

MANAGE DATABASE SYSTEM

UNIT CODE: IT/CU/ICT/CR/4/5

Relationship to Occupational Standards

This unit addresses the unit of competency: Manage database system

Duration of Unit: 310 hours

Unit Description:

This unit specifies competencies required to manage database system. Which involve identifying database concepts, designing a basic database, creation and manipulation of database objects, database testing and printing of database objects.

Summary of Learning Outcomes:

1. Identify database concepts
2. Design basic database
3. Create and manipulate database objects
4. Perform database testing
5. Print database objects

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Method
1. Identify database concepts	<ul style="list-style-type: none">• Define database• Database models are identified<ul style="list-style-type: none">✓ ER- Models✓ Relational Models✓ Hierarchical models✓ Network Models• Merits and demerits of database are defined	<ul style="list-style-type: none">• Practical exercises• Oral questioning• Written test• Learner portfolio of evidence.
2. Design basic database	<ul style="list-style-type: none">• Database design concepts are identified<ul style="list-style-type: none">✓ Entry integrity✓ Referential integrity	<ul style="list-style-type: none">• Practical exercises• Oral questioning• Written test

	<ul style="list-style-type: none"> ✓ Relationships 	<ul style="list-style-type: none"> • Learner portfolio of evidence.
3. Create and manipulate database objects	<ul style="list-style-type: none"> • Database objects are identified <ul style="list-style-type: none"> ✓ Tables ✓ Queries ✓ Reports ✓ Forms • Creation of tables <ul style="list-style-type: none"> ✓ Primary and secondary key • Linking of tables • Data variables • Database integration • Database Querying 	<ul style="list-style-type: none"> • Practical exercises • Oral questioning • Written test • Learner portfolio of evidence.
4. Perform database testing	<ul style="list-style-type: none"> • Integration testing • DB Query testing • Perform database testing • Generate test report 	<ul style="list-style-type: none"> • Practical exercises • Oral questioning • Written test • Learner portfolio of evidence.
5. Print database objects	<ul style="list-style-type: none"> • Procedure of printing database objects is identified • Print <ul style="list-style-type: none"> ✓ Tables ✓ Queries ✓ Reports ✓ Forms 	<ul style="list-style-type: none"> • Practical exercises • Oral questioning • Written test • Learner portfolio of evidence

Suggested Methods of Delivery

- Presentations and practical demonstrations by trainer;
- Guided learner activities and research to develop underpinning knowledge;
- Supervised activities and projects in a workshop;

The delivery may also be supplemented and enhanced by the following, if the opportunity allows:

- Visiting lecturer/trainer from the ICT sector;
- Industrial visits.

Recommended Resources

Tools <ul style="list-style-type: none">• Microsoft Access• MYSQL• SQL Server
Equipment <ul style="list-style-type: none">• Computer• Printer• Stationery
Materials and supplies Digital instructional material including DVDs and CDs <ul style="list-style-type: none">•
Reference materials Manuals