ICDL ADVANCED – Database – AM5

Description

This course covers the key database concepts necessary to understand a relational database and use an appropriate application to create an advanced database structure and outputs.

Course Content
Chapter 1: Database Concepts

- Module 1: Database Development and Use
  - Know that different types of database models exist like: hierarchical, relational, object-oriented
  - Know the life cycle stages of a database: logical design, database creation, data entry, data maintenance, information retrieval
  - Recognize common business applications of databases like: dynamic website, customer relationship management systems, enterprise resource planning systems, website content management systems
  - Know the term SQL (structured query language) and understand its main use in querying database content

Chapter 2: Tables and Relationships

- Module 1: Fields/Columns
  - Create, modify, delete a lookup in a field/ column
  - Create, modify, delete an input mask in a field/ column
  - Set data entry for a field/column: required, not required
- Module 2: Relationships and Joins
  - Create, modify, delete a one-to-one, one-tomany relationship between tables
  - Create, modify a many-to-many relationship using a junction table
  - Apply referential integrity between tables
  - Apply automatic update of related fields
  - Apply automatic deletion of related records
  - Apply, modify an inner join, outer join
  - Create, modify a subtract join
  - Apply a self join

Chapter 3: Queries

- Module 1: Query Types
  - Create, run a query to update data in a table
  - Create, run a query to append records to a table
  - Create, run a query to delete records in a table
  - Create, run a query to save selected data as a new table
  - Create, run a crosstab query
  - Create, run a query to show duplicated records within a table
  - Create, run a query to show unmatched records in related tables
- Module 2: Refining a Query
  - Create, modify, run a one, two variable parameter query
  - Use wildcards in a query: [ ], !, -, #

© Copyright ITTA – All contents are protected by copyright.

    - Show highest, lowest range of values in a query
    - Create and name a calculated field that performs arithmetic operations
    - Group information in a query using functions: sum, count, average, max, min

Chapter 4: Forms

- Module 1: Controls
    - Create, modify, delete bound controls: text box, combo box, list box, check box, option groups
    - Apply, remove bound control properties like: limit to list, distinct values
    - Create, modify, delete unbound controls containing arithmetic, logical expressions
    - Modify sequential tab order of controls on a form
    - Create, delete a linked subform

Chapter 5: Reports

- Module 1: Controls
    - Format arithmetic calculation controls in a report: percentage, currency, to a specific number of decimal places
    - Apply a running sum for a group, over all
    - Concatenate fields in a report
- Module 2: Presentation
    - Insert, delete a data field in group, page, report headers and footers
    - Sort, group records in a report by field(s)
    - Force page breaks for groups in a report
    - Create, delete a linked subreport

Chapter 6: Enhancing Productivity

- Module 1: Linking, Importing
    - Link external data to a database: spreadsheet, text (.txt, .csv), existing database files
    - Import spreadsheet, text (.txt, .csv), XML, existing database files into a database
- Module 2: Automation
    - Create a simple macro like: close an object and open another object, open and maximize an object, open and minimize an object, print and close an object
    - Assign/attach a macro to a command button, object, control

Lab / Exercises

- Practice exercises will be offered during and at the end of each module

Documentation

- Digital courseware included

Exam

- This course prepares to the exam ICDL Database Advanced (AM5). If you wish to take this exam, please contact our secretariat who will let you know the cost of the exam and will take care of all the necessary administrative procedures for you

Participant profiles

- Individuals wishing to develop their skills and Knowledge about the use of a database

Prerequisites

© Copyright ITTA – All contents are protected by copyright.

- Advanced knowledge on databases
- Understand key concepts of database development and usage
- Create a relational database using advanced table creation features and complex relationships between tables
- Design and use queries to create a table, update, delete and append data
- Refine queries using wildcards, parameters and calculations
- Use controls and subforms to enhance forms and improve functionality
- Create report controls to perform calculations
- Create subreports and enhance report presentation

Objectives

- Understand key concepts of database development and usage
- Create a relational database using advanced table creation features and complex relationships between tables
- Design and use queries to create a table, update, delete and append data. Refine queries using wildcards, parameters and calculations
- Use controls and subforms to enhance forms and improve functionality
- Create report controls to perform calculations. Create subreports and enhance report presentation
- Enhance productivity by working with macros and use linking and importing features to integrate data

Niveau
Avancé
Classroom Registration Price (CHF)
1300
Virtual Classroom Registration Price (CHF)
1200
Duration (in Days)
2
Reference
ECDL3-AM5

© Copyright ITTA – All contents are protected by copyright.