Courses Listed

Beginner
- HA100 - SAP HANA Introduction
- HA100E - SAP HANA Introduction

Advanced
- HA450 - SAP HANA 2.0 SPS03 - Application Development for SAP HANA

Certification Exam
- C_HANADEV_14 - SAP Certified Development Associate - SAP HANA 2.0 SPS02
- C_HANADEV_15 - SAP Certified Development Associate - SAP HANA 2.0 SPS03
All available schedules in your selection

### HA100E  SAP HANA Introduction

<table>
<thead>
<tr>
<th>Country</th>
<th>Delivery method &amp; Location</th>
<th>Solution Release</th>
<th>Language</th>
<th>Timeframe</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td></td>
<td>HANA SPS11</td>
<td>English</td>
<td>1 Jan - 31 Dec 9999</td>
<td>$375.00 (USD)</td>
</tr>
</tbody>
</table>

### HA450  SAP HANA 2.0 SPS03 - Application Development for SAP HANA

<table>
<thead>
<tr>
<th>Country</th>
<th>Delivery method &amp; Location</th>
<th>Solution Release</th>
<th>Language</th>
<th>Timeframe</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>22 Jul - 25 Jul 2019</td>
<td>$3,000.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>26 Aug - 29 Aug 2019</td>
<td>$3,000.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>14 Oct - 17 Oct 2019</td>
<td>$3,000.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>12 Nov - 15 Nov 2019</td>
<td>$3,000.00 (USD)</td>
</tr>
</tbody>
</table>

### HA100  SAP HANA Introduction

<table>
<thead>
<tr>
<th>Country</th>
<th>Delivery method &amp; Location</th>
<th>Solution Release</th>
<th>Language</th>
<th>Timeframe</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>8 Jul - 9 Jul 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>15 Jul - 16 Jul 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>Country</td>
<td>Delivery method &amp; Location</td>
<td>Solution Release</td>
<td>Language</td>
<td>Timeframe</td>
<td>Cost</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------</td>
<td>------------------</td>
<td>----------</td>
<td>--------------------</td>
<td>------------</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>29 Jul - 30 Jul 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>8 Aug - 9 Aug 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>15 Aug - 16 Aug 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>26 Aug - 27 Aug 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>9 Sep - 10 Sep 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>18 Sep - 19 Sep 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>30 Sep - 1 Oct 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>3 Oct - 4 Oct 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>14 Oct - 15 Oct 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>28 Oct - 29 Oct 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>4 Nov - 5 Nov 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>12 Nov - 13 Nov 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>18 Nov - 19 Nov 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
</tbody>
</table>
COURSE LISTING

HA100  SAP HANA Introduction

<table>
<thead>
<tr>
<th>Country</th>
<th>Delivery method &amp; Location</th>
<th>Solution Release</th>
<th>Language</th>
<th>Timeframe</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>9 Dec - 10 Dec 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
<tr>
<td>United States of America</td>
<td></td>
<td>SAP HANA 2.0 SPS03</td>
<td>English</td>
<td>16 Dec - 17 Dec 2019</td>
<td>$1,500.00 (USD)</td>
</tr>
</tbody>
</table>

C_HANADEV_15  SAP Certified Development Associate - SAP HANA 2.0 SPS03

There are currently no events available for this course. Please feel free to register interest for this course on SAP Training. We will then notify you when a course has been scheduled.

C_HANADEV_14  SAP Certified Development Associate - SAP HANA 2.0 SPS02

There are currently no events available for this course. Please feel free to register interest for this course on SAP Training. We will then notify you when a course has been scheduled.
Course announcements

- In this course, you will get an overview of SAP HANA. You will learn about in-memory computing, SAP HANA architecture and main implementation scenarios. You will also learn about modeling and data processing, data provisioning, as well as the different types of applications that run on SAP HANA, such as SAP BI tools, SAP Business Warehouse and SAP HANA XS applications. This course is also valuable for everyone who is part of an S/4HANA project, as it helps understand the key innovations in SAP Business Suite that the underlying SAP HANA Platform permits.

Goals

- This course will prepare you to:
  - Understand the Key Concepts of SAP HANA and in-memory computing
  - Create a Data Model with SAP HANA Native Modeling Tools
  - Provision Data Into SAP HANA
  - Consume SAP HANA Information Models and Run Applications on SAP HANA

Audience

- Application Consultant
- Change Manager
- Data Consultant / Manager
- Developer

Essential

- None

Course based on software release

- SAP HANA SPS11

Content

- Introduction
Due to the similarity of the two architectures, Native applications also run in the SAP Cloud Platform, within the Cloud Foundry application server. This course also fits in case you plan to develop applications for the SAP Cloud Platform. Specific exercises are included to show the way to move applications across the two environments.

The basis of Application Development on the deprecated SAP HANA XS Classic application server (still part of the SAP HANA Platform) are also provided, as a useful piece of information for migrating the existing applications from SAP HANA XS Classic to SAP HANA XS Advanced.

Along the course, you will be guided to "break the ice" with all the development tools and development languages used to realize the different parts of a software application in SAP HANA:

- The persistency layer, based on Core Data Services
- the client-server communication services, based on Node.js and XSODATA
- the user interface, based on SAPUI5

**Duration**
4 days

**Course announcements**
- In this course you will learn how to develop SAP HANA Native software applications, running on both the SAP HANA Platform and the SAP Cloud Platform.

