Course Schedule 2020
SAP Skills University Singapore

<table>
<thead>
<tr>
<th>Solution / Course</th>
<th>Duration</th>
<th>Fee excl 7% GST (SGD)</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>WSB BW SAP Business Warehouse powered by SAP HANA (FT)</td>
<td>20 days</td>
<td>13,815</td>
<td>26-Oct-20</td>
<td>27-Nov-20</td>
</tr>
<tr>
<td>BW305H SAP BW powered by SAP HANA: BW Query Design</td>
<td>5 days</td>
<td></td>
<td>26-Oct-20</td>
<td>30-Oct-20</td>
</tr>
<tr>
<td>BW310H SAP BW powered by SAP HANA: Enterprise Data Warehousing</td>
<td>5 days</td>
<td></td>
<td>02-Nov-20</td>
<td>06-Nov-20</td>
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<tr>
<td>BW330H SSAP BW powered by SAP HANA: Data Warehouse Modeling</td>
<td>5 days</td>
<td></td>
<td>16-Nov-20</td>
<td>20-Nov-20</td>
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<tr>
<td>BW350H SAP BW powered by SAP HANA: Data Acquisition</td>
<td>5 days</td>
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<td>23-Nov-20</td>
<td>27-Nov-20</td>
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<tr>
<td>C_TBW50H_75 SAP Certified Application Associate - Modeling and Data Acquisition with SAP BW 7.5 powered by SAP HANA</td>
<td></td>
<td>18-Dec-20</td>
<td>18-Dec-20</td>
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Please note, SAP reserves the right to change the pricing and / or promotions without prior notice.

Course details are the last updated on 13-May-2020
For more information, visit https://training.sap.com/

BW305H SAP BW powered by SAP HANA: BW Query Design

Goals
- This course will prepare you to:
  - Provide students with an overview of SAP BW powered by SAP HANA
  - Provide knowledge to create query definitions using BW Query Designer and to make them available for analysis

Audience
- Application Consultant
- Business Analyst
- Business Process Owner / Team Lead / Power User
- Data Consultant / Manager
- Program / Project Manager
- Technology Consultant
- User

Prerequisites
Essential
- None
BW305H SAP BW powered by SAP HANA: BW Query Design (Contd...)

Recommended
• Experienced and sound knowledge of the subject matter of at least one SAP ERP application course.

Course based on software release
• SAP BW 7.5 on SAP HANA

Content
• Introduction to SAP HANA and SAP Business Warehouse (BW)
  – Describing the Evolution and Data Layout of SAP HANA
  – Describing the Concepts of Business Intelligence (BI) and Data Warehousing on Any Database
  – Outlining the Basics of SAP BW Powered by SAP HANA
  – Set Up SAP BW Modeling Tools in SAP HANA Studio
• Report Launching and Navigation in Reports
  – Outlining SAP BusinessObjects BI Platform
  – Navigating in SAP BusinessObjects Analysis, Edition for Microsoft Office
  – Navigating in SAP BusinessObjects Design Studio Generic App
• Simple Queries
  – Creating Simple Queries
• Key Figures in Queries
  – Configuring Properties of Key Figures
  – Creating Restricted Key Figures
  – Creating Calculated Key Figures
  – Creating Calculated Key Figures with Boolean Operators
  – Creating Calculated Key Figures with Exception Aggregation
• Structures in Queries
  – Creating Structures
  – Resolving Formula Collision and Working with Cells
• Characteristics, Attributes, and External Hierarchies in Queries
  – Configuring the Properties of Characteristics
  – Creating a Query and Running Display and Navigation Attributes
  – Creating Queries and Including External Hierarchies
• Variables in Queries
  – Explaining Variables
  – Creating Characteristic Value and Text Variables
  – Applying Business Content Variables
  – Creating Characteristic Value Variables with a Replacement Path from a Query
  – Creating Formula Variables
  – Creating Hierarchy Variables and Hierarchy Node Variables
• Exceptions and Conditions in Queries
  – Creating a Query and Including Exceptions
  – Creating a Query and Including Conditions
• Report-Report Interface
  – Applying the Report-Report Interface
• Query Performance Optimization
  – Optimizing Query Performance
  – Applying Performance Monitoring Tools
BW305H SAP BW powered by SAP HANA: BW Query Design (Contd...)

