



HP NonStop SQL/MP Essentials U4181S

This 4-day course is an introduction to the HP NonStop SQL/MP database product and serves as a prerequisite to more advanced courses. Hands-on lab sessions provide practical experience with creating databases and generating queries to access the data. The course is 70 percent lecture and 30 percent hands-on labs using HP NonStop servers.

HP NonStop SQL/MP Essentials

Price USD \$3,200

Links to local schedules, pricing and [US/Canada](#)
[Mexico/Latin America](#)
[Brazil](#)

HP course # U4181S

Category NonStop

Duration 4 days

Audience

- Anyone working with or interested in the HP NonStop SQL/MP product
- Anyone responsible for managing or designing a database or developing embedded SQL programs

Prerequisites

- Concepts and Facilities for NonStop Systems (U4147S)

Course objectives

At the conclusion of this course you should be able to:

- Understand relational database concepts and terminology

Benefits to you

- Relational database concepts and terminology
- HP NonStop SQL/MP components
- HP NonStop SQL/MP database structures
- HP NonStop SQL/MP conversational interface
- HP NonStop SQL/MP queries
- HP NonStop SQL/MP database object creation and management

Next steps

- NonStop SQL/MP Programming (U4182S) or
- NonStop SQL/MP Query Design for Performance (U4183S) or
- NonStop SQL/MP Database Management (U4180S) or
- NonStop SQL/MP Physical Database Design (U5082S) or

Course outline

Module 1 - Relational Database Definitions

- Flat-file systems and relational database management systems (RDMBS)
- Components of a relational table
- Relational database structure
- Primary and foreign keys in a relational table
- Different types of relationships
- How relationships are formed in a relational database

Module 2 - SQL/MP Physical Architecture

- Characteristics and functions of NonStop SQL/MP objects
- Function and important aspects of each of the objects

Module 3 - NonStop SQL/MP Process Architecture

- Characteristics and functions of NonStop SQL/MP processes
- Function and important aspects of each of the processes
- Overall data flow

Module 4 - NonStop SQL/MP - the SQL Language

- Standard types of SQL statements and their functions

Module 5 - NonStop SQL/MP Conversational Interface

- Setting up an SQLCI session
- Standard SQLCI commands
- Ad hoc query processing

Module 6 - Generating Queries for Single Tables

- Core syntax, structure, and function of an SQL query

Module 7 - Generating Queries Against Multiple Tables

- Concept of a "join"
- Simple join examples
- How joining works and how to work through a join

Module 8 - SQL Subqueries

- Concept of a subquery
- Two types of subqueries
- Syntax of subqueries

Module 9 - Creating a NonStop SQL/MP Database

- Catalog
- Table
- Partition
- Index
- Constraint
- View
- Comment
- Collation

Module 10 - Creating Rows and Loading a NonStop SQL/MP Database

- Referential integrity
- How to use the INSERT statement
- SQL utilities, CONVERT, COPY, and LOA

Module 11 - Modifying Database Data

- Business transactions and Transaction Control Language (TCL) SQL commands
- SQL UPDATE and DELETE commands
- Locking mechanisms

Module 12 - NonStop SQL Management Functions

- Introduction to managing an SQL/MP database
- Syntax to alter or drop a NonStop SQL/MP object
- Impact and considerations to alter or drop SQL objects in the database
- Security issues related to adding, altering, or dropping an SQL object from the database
- Object dependencies
- SQLCI and NonStop kernel utilities

Learn more at

hpe.com/us/training/nonstop