

Overview page

Introduction to databases

Level: Beginners

Contact time: One evening a week for 10 weeks (there will be a 2 week break part way)

Databases are all around us. Everything we do from shopping to watching television is likely to involve a database of some sort.

This module teaches the fundamentals of extracting information from a relational database using structured query language (SQL). You will gain an understanding of the basic SQL statements that can be written to provide information that is useful to a business. You will also learn how to design and create your own database structure for storing business information.

PDF document information

Contact hours: Up to 2 hours per contact week for tutorials. Learners will also be required to watch lecture recording and carry out computer-based activities on their own PC.

Synopsis: Databases are all around us. Everything we do from shopping to watching television is likely to involve a database of some sort. This module teaches the fundamentals of extracting information from a relational database using structured query language (SQL). You will gain an understanding of the basic SQL statements that can be written to provide information that is useful to a business. You will also learn how to design and create your own database structure for storing business information.

Notes: This module is aimed at professional learners who are looking to learn the basics of using SQL databases.

Assessment: Learners will be assessed on their understanding through assignments, and a two-hour open book test.

Aim: This module aims to introduce learners to structured query language (SQL) which is used for the manipulation of data in relational databases. It also introduces a formal method of database design.

Learning outcomes: Describe the major characteristics of a relational database; Write SQL queries to extract information from a relational database; Carry out database design; Write SQL queries to create and manipulate a database.

Syllabus: Introduction to databases; Introduction to SQL; Searching and sorting data; Calculations and function; Aggregate functions and grouping; Multi-table queries; Database design; Data definition; Data manipulation; Database security.