

SAP S/4 HANA Production Planning and Manufacturing Academy Part I

Duration: 10 Days (80 Hours)

Course Summary

This course offers a comprehensive introduction to SAP S/4HANA Production Planning and Manufacturing. Covering foundational topics such as master data, material requirements planning, demand management, and advanced planning tools like PP/DS and DDMRP, this course is designed for consultants and professionals aiming to gain practical insight into end-to-end production planning processes.

Detailed Table of Contents

1. Introduction

- Introduction to ERP
- Introduction to SAP
- SAP Landscape
- Navigation
- Introduction to modules in SAP
- Introduction to SAP Production Planning
- Organization Structure
- Master Data in SAP Production Planning

2. Material

- Introducing Material
- Creating a Material, Change, Display
- Extension of Material master, Views and Org. Structure
- Copying a material
- Customization in Material Master

3. Bill of Material (BOM)

- Introducing Bills of Material (BOMs)
- Usage, Categories, Status, Structure
- Creating BOMs, Change, Display
- Low Level Code
- Performing Mass Changes
- BOM Reporting, where used list
- Customization in BOM

4. Work Centers

- Creating Work Centers, Change, Display
- Default values, Standard Value Key, Scheduling, Costing in a Work Center
- Creating Capacities in a Work Center
- Customization in Work Centres

5. Task Lists

- Working with Task Lists - Create, Change, Display
- Creating Material Assignments and Component Allocations
- Creating Suboperations and User-Defined Fields
- Creating Production Versions
- Mass Change and Reporting
- Customization in Task lists

6. Advanced Bill of Material Functions

- Phantom Assemblies
- Co-Products and By-Products
- Alternative Components
- Multiple BOMs
- Variant BOMs
- Changing BOMs with Engineering Change Management

7. Advanced Routing Functions

- Modeling Sequences
- Alternative Manufacturing Processes
- Reference Operation Sets
- Lead-Time Scheduling
- Reduction in the Routing
- Change Routings with Engineering Change Management

8. Production Planning Overview

- Production Planning and Control
- SAP S/4HANA: Deployment Options

9. Master Data for SAP S/4HANA Production Planning

- General Master Data - Plant, Material, Business Partners
- External Procurement Relationships
- Production-Specific Master Data - BOM, Workcenter, Routing, Production Version
- Further Master Data - MRP Area

10. Demand Management

- Understanding Principles and Tools for Demand Planning
- Planning Strategies in SAP S/4HANA

- Make-to-Stock Production: PS 10, 30, 40, 70
- Make-to-Order Production: PS 20, 50, 82
- Outlining Predictive MRP (pMRP)

11. Material Requirements Planning

- Technical Process Steps of MRP
- Scheduling in MRP
- Planned Independent Requirements
- Stock/Requirements list
- Classic MRP runs - Single Item, Single Level, Multilevel, Total Run
- MRP Live

12. Advanced Planning

- Outlining Advanced Planning: PP/DS in SAP S/4HANA
- Supply Chain Planning Overview
- Prerequisites and Tools for Advanced Planning
- Forecast Techniques
- Demand Planning Process Flow
- Reviewing Master Data for Advanced Planning
- Models and Versions in PP/DS
- Planning Methods
- Activating Advanced Planning
- Alert Monitor
- Product View
- Demand Management regarding Advanced Planning
- Exploring Steps in PP/DS Material Requirements Planning
- Pegging
- Heuristics and Functions in PP/DS

13. Detailed Scheduling

- Concepts and Principles for Detailed Scheduling
- Selecting Alternative Resources - Modes
- Transactional Tools for Detailed Scheduling
- Detailed Scheduling Planning Board
- Monitor Material Coverage
- Combining Multi-Step Planning Run in PP/DS with MRP Live
- Using the PP/DS Optimizer

17. Demand-Driven Replenishment

- Demand-Driven Replenishment (DDR)
- Decoupling
- Buffer Level Calculation – Concept