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| Title | **Handle database** | | |
| Level | **2** | **Credits** | **6** |

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| Purpose | This module aims to enable the learner to maintain company records (Set of logically related data) in an information system. |

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| Classification ISCED | 0611 Computer use |

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| Available grade | Competent / Not yet competent |

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| Modification history | N/A |

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| **Competency Unit** | **Performance Criteria** | **Knowledge and Understanding** |
| **C1: Keep Record** | **The trainee will be able to:**  **P1**. Enlist the techniques to mention fields and records in a table.  **P2**. Enlist different “keys” for the functionality of having indexes.  **P3**. Describe different data type e.g. character, number, logical, and date/time, etc.  **P4**. Define the role of different “keys” including Primary Key, etc.  **P5**. Illustrate definition of a Database; not null, unique, logical data entry.  **P6**. Create tables and indexes in a database.  **P7**. Describe DDL, DML concepts to insert/ modify operations of a table.  **P8**. Describe search criteria (queries) e.g. select, etc. | **K1**. Learn between column (field), row (record)  **K2**. Elaborate structure of a table (Database) in similarity with a table of a word document file  **K3**. Understand the database concept.  **K4**. Understand the procedure of database creation.  **K5**. Understand the use selection and limitation of different data types.  **K6**. Learn to execute specific search through queries.  **K7**. Learn procedure of data entry and assurance procedure to check validity of entered data. |

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| **Competency Unit** | **Performance Criteria** | **Knowledge and Understanding** |
| **C2: Manage Database Relationship** | **The trainee will be able to:**  **P1**. Establish relationships on different data entities defined, e.g. 1:1, 1:M, M:N  **P2**. Design ERD (entity relationship diagram).  **P3**. Design DFD (Data Flow Diagram)  **P4**. Draw step wise and design a Data Flow Diagram. | **K1**. Learn the steps to find the relationships between entities through cardinality concepts.  **K2**. Learn the steps to design Entities Relationship diagrams for (1:1, 1: N, N: N) relations.  **K3**. Follow steps to design Data Flow Diagram.  **K4**. Understand Normalization process up to level 3. |