitation using active learning strategies
- Demonstration by trainer
- Practical work by trainees
- Viewing of related videos
- Field Visits
- Group Work
- Role plays
- Group projects

S/No.	Category/Item	Description/Specifications	Quantity	Recommended Ratio (Item: Trainee)
A	Learning Materials			
	Internet connection	✓ For each computer	1	1:1
	Flip charts	A1	1	1:25
	Textbooks	For reference	3	3:25
B	Learning Facilities & infrastructure			

	Theory Room	furnished with 25 Arm-chairs and a suitable trainer's table	1	1:25
C	Consumable materials			
	Printing papers	A4	2 Reams	1:12
	White board markers	Assorted colors	20	4:5
D	Tools and Equipment			
	Computers	✓ Genuine Windows/Linux ✓ Genuine Microsoft office Software ✓ Google Workspace Account ✓ Antivirus Software ✓ MS Project / Ms Visio ✓ Visual Paradigm ✓ Clickup	25	1:1
	External storage media	HDD / SSD / Flash	1	1:25
	Printer	Working printer	2	1:12
	1 Smart-board / Smart TV / Projector (with screen)	Where available	1	1:25
	Whiteboard/Chalkboard	4 X 8 Feet	1	1:25