SAP Technical Bundle Course

SAP ABAP

1. Introduction to ABAP/4
- Introduction to ERP
- Introduction to SAP/3, ABAP/4
- ABAP Editor
- System Landscapes
- Data Types & Keywords
- Output Statements
- Arithmetic Operations
- Relational Operations
- Writing Small Programs
- String Operations

- Control Statements
- Selection Screens
- Open SQL Statements (Insert, Modify, Delete, Update)
- Simple Reporting

2. Transport Organizer & Package Builder
- Why to Transport?
- Creation of a Task
- What is a Transport Request?
- Releasing of Request
- Package Creation

3. Data Dictionary
- Creation of Database Tables
- Data Element & Data Domain
- Structures & Table Types
- Search Helps
- Creation of Views
- Type Groups
- Creation of Foreign Keys
- Check & Value Tables

4. Reporting
- Debugging Techniques
- Pillars of ABAP
- Modularization Techniques
- For All Entries & Joins
- Events for Classical Reports
- Events for Interactive Reports
- Types of Messages & Message Class Creation

5. ABAP List Viewer
Introduction to ABAP List Viewer
Types of ABAP List Viewer
- Function Module for List Display
- Function Module for Grid Display
- Interactive ALV (SLIS)

6. Interfaces
- Introduction to Cross Applications
- Working with RFC Function Modules
- Overview of Business Objects

- Creation of Business Objects
- Creation of BAPI

7. Conversion
Why Data Transfer?
- Introduction to BDC
- Recording a Transaction
- Methods in BDC
- Flat File Creation
- Uploading Data
- LSMW (Legacy System Migration Workbench)

8. Enhancements
- Introduction to Enhancements
- User Exits
- Customer Exits
- Introduction to BAdIs (Business Add Ins)
- Implementation of a BAdI
- Overview of Enhancement Spots, Enhancement Sections, Enhancement Implementations, Class Enhancements

9. Forms (Scripts & SMARTFORMS)
- Introduction to Scripts
- Layout Sets
- SAP Scripts Elements
- Logo Inclusions
- Working with SMARTFORMS
- Standard Text
- Graphics Managements
- Writing Print Programs & Designing Layouts
- Output Type Configuration to Standard Orders

10. Object Oriented ABAP
- Fundamentals of Object Orientation
- Introduction to Local Classes & Methods
- Importance of Access Specifiers
- Simple Reporting using Local Classes & Methods
- Introduction to Global Classes & Interfaces
- Uses of Global Classes in Reports

11. Module Pool Programming
- Introduction to Module Pool

- Flow Logic
- Screen Designing
- Programming in Object Browser
- Creation of Table Controls
- Dynamic Screens

12. Sales & Distribution Flow

SAP BW/4HANA

- Getting started
  - SAP HANA
  - SAP BW/4HANA
  - SAP BW/4HANA Modeling Tools in Eclipse and SAP BW/4HANA Cockpit
- Paths to SAP BW/4HANA
  - Overview with additional details for In-Place Conversion as well as Remote Conversion.
- SAP HANA Modeling
  - SAP HANA native Modeling of Calculation Views
- Modeling and Running the SAP BW/4HANA Data Warehouse
  - InfoObject Enhancements
  - Advanced DataStore-Objects
  - CompositeProviders
  - BAdI-Providers
  - HANA-optimized Transformations
  - Process Chain Enhancements
  - HANA-optimized Analytic Manager
  - HANA Analysis Processes
  - Changes regarding Authorizations
  - SAP BW/4HANA Statistical Analysis based on ABAP CDS Views
  - SAP BW/4HANA Tool Collection
- Modeling with SAP´s Reference Architecture LSA++
  - Review of Layered Scalable Architecture (LSA)
  - From LSA to LSA++: Streamline Core Layers
  - LSA++: Open Operational Data Store Layer based on Open ODS Views
  - LSA++: BW/4HANA Workspaces
- Hybrid Modeling in Mixed Scenarios
  - Generation of external HANA-Views for BW/4HANA Objects
  - Modeling Mixed Scenarios
  - SAP BW/4HANA Content Add-On

- o Use case for Mixed Scenarios: SAP Predictive Analytics (optional)
- SAP BW/4HANA Data Lifecycle Management
  - o Multi-Temperature Data Management
  - o SAP BW/4HANA Data Tiering Optimization
  - o Additional Tiering Concepts
- Data Provisioning into SAP HANA and SAP BW/4HANA
  - o Overview of Data Provisioning Methods into SAP HANA
  - o SAP LT Replication into SAP HANA
  - o SAP HANA Smart Data Access
  - o SAP HANA Smart Data Integration incl. real-time Streaming
  - o Operational Data Provisioning into SAP BW/4HANA based on SAP Extractors, ABAP CDS Views, HANA Information Views and BW InfoProviders
  - o Integration of Big Data