- Configuring Query Read Mode
- Describing the HANA-Optimized Analytic Manager

• Query Management
  - Managing Query Objects

• Authorizations Overview
  - Describing Authorizations

• Business Intelligence (BI) Products Consuming Queries
  - Describing Business Intelligence Products Consuming Queries

Notes
• Courseware available as flipbook in Learning Hub

BW310H SAP BW powered by SAP HANA: Enterprise Data Warehousing

Goals
• This course will prepare you to:
  - Work with Data Warehousing Workbench and SAP HANA Studio to set up different data models.

Audience
• Application Consultant
• Data Consultant / Manager
• Database Administrator
• Developer
• Enterprise Architect
• Solution Architect
• System Architect
• Technology Consultant

Prerequisites
Essential
• None

Recommended
• Experienced and sound knowledge of the subject matter of at least one SAP ERP application course.

Course based on software release
• SAP BW 7.5 on SAP HANA

Content
• Introduction to SAP HANA Architecture
• SAP Business Warehouse (BW)
• SAP HANA Studio
• Data Warehousing Workbench
• InfoObjects like Characteristics and Key Figures
• Master Data Loading from SAP source system with Operational Data Provisioning
• Generic DataSources
• Transformation and Data Transfer Process
BW310H SAP BW powered by SAP HANA: Enterprise Data Warehousing (Contd...)

• Difference between Classic and Graphical Data Flow Modeling
• Modelling DataStore Object (Advanced)
• Transactional Data Loading from SAP source system with Operational Dat Provisioning
• Data Loading from Flatfile
• Modeling CompositeProviders
• HANA Native Modeling with Calculation Views
• Modelling Open ODS Views
• Process Chains

Notes
• Courseware available as flipbook in Learning Hub

BW330H SAP BW powered by SAP HANA: Data Warehouse Modeling

Goals
• This course will prepare you to:
  – Learn procedures within modeling of SAP Business Warehouse
  – Learn how to create a Layered Scalable Architecture

Audience
• Application Consultant
• Business Analyst
• Business Process Architect
• Business Process Owner / Team Lead / Power User
• Enterprise Architect
• Program / Project Manager
• Technology Consultant

Prerequisites
Essential
• BW310H
• Basic knowledge of data modeling

Recommended
• None

Course based on software release
• SAP BW 7.5 powered by SAP HANA
• BW Modeling Tool
• BO Enterprise Server

Content
• Data Modeling with SAP Business Information Warehouse (SAP BW) Powered by SAP HANA
  – Understanding Modeling Targets and Issues
  – Understanding SAP HANA From a Modeling Perspective
  – Understanding SAP BW From a Modeling Perspective
  – Comparing SAP BW with SAP HANA
• Business Review
  – Understanding the Relevant Skills and Exercises
  – Getting to know the ITelO Case Study
Understanding the ERP Model
• Global Decision Areas and Best Practice Standards
  – Planning Transport Management
  – Separating Master Data and Transactional Data
  – Tracking History
  – Evaluating Global Standards and Local Adaptations
  – Designing a Layered Scalable Architecture (LSA) with Virtual Layers
  – Understanding LSADomains
  – Understanding Reporting Options
• Process of Modeling
  – Defining the Sequence of SAP BW Projects
  – Planning the Phases of a SAP BW Project
  – Developing a SAP BW Data Model
  – Getting an Overview SAP HANA Live
  – Overviewing Business Content
• Field-Based Rapid Prototyping
  – Implementing Field-Based Modeling
• Master Data Modeling with SAP BW Characteristics
  – Listing Tables in the SAP BW Data Model
  – Using Reference Characteristics
  – Using Hierarchies in SAP BW Characteristics
• Key Figure Modeling in SAP BW
  – Defining Key Figures as InfoObjects
  – Creating Key figures for Non-Cumulatives
• Transactional Data Modeling in SAP BW
  – Modeling Advanced DataStore Objects (ADSOs)
  – Implementing Currency Harmonization
  – Implementing Quantity Conversion
  – Modeling Transformations
  – Modeling a Composite Provider for Agile Data Mart Scenarios
• Master Data Modeling in SAP HANA Views
  – Modeling Master Data and Hierarchies in SAP HANA Views
• Transaction Data Modeling with SAP HANA
  – Modeling Transactional Data in SAP HANA Views
• Hybrid Modeling in Mixed Scenarios
  – Modeling Mixed Scenarios
  – Enhancing Views in SAP HANA
• Enhanced Scenarios in SAP BW
  – Modeling an SAP BW Workspace
  – Implementing HANA Analysis Processes
• Existing Model Enhancement
  – Using the SAP BW Remodeling Toolbox
  – Converting Silos or LSAs to LSA

