



info@kashatraining.com

Call: (IN) 8447799888
(US) +1 (515) 442-2418

SAP BW/4HANA Training Curriculum Online by Certified Consultant

Course Overview

SAP BW/4HANA is SAP's next-generation enterprise data warehouse solution built exclusively for the SAP HANA platform. It enables organizations to consolidate, transform, model, and analyze large volumes of business data in real time. This course provides comprehensive training on SAP BW/4HANA architecture, data modeling, data acquisition, reporting, administration, and performance optimization.

Participants will gain hands-on experience in building modern data warehouses, integrating SAP and non-SAP data sources, creating advanced data models, and supporting business intelligence and analytics requirements.

Course Duration: 50–70 Hours

Mode: Online

Level: Beginner to Advanced

Prerequisites: Basic knowledge of SAP ERP, databases, and data warehousing concepts

Module 1: Introduction to SAP BW/4HANA

Topics Covered

- Introduction to Data Warehousing
- Evolution from SAP BW to SAP BW/4HANA
- SAP BW/4HANA Architecture
- SAP HANA Platform Overview
- Data Warehouse Concepts
- SAP BW/4HANA Landscape
- Key Features and Benefits
- SAP BW/4HANA Tools Overview

Practical Exercises

- Explore SAP BW/4HANA Environment
- Understand System Architecture
- Navigate BW Modeling Tools

Module 2: SAP HANA Fundamentals for BW Consultants

Topics Covered

- SAP HANA Architecture
- In-Memory Computing Concepts
- Column Store vs Row Store
- HANA Database Fundamentals
- HANA Studio Overview
- Data Persistence Concepts
- HANA Security Basics

Practical Exercises

- Explore SAP HANA Database
 - Execute Basic SQL Queries
 - Understand HANA Data Structures
-

Module 3: SAP BW/4HANA Modeling Tools

Topics Covered

- Eclipse-Based BW Modeling Tools
- Project Configuration
- Modeling Perspectives
- Object Management
- Repository Structure
- Object Transport Concepts

Practical Exercises

- Configure BW Modeling Tools
 - Create Modeling Projects
 - Manage Repository Objects
-

Module 4: Data Acquisition and Extraction

Topics Covered

- Data Provisioning Concepts
- Operational Data Provisioning (ODP)
- SAP Source System Connections
- Non-SAP Data Sources
- Flat File Uploads
- Database Connections
- Data Services Integration
- Real-Time Data Acquisition

Practical Exercises

- Connect Source Systems
 - Configure Data Extraction
 - Load Data into BW/4HANA
-

Module 5: InfoObjects

Topics Covered

- Characteristics
- Key Figures
- Units and Currencies
- Time Characteristics
- Master Data Management
- Texts and Hierarchies
- Attributes and Navigation Attributes

Practical Exercises

- Create InfoObjects
 - Load Master Data
 - Configure Hierarchies
-

Module 6: DataStore Objects (ADSO)

Topics Covered

- Advanced DataStore Objects (ADSO)
- ADSO Architecture
- Standard ADSO



info@kashatraining.com

Call: (IN) 8447799888
(US) +1 (515) 442-2418

- Data Acquisition Layer
- Corporate Memory Layer
- Reporting Layer
- Data Activation Process

Practical Exercises

- Create ADSOs
 - Load and Activate Data
 - Build Reporting Models
-

Module 7: Composite Providers

Topics Covered

- Composite Provider Concepts
- Data Virtualization
- Join Operations
- Union Operations
- Multi-Provider Replacement
- Data Federation Techniques

Practical Exercises

- Create Composite Providers
 - Configure Joins and Unions
 - Test Data Models
-

Module 8: Open ODS Views

Topics Covered

- Open ODS View Concepts
- Virtual Data Access
- Data Integration Scenarios
- External Data Sources
- Real-Time Reporting

Practical Exercises

- Create Open ODS Views
 - Access External Data
 - Build Virtual Reporting Models
-

Module 9: Data Transformation and Processing

Topics Covered

- Transformation Rules
- Data Cleansing
- Data Mapping
- Start Routines
- End Routines
- Expert Routines
- DTP (Data Transfer Process)
- Error Handling

Practical Exercises

- Create Transformations
 - Implement Data Mapping
 - Process Data Loads
-

Module 10: SAP BW Queries

Topics Covered

- Query Designer
- Calculated Key Figures
- Restricted Key Figures
- Variables
- Structures
- Conditions and Exceptions
- Query Performance Optimization

Practical Exercises

- Design BW Queries
- Create KPIs
- Configure Variables

Module 11: Reporting and Analytics

Topics Covered

- Reporting Architecture
- SAP Analytics Integration
- Business Intelligence Concepts
- Dashboard Development
- Self-Service Analytics
- Data Visualization

Practical Exercises

- Create Reports
 - Build Dashboards
 - Analyze Business Data
-

Module 12: SAP Analytics Cloud Integration

Topics Covered

- SAP Analytics Cloud Overview
- Live Data Connections
- Import Connections
- Story Design
- Analytical Applications
- Planning Integration

Practical Exercises

- Connect BW/4HANA with SAP Analytics Cloud
 - Build Interactive Dashboards
-

Module 13: Process Chains

Topics Covered



info@kashatraining.com

Call: (IN) 8447799888
(US) +1 (515) 442-2418

- Process Chain Architecture
- Scheduling Data Loads
- Automation Concepts
- Monitoring Process Chains
- Error Recovery Procedures

Practical Exercises

- Create Process Chains
 - Schedule Automated Loads
 - Monitor Data Processing
-

Module 14: Administration and Monitoring

Topics Covered

- System Administration
- Data Load Monitoring
- Process Monitoring
- User Management
- Authorization Concepts
- Audit and Logging
- Housekeeping Activities

Practical Exercises

- Monitor Data Loads
 - Manage Users and Roles
 - Analyze System Logs
-

Module 15: Performance Optimization

Topics Covered

- SAP HANA Optimization
- Query Performance Tuning
- Data Modeling Best Practices
- Partitioning Strategies
- Data Tiering Optimization
- System Resource Management

Practical Exercises

- Analyze Query Performance
 - Optimize Data Models
 - Improve Reporting Speed
-

Module 16: Security and Authorizations

Topics Covered

- BW Security Architecture
- Analysis Authorizations
- User Roles
- Data Access Control
- Secure Reporting Environment

Practical Exercises

- Create Security Roles
 - Configure Analysis Authorizations
-

Module 17: Migration to SAP BW/4HANA

Topics Covered

- Migration Strategy
- BW to BW/4HANA Conversion
- Object Simplification
- Migration Tools
- Readiness Assessment
- Post-Migration Activities

Practical Exercises

- Perform Migration Assessment
 - Convert Existing Objects
-



info@kashatraining.com

Call: (IN) 8447799888
(US) +1 (515) 442-2418

Module 18: Real-Time Project

End-to-End SAP BW/4HANA Data Warehouse Project

Project Objectives

- Design Enterprise Data Warehouse Architecture
- Extract Data from SAP and Non-SAP Systems
- Build ADSOs and Composite Providers
- Create Transformations and Process Chains
- Develop BW Queries and Reports
- Integrate with SAP Analytics Cloud
- Implement Security and Monitoring