SAP ABAP on HANA Brochure

Course Content:

1. SAP Overview
- Introduction to ERP
- Introduction to SAP
- SAP R/3 Architecture

2. Introduction to ABAP
- ABAP Statements and Keyword
- ABAP Data Types
- Arithmetic operations
- String operations
- Input/output Statements
- Loop operations
- Conditional Statements
- Package
- Transport Organizer
- Request
- Processing Blocks in ABAP
- Field Symbols

3. Components of ABAP Data Dictionary
- Data Elements
- Domains
- Tables
- Structures
- Views
- Search Help Object
- Lock Objects
- Creation and Maintenance of Tables
- Table maintenance generator

- Primary and Foreign keys

4. Internal Tables
- Types of Internal Tables
- Creating and Processing Internal Tables
- Types of Joins

5. Modularization Techniques
- Include Programs
- Sub Routines
- Function Modules
- Macros

6. Debugging Techniques
- Breakpoint creation
- Watchpoint creation

7. Dialog/Module Pool Programming
- Screen Painter
- Menu Painter
- Flow Logic Events
- Sub screens
- Tab strip control
- Table control

8. Report Programming
- Types of Reports
- Classical Report
- Interactive Report
- ALV Report
- Selection Screen
- Control Break Statements

9. Interface
- Step By Step Approach followed to create BAPI
- Standard BAPI

- Custom BAPI
- Remote Function Calling (RFC)

10. Conversion

- Batch Data Communication (BDC)
- Types of BDC Programming
- Call Transaction
- Session Method
- Recording in BDC Programming
- Error Handling
- Legacy System Migration Workbench (LSMW)

11. Forms

- SAP script
- Smart forms

12. Enhancements

- BADI
- User Exit
- Customer Exit

🔲 S4 HANA ABAP

1. HANA Introduction

- Introduction to High-Performance Analytical Architecture
- Components and Tools of SAP HANA
- Advanced Database Management
- SAP HANA Software Editions
- Hardware and software technology Innovations

2. SAP Components of SAP HANA

- SAP HANA DATABASE
- SAP HANA STUDIO
- SAP HANA CLIENT
- SAP HANA Function Libraries
- Data Replication Methodologies

- Life Cycle Management Components
- Row vs Column storage, Hot vs Cold Data Storage

3. Performance Tools in SAP HANA

- Understand the Runtime Analysis (SE30)
- Understand the ABAP Trace (SAT)
- Understand the Code Inspector (SCI)
- Understand the SQL Trace (ST05)
- SQLM and SWLT

4. SAP HANA – OO ABAP Concepts

- Visibility (Public/Protected/Private)
- Static/Instance Variables, Constants
- Static/Instance Methods, Method Parameters
- Interfaces, Interface Methods
- Inheritance, Polymorphism, Abstract Methods & Abstract Classes, Casting

5. SAP HANA on Application Development ABAP

- New Technical Options
- Code Push Down
- Impact on Database
- ALV IDA Reporting on HANA
- WebDynpro Applications on HANA
- FPM on HANA
- Developing Forms& Reports on HANA
- Screen designing on HANA ABAP
- Interfaces & Enhancements using HANA ABAP
- Web service & Proxy Development on HANA
- Net Weaver Gateway services on HANA

6. SAP HANA Positioning and Architecture

- Architecture of SAP HANA
- Data Provisioning
- Modelling on HANA Platform
- Data Reporting

7. SQL Basics for SAP HANA

- Basic Concepts of SQL
- Fetching Data from Tables / Views
- Retrieving Data from Multiple Tables
- Data Aggregation
- Modification of Data from Tables
- Data Storage techniques
- Accessing Data using Views
- Database Transactions

8. SQL Concepts for SAP HANA

- SQL Clause New Feature
- SQL Functions
- Using Tuple Variables
- Case Statements in SQL
- Group By
- Order By
- IS NULL/ NOT NULL
- Between
- LIKE Predicate
- Order Precedence
- Aggregate Functions
- UNION and UNION ALL
- Joining Table
- Inner Join
- Left & right Outer Join
- Full Outer Join
- Data Manipulation
- Insert / Update / Delete
- Data Definition
- Create column table
- Alter Table
- Rename Table

9. View Modelling in SAP HANA STUDIO

- Attribute Views
- Analytical Views
- Calculation Views

- SAP HANA Views in ABAP
- Approaching Code to Data Paradigm
- SAP HANA Views with Native SQL Approach
- Access HANA views in External Views in ABAP DDIC
- Transport of SAP HANA Objects
- ABAP DATABASE CONNECTIVITY (ADBC)

10. CDS (Core Data Services)

- View Definitions using CDS
- Open SQL usage
- ABAP Language Enhancements
- CDS implementation in CDS
- Creation of CDS Views
- Core Data Services View Definition
- CDS View on View
- CDS Views with Input Parameters
- CDS Views Associations
- CDS Annotations

11. SAP HANA Database procedures in ABAP

- Database Procedures in ABAP
- SAP DB procedures in ABAP
- ABAP-MANAGED DATABASE PROCEDURES
- Creation of AMDP

12. Development Environment

- Basic Principles of Eclipse
- SAP's Eclipse
- Integration of Eclipse and SAP Software

13. ABAP Development Tools (ADT)

- Installation of ABAP Development tools
- ADT in Development System

14. Application Transport

- Transport Management in SAP HANA
- Combined ABAP/ HANA

- HANA transport Container
- Enhanced transport Container

15. Run Time Analysis with SAP HANA
- Error Analysis
- ABAP Code Analysis
- SAP HANA Plan Visualizer

16. Advanced Topics
- ABAP List Viewer (ALV) with Integrated Access to SAP HANA
- Transport of SAP HANA Objects

✓ **Assignments**

✓ **Interview Questions**

After completing the course, the institute will offer complementary topics such as:

✓ **Resume Building with Sample copies**
- Crafting a professional and impactful resume tailored to the IT industry.

✓ **Job Guidance**
- Tips on job searching, networking, and applying for relevant positions.

✓ **Personality Development**
- Building confidence, leadership, and personal branding.

✓ **LinkedIn Profile Creation**
- Building a strong LinkedIn profile to attract recruiters and showcase your professional journey.

✓ **Naukri Profile Creation**
- Creating and optimizing your Naukri.com profile to increase job visibility and opportunities.

These topics help equip you with the technical and professional tools needed to succeed in the job market.