Notes
• This course contains only an overview over the Layered Scalable Architecture++ with SAP HANA, with some example LSA++ and SAP HANA modeling exercises. It is no substitute for a project consulting.
• This course does not discuss operational solutions or specific technical company scenarios.
• Courseware available as flipbook in Learning Hub
**BW350H SAP BW powered by SAP HANA - Data Acquisition**

**Goals**
- Learn how to extract data from SAP source systems with the SAP API (Application Programming Interface) and how to manage delta data
- Acquire data from using different interfaces such as: SDI - Smart Data Integration, SDA - Smart Data Access, ODP - Operational Data Provisioning, Flat File, DB Connect, XML, and Data Services
- Design and maintain process chains and perform transports * Distribute data via Data Marts and Open Hub

**Audience**
- Developer
- Solution Architect
- System Administrator
- Technology Consultant
- Trainer

**Prerequisites**

**Essential**
- Sound knowledge of the content that is covered in BW310H - Data Warehousing course, especially working with the Data Warehousing Workbench

**Recommended**
- Knowledge of the Data Dictionary and at least one SAP Component

**Course based on software release**
- SAP BW 7.5 powered by SAP HANA

**Content**
- SAP BW and HANA Data Acquisition
  - Introducing BW and HANA
  - Explaining Data Acquisition in SAP BW
  - Explaining SAP HANA Optimized Data Staging
  - Comparing & Migrating 3.x to 7.x Data Flow Components
  - Introducing Data Replication to HANA using SLT, SDI, and SDA
- Data Acquisition with the SAP BW Service API
  - Connecting SAP Source Systems to SAP BW
  - Displaying the Configuration of the SAP BW Service API
  - Modeling Generic DataSources
  - Explaining Business Intelligence(BI) Off The Shelf Content
  - Loading hierarchies from ECC
  - Examining the Transfer of GL Data
  - Adapting BI Content DataSources
  - Implementing Process Chains
- Delta Data Flow Management
  - Describing Delta Management
  - Explaining Terms and Basic Processes of Delta Enabled DataSources
  - Configuring the Logistics Data Extraction (LO Cockpit)
  - Configuring Generic Delta DataSources
  - Learning Data Transfer Process(DTP) Settings
- Data Acquisition with ODP and SLT
  - Describing Data Acquisition with Operational Data Provisioning (ODP)
- Analyzing Operational Delta Queue (ODQ)
- Replicating Data with SAP Landscape Transformation (SLT)
- Learning the Details of Real Time Data Acquisition (RDA)
- Extracting to BW via ODP-SLT

**Flat File Data Transfer**
- Accessing Data from a Flat File
- Loading Flat File Hierarchies
- Using Workspaces for Local Flat File load

**Additional Data Acquisition Techniques**
- Positioning DB Connect
- Positioning Universal Data (UD) Integration
- Explaining XML-Based Extraction
- Acquiring Data Using an XML Based Web Service
- Integrating SAP Data Services and SAP BW
- Positioning HANA SDI capabilities for BW

**Data Mart Interface and OpenHub**
- Positioning the Data Mart Interface
- Implementing OpenHub Destinations
- Exporting a Hierarchy with OpenHub
- Exporting from a BW InfoProvider to a Native HANA Table

**Overview of BW Transports**
- Describing the BW Transport System Landscape
- Determining Object Versions and Metadata
- Managing BW Transports
- Troubleshooting Transport Strategies