

## BC402: Advanced ABAP

### Course Outline

#### Course announcements

In this course, you will acquire in-depth knowledge of the advanced features in ABAP programming and understand how to apply them practically in your ABAP applications.

#### Course Duration

5 Days

#### Delivery Format

Classroom, Virtual Live Classroom, Hybrid

#### Course Fee

Contact us for more details

#### Goals

This course will prepare you to:

- Acquire in-depth knowledge of the ABAP programming language
- Write more robust ABAP programs
- Assess ABAP programming techniques according to performance aspects and develop high-performance programs
- Gain detailed knowledge in ABAP Open SQL
- Develop dynamic ABAP programs

#### Audience

- Developer
- Developer Consultant

#### Content

- ABAP Language Evolution
  - Explaining the Difference between Statements, Functions and Expressions
  - Describing ABAP Data Types and Data Objects
  - Selecting Data from a Single Database Table with Open SQL

- Program Calls and Memory Management
  - Calling Programs Synchronously
  - Describing the ABAP Runtime and Memory Management
  - Using Shared Objects
- Statements, Functions, and Expressions for Simple Data
  - Using Numeric Data Types in Arithmetic Expressions
  - Understanding Statements for Processing Character Strings and Byte Strings
  - Processing Character Strings and Byte Strings Using Functions and Expressions
- Internal Tables
  - Using Standard, Sorted, and Hashed Tables
  - Using Special Techniques with Internal Tables
  - Using Expressions for Internal Tables
  - Using Data References and Field Symbols
- Dynamic Programming
  - Explaining the Dynamic Programming Techniques of ABAP
  - Using Dynamic Statements and Dynamic Calls
  - Using Generic Data Types
  - Describing Data Types, Data Objects, and Objects at Runtime
  - Creating Data Types, Data Objects, and Objects at Runtime
- ABAP Open SQL
  - Describing the Technical Background of Database Accesses with Open SQL
  - Processing and Aggregating Datasets on the Database
  - Implementing Complex WHERE Conditions and Special INTO Clauses

- Using the Features of the New Open SQL
- Selecting Data from Multiple Database Tables
- Explaining Additional Techniques for Reading from Multiple Database Tables
- Analysis and Testing
  - Defining and Activating Checkpoints
  - Using the ABAP Trace
  - Using the SQL Trace
  - Using the SQL Monitor