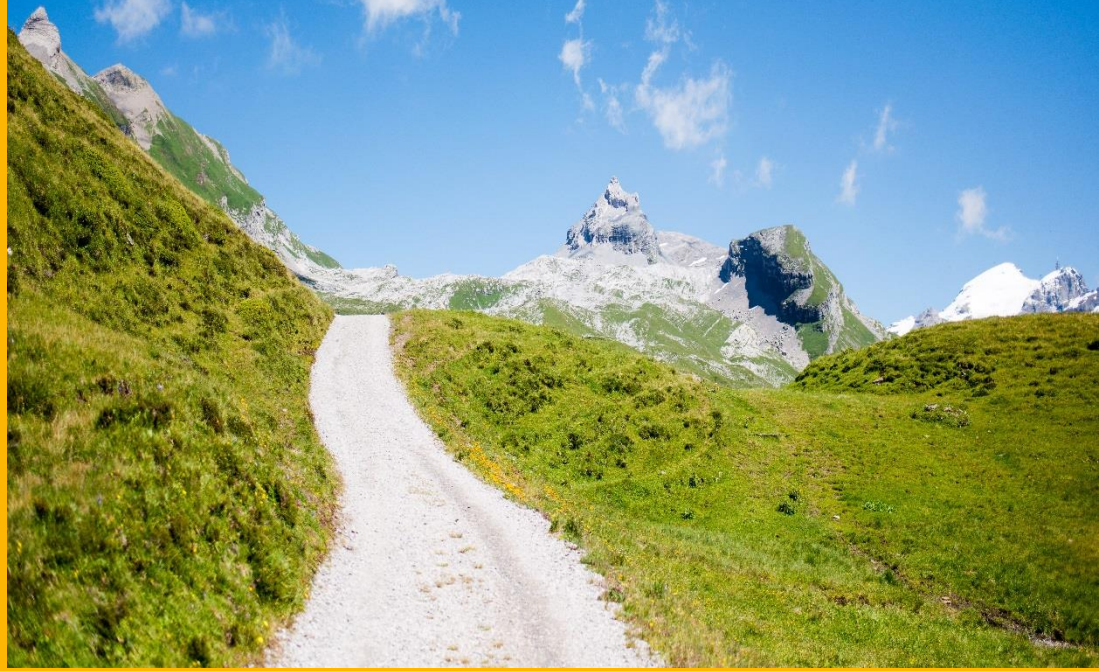


The SAP logo is positioned in the top right corner of the image. It consists of the letters 'SAP' in a bold, white, sans-serif font, set against a blue rectangular background that has a white diagonal stripe running from the top-left to the bottom-right. A small registered trademark symbol (®) is located to the right of the letters.

**Savantis Training**  
**ABAP Programming for SAP HANA**

Presented by: Savantis Group, Inc.



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## 1. Course Description

In this course, you will learn how you can use SAP HANA and new features in the ABAP programming language to optimize existing ABAP code and develop innovative ABAP applications to enhance your business.



## 2. Goals

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This course will prepare you to:

- Develop more concise and well-performing ABAP programs using new features of the ABAP programming language.
- Develop and optimize ABAP applications that access data stored in the SAP HANA Database.

## 3. Audience

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- Application Consultants
- Developers
- Developer Consultants

## 4. Duration

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5 Days

## 5. Delivery Methods

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- Remotely
  - Minimum audience - 10
  - Maximum audience - 20
- On-site
  - Minimum audience - 10
  - Maximum audience - 20

## 6. Course based on:

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SAP HA400 and SAP HA100

## 7. Content

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- SAP HANA – Introduction
  - Key concepts of SAP HANA
  - SAP HANA Front-End Tools
  - Architecture of SAP in-memory computing
  - Modeling with SAP HANA
  - Overview of data provisioning in SAP HANA
  - SAP HANA Data Consumption
- Introduction to HANA ABAP
  - Understanding SAP HANA and how it impacts the ABAP development paradigm
  - Introduction to the ABAP development tools (also known as ABAP in Eclipse)
- Taking ABAP to SAP HANA
  - Accessing SAP HANA as a secondary database
  - Tools to detect potential functional and performance issues when migrating to SAP HANA: Code Inspector and ABAP Test Cockpit, ABAP Trace and ABAP Profiler, SQL Trace
  - Tools to prioritize performance issues: SQL Monitor, SQL Performance Tuning Worklist
  - Performance rules and guidelines for ABAP in the context of SAP HANA
- Database independent Code-to-Data
  - New Open SQL
  - Defining advanced views using Core Data Services (CDS) and CDS Associations in ABAP
  - Incorporating Authorization Checks with CDS in ABAP
- SAP HANA specific Code-to-Data
  - Using native SQL and ABAP Database Connectivity (ADBC)
  - Creating, using, and debugging ABAP managed database procedures
- Consuming SAP HANA objects in ABAP
  - Consuming SAP HANA views in ABAP using native SQL and ADBC

- Consuming SAP HANA database procedures using native SQL and ADBC
- SAP HANA Proxy Objects
  - Creating and using external views
  - Database procedure proxies
  - HANA transport container
- Advanced Topics
  - Using SAP HANA Full Text Search in ABAP
  - Enabling input fields for type-ahead search
  - SAP List Viewer (ALV) for SAP HANA

## **8. Deliverables / What to expect**

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- Documentation and learning material
- Access to the Savantis training environment
- Savantis certification
- Access to our LMC for course documentation and additional content

## **9. Cancellation policy**

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- Free cancellation one week prior to the course; after this period, a cancellation fee will apply.
- For the remote course format, we require a minimum of 7 attendees; if we don't reach this number, the course will be cancelled or rescheduled.

## 10. Selling Price

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- On-site course

| Course                        | Days | Minimum Attendees | Maximum Attendees | Daily Pricing | Total Price |
|-------------------------------|------|-------------------|-------------------|---------------|-------------|
| ABAP Programming for SAP HANA | 5    | 10                | 20                | \$3,850       | \$19,250    |

\* Fee is based on a per day price of \$3,850 for up to (10) attendees. Each additional attendee has an associated extra charge of \$300/attendee/day. The maximum number of attendees per class is (20).

- Remote course

| Course                        | Days | Minimum Attendees | Maximum Attendees | Daily Pricing per Attendee | Total Price |
|-------------------------------|------|-------------------|-------------------|----------------------------|-------------|
| ABAP Programming for SAP HANA | 5    | 7                 | 20                | \$465                      | \$2,325     |