

Enterprise Application Development using SAP ABAP on HANA

Course Code	KS28001
Course Title	Enterprise Application Development using SAP ABAP on HANA
Number of Credits	1-0-0-0
Course Type	Vocational Elective

Course Objectives:

The course objectives for Enterprise Application Development using SAP ABAP(Advanced Business Application Programming) on HANA typically aim to equip participants with the skills and knowledge necessary to develop and maintain SAP applications using the ABAP programming language.

Course Outcomes:

- ✓ **CO1:** Understand the fundamental concepts of Enterprise Resource Planning (ERP) and SAP.
- ✓ **CO2:** Establish a strong foundation in ABAP programming.
- ✓ **CO3:** Develop skills in managing data structures using the ABAP Data Dictionary.
- ✓ **CO4:** Introduce Object-Oriented ABAP concepts.
- ✓ **CO5:** Master the creation of various types of ABAP reports.

Course Contents:

Unit I: Introduction to ERP, SAP and ABAP

- Introduction to ERP
- Overviews of SAP & it's system architecture
- Overviews of SAP HANA
- Introduction to ABAP programming language
- Introduction to SAP GUI and navigation.

Unit II: ABAP Basics

- ABAP Data Types
- Variables and Constants
- Arithmetic Operations
- Control Structures (IF, CASE, LOOP)
- Internal Tables and Data Structures
- Modularization Techniques (Subroutines, Function Modules)

Unit III: ABAP Data Dictionary

- Tables, Views, and Data Elements
- Domains and Search Helps
- Table Maintenance Generator (TMG)
- Table Indexes and Foreign Keys
- Lock Objects and Data Class

Unit IV: ABAP Object-Oriented Programming (OOP)

- Introduction to Object-Oriented ABAP
- Classes, Objects, and Interfaces
- Inheritance and Polymorphism
- Events and Methods

Unit V: ABAP Reports

- Classical Reports

- Interactive Reports
- ALV (ABAP List Viewer)

Assessment Scheme:

Activity	Marks
Daily performance	50
Lab Record	30
Examination	20
Total	100

Text Books:

1. "SAP ABAP Programming for Beginners" by Sushil Markandeya.
2. "SAP ABAP: A Step-by-Step Guide" by Rabi Jay.