**Goals**
- This course will prepare you to:
- develop SAP HANA native software applications, running on both the SAP HANA Platform and the SAP Cloud Platform.

**Audience**
- Developer
- Developer Consultant

**Essential**
- Experience of Object Oriented software development
- Experience with database development and SQL query language

**Course based on software release**
- SAP HANA 2.0 SPS03

**Content**
- This course is the natural starting point to learn "native" software development for the SAP HANA Platform. Native means "independent from the ABAP world", the whole application runs based on the SAP HANA platform, no SAP NetWeaver Application Server is used.
- Native applications run based on the SAP HANA extended application services, advanced model (XS Advanced), the application server, natively available in the SAP HANA Platform.
At the end, you will be able to code simple, but fully functional SAP HANA Software Applications.

Table of contents:
- Unit 1: Introduction to SAP HANA
- Unit 2: Development Tools
- Unit 3: The Development Project
- Unit 4: The Persistence Model
- Unit 5: OData Services
- Unit 6: Building UIs with SAPUI5
- Unit 7: SQLScript
- Unit 8: Server-Side JavaScript (Node.js)
- Unit 9: Application Deployment
- Unit 10: Authorization in the SAP HANA Database
- Unit 11: Application Development in XS Classic

Notes
- The following courses are suited to follow up and/or deepen this subject: HA300 SAP HANA Modeling, HA150 SQL Script, and UX402 Developing UIs with SAPUI5.
HA100 - SAP HANA Introduction

Duration
2 days

Course announcements
- This course provides an introduction to SAP HANA. Through lectures and exercises you will quickly develop your knowledge of SAP HANA technology, architecture, data modeling, and data management. You will discover how SAP HANA powers many types of applications including S/4HANA, Business Suite, SAP Analytics, and SAP BW. You will learn how SAP HANA supports the development of brand new native applications including the SQL driven data warehouse. This short course is ideal for those who simply want the big picture of SAP HANA. This course is an important prerequisite for many detailed follow-on SAP HANA courses.

Goals
- This course will prepare you to:
  - Understand the key concepts of SAP HANA and in-memory computing
  - Create a data model with SAP HANA modeling tools
  - Provision and enrich data into SAP HANA
  - Run analytics on SAP HANA

Audience
- Application Consultant
- Change Manager
- Business Analyst
- Application Developer
- BI / BW consultant
- Data Scientist
- Database Administrator

Essential
- None

Course based on software release
- SAP HANA 2.0 SPS03

Content
- Describing SAP HANA
- Understanding the Need for a Modern Digital Platform
- Describing how SAP HANA Powers a Digital Platform
- Architecture of SAP HANA
- Outlining Components of SAP HANA
- Working with SAP HANA interfaces
- Understanding Key Features of SAP HANA Database
- Describing High Availability
- Analytical Processing with SAP HANA
- Understanding Core Modeling with SAP HANA
- Understanding SAP Supplied Data Models
- Advanced Modeling with SAP HANA
- Data Management with SAP HANA
- Describing Data Management
- Describing Data Acquisition Tools
- SAP HANA Data Management Suite
• Developing and Running Applications on SAP HANA
• Running SAP Enterprise Suites on SAP HANA
• Connecting SAP Business Intelligence Tools to SAP HANA
• Outlining SAP Business Warehouse on SAP HANA
• Developing SQL Data Warehouses with SAP HANA
• Building Native HANA Applications
• Appendix: Continuing your SAP HANA Learning Journey

Notes
• This course is based on SAP HANA 2.0 but is useful for customers working with SAP HANA 1.0
### Description
The "SAP Certified Development Associate - SAP HANA 2.0 SPS03" certification exam verifies that the candidate has the knowledge to develop native software applications running on the SAP HANA Platform. This certificate builds on the basic knowledge gained through related SAP HANA training. The training covers the development tools and languages, used to realize the different parts of a software application in SAP HANA.

### Notes
- To ensure success, SAP recommends combining education courses and hands-on experience to prepare for your certification exam as questions will test your ability to apply the knowledge you have gained in training.
- You are not allowed to use any reference materials during the certification test (no access to online documentation or to any SAP system).
The "SAP Certified Development Associate - SAP HANA 2.0 SPS02" certification exam verifies that the candidate has the knowledge to develop native software applications running on the SAP HANA Platform. This certificate builds on the basic knowledge gained through related SAP HANA training. The training covers the development tools and languages used to realize the different parts of a software application in SAP HANA.

Notes

- To ensure success, SAP recommends combining education courses and hands-on experience to prepare for your certification exam as questions will test your ability to apply the knowledge you have gained in training.
- You are not allowed to use any reference materials during the certification test (no access to online documentation or to any SAP system).
COURSE LISTING

All rights reserved. No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

The information contained herein may be changed without prior notice. Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliated company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP and SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE’s or its affiliated companies’ strategy and possible future developments, products, and/or platform directions and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, and they should not be relied upon in making purchasing decisions.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and other countries. Please see http://www.sap.com/corporate-en/legal/copyright/index.epx#trademark for additional trademark information and notices.