SAP BO

1. Introduction:

- Understanding BusinessObjects Enterprise
- What is BusinessObjects Enterprise?
- Working with SAP BO Launchpad (Infoview)

2. SAP Business Objects Web Intelligence and BI Launch Pad 4.1

- SAP Business Objects Dashboards 4.1
- BI launch pad: What's new in 4.1
- Restricting data returned by a query
- Enhancing the presentation of data in reports
- Formatting reports
- Calculating data with formulas and variables
- Using multiple data sources
- Analyzing data
- Managing and sharing Interactive Analysis documents
- Reporting from Other Data Sources
- Introducing Web Intelligence
- Accessing corporate information with Web Intelligence
- Understanding how universes allow you to query databases using everyday business terms.
- Managing documents in InfoView
- Viewing a Web Intelligence document in InfoView
- Setting Info View Preferences
- Creating Web Intelligence Documents with Queries
- Getting new data with Web Intelligence
- Creating a new Web Intelligence document
- Modifying a document's query

- Working with query properties
- Restricting Data Returned by a Query
- Modifying a query with a predefined query filter
- Applying a single-value query filter
- Using prompts to restrict data
- Using complex filters
- Displaying data in tables and charts
- Presenting data in free-standing cells
- Enhancing the Presentation of Reports
- Using breaks, calculations, sorts and report filters
- Ranking data to see top or bottom values
- Using alerters to highlight information
- Organizing a report into sections
- Copying data to other applications
- Alternative Query Techniques Using Combined Queries Using Sub-Queries
- Creating a Query based on another Query
- Character and Date String Functions Using the character string functions Concatenating different data types Using date functions
- Using If Logic
- Grouping data using If() logic
- Using If() to modify calculation behavior
- Advanced Reporting Features Formatting breaks
- Creating custom sorts
- Displaying document data in free-standing cells
- Alternative Query Techniques Defining Combined Query Types Using Combined Queries
- Using Sub-Queries
- Creating a Query on a Query
- Character and Date String Functions Understanding Character Strings
- Using Date Functions User-Defined Objects Creating User Objects
- Using a User Object in a Query
- Editing a User Object Deleting a User Object Storing a User Object Grouping Data

3. Information Design Tool 4.0

- What is the Information Design Tool (IDT)
- Create a project
- Create a connection to a relational database (Single and Multiple databases)
- Create the data foundation with Single & Multiple databases
- Define the different types joins in a data foundation
- Create a business layer
- Create folders and objects
- Resolve Loops and Use alias
- Resolve Loops Use contexts
- Resolving the fan traps and Chasm traps problem
- Define data restrictions
- Work with LOVs

- Use Parameters restrict data
- Use @functions also Aggregate Awareness
- Create Derived Tables and Index Awareness
- Maintain universes
- Deploy and manage and maintain universes

4. Universe Designer Tool 4.0

- Understanding Business-Objects Universes.
- Understanding how universes allow users to query databases using their everyday business terms.
- Creating Universe Connections.
- The course database and universe.
- Creating the universe.
- Building and populating the Universe Structure.
- Defining joins in a universe.
- Creating Dimension Objects.
- Understanding classes and objects.
- Creating Measure Objects.
- Understanding measure objects.
- Using List of Values.
- Resolving Loops.
- Resolving loops using aliases.
- Resolving loops using contexts.
- Chasm traps and Fan traps.
- Restricting the data returned by objects.
- Using Functions with Objects.
- Using @ Functions.
- Using Hierarchies.
- Working with hierarchies.
- Aggregate Awareness.
- Derived Tables
- Securing Universes.
- Managing Universes

5. SAP Business Objects Dashboards 4.0 (Crystal Xcelsius 2011)

- Crystal Xcelsius Overview
- Creating Dashboards using Query As A Web Service (QAAWS) and Live Office
- Create Drill Down dashboard reports
- What's new in SAP Business Objects Dashboards 4.0
- Creating a Visualization
- Producing interactive visualizations
- Getting around in Xcelsius
- Working with your Excel workbook
- Visualizing data with charts

- Using Xcelsius Components
- Formatting a Visualization
- Applying formatting options
- Using themes and templates to apply formatting
- Adding Interactivity to a Visualization
- Using selectors
- Adding dynamic visibility
- Using live data sources
- Connecting to BO Universes using Query as a Web Service
- Using Live Office data
- Creating Complex dashboards

6. SAP Crystal Reports 2011

- Creating reports
- Selecting records
- Organizing data on reports
- Formatting & section formatting
- Creating basic and complex formulas
- Using variables
- Using report templates
- Applying conditional reporting
- Building parameterized and specialized reports
- Summarizing data with cross tabs
- Using report sections
- Representing data visually
- Managing reports
- Distributing reports
- Using repository and repository data sources
- Report processing
- Linking Crystal Reports to Webi reports
- Drill down reports