

S4280

SAP S/4HANA Manufacturing for Production Engineering and Operations

COURSE OUTLINE

Course Version: 19
Course Duration:

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Typographic Conventions

American English is the standard used in this handbook.

The following typographic conventions are also used.

This information is displayed in the instructor's presentation



Demonstration



Procedure



Warning or Caution



Hint



Related or Additional Information



Facilitated Discussion



User interface control

Example text

Window title

Example text

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Course Overview

TARGET AUDIENCE

This course is intended for the following audiences:

- Project Manager
- Application Consultant
- Super / Key / Power User
- Industry Specialist

Lesson 1: Explaining Key Features and Benefits of SAP S/4HANA Manufacturing for Production Engineering and Operations (PEO)

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the key features and benefits of SAP S/4HANA Manufacturing for production engineering and operations (PEO)
- Enable the production engineering and operations function modules in SAP S/4HANA

Lesson 2: Assigning Roles and Working with SAP S/4HANA PEO Apps on SAP Fiori Launchpad

Lesson Objectives

After completing this lesson, you will be able to:

- Explain which business roles are required for which SAP S/4HANA PEO apps
- Understand the grouping of SAP S/4HANA PEO apps on the SAP Fiori launchpad
- Manage SAP Fiori launchpad settings and create your own group with applications

Lesson 3: Setting Up Manufacturing Users for SAP S/4HANA PEO

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the purpose of using manufacturing users in SAP S/4HANA Manufacturing for production engineering and operations
- Create a manufacturing user and assign to a default work center and plant

Lesson 1: Handing Over the Engineering Snapshot from PLM to Production Engineering

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the purpose of Snapshot revisions
- Monitor Engineering Snapshots

Lesson 2: Preparing MBOM Creation (Based on Snapshot)

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the difference between classical BOM and version-controlled BOM
- Manage unassigned EBOMs
- Explain the planning scope and change record concepts
- Prepare MBOM creation based on Snapshots

Lesson 3: Creating MBOMs based on EBOM using Visual Enterprise Manufacturing Planner (VEMP)

Lesson Objectives

After completing this lesson, you will be able to:

- Use the Visual Enterprise Manufacturing Planner for EBOM to MBOM conversion

Lesson 1: Creating a Simple Shop Floor Routing and Assigning it a Manufacturing BOM

Lesson Objectives

After completing this lesson, you will be able to:

- Create a simple shop floor routing and assign it a manufacturing BOM

Lesson 2: Assigning Components, PRTs, and Documents to Operation Activities

Lesson Objectives

After completing this lesson, you will be able to:

- Assign manufacturing BOM components to operation activities

Lesson 3: Defining Simple Work Instructions for Operation Activities

Lesson Objectives

After completing this lesson, you will be able to:

- Define simple work instructions for operation activities

Lesson 4: Releasing Shop Floor Routing and Creating a Production Version

Lesson Objectives

After completing this lesson, you will be able to:

- Use the error log to solve inconsistencies or errors
- Release the shop floor routing and create a production version

Lesson 1: Releasing and Managing Shop Floor Orders in SAP S/4HANA PEO

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the difference between classical production order and a new shop floor order in SAP S/4HANA PEO
- Create and release new shop floor orders
- Manage shop floor orders using SAP Fiori apps

Lesson 2: Executing Serialized Production Process and Monitoring Production Results

Lesson Objectives

After completing this lesson, you will be able to:

- Assign work to individual production operators
- Explain how production operators can select the work to start in SAP S/4HANA PEO
- View and analyze production results using SAP S/4HANA PEO out-of-the-box reports
- Execute serialized production process by collecting component data, confirming individual operation activities, and viewing order confirmation

Lesson 3: Disassembling Components in Various Scenarios

Lesson Objectives

After completing this lesson, you will be able to:

- Describe how to disassemble components in various scenarios
- Disassemble components triggered by engineering change

Lesson 4: Recording Defects

Lesson Objectives

After completing this lesson, you will be able to:

- Record a defect in SAP S/4HANA PEO
- Record a defect for serialized material and view defect information in monitoring apps

Lesson 5: Executing Non-Serialized Production Process and Monitoring Production Results

Lesson Objectives

After completing this lesson, you will be able to:

- Take non-serialized materials through the production process

Lesson 6: Splitting a Shop Floor Order

Lesson Objectives

After completing this lesson, you will be able to:

- Split a Shop Floor Order

UNIT 5

Unitized Products and the Complex Assembly/Installation Process

Lesson 1: Understanding the Complex Assembly Process

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the different types of assemblies required to define the complex assembly process and their distinguishing characteristics

Lesson 2: Understanding the Concept of Parameter Effectivity

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the concept of parameter effectivity

Lesson 3: Preparing MBOM Creation for a Unitized Product

Lesson Objectives

After completing this lesson, you will be able to:

- Create a change record and related planning scope for the EBOM to MBOM handover of a unitized product

Lesson 4: Handing Over EBOM to MBOM, Creating Related Planning Scopes, Creating Installation Kits, and Maintaining Parameter Effectivity

Lesson Objectives

After completing this lesson, you will be able to:

- Hand over EBOM to MBOM, create related planning scopes, creating installation kits, and maintaining parameter effectivity

Lesson 1: Defining Teams and Responsibilities

Lesson Objectives

After completing this lesson, you will be able to:

- Create teams and responsibilities for further use in the production process

Lesson 2: Creating a Workflow for the Shop Floor Routing

Lesson Objectives

After completing this lesson, you will be able to:

- Set up and start a workflow to manage advanced routing creation process

Lesson 1: Creating a New Shop Floor Routing with Effectivity and Assigning Components

Lesson Objectives

After completing this lesson, you will be able to:

- Create a new shop floor routing with effectivity and assign components

Lesson 2: Creating Tabular Inspection Characteristics

Lesson Objectives

After completing this lesson, you will be able to:

- Create tabular inspection characteristics for operation activities

Lesson 3: Managing Standard Texts

Lesson Objectives

After completing this lesson, you will be able to:

- Create a standard text for copy

Lesson 4: Creating Interactive Work Instructions for Operation Activities

Lesson Objectives

After completing this lesson, you will be able to:

- Create interactive work instructions for operation activities

Lesson 1: Creating Qualifications and Assigning Qualifications to Objects in SAP S/4HANA PEO

Lesson Objectives

After completing this lesson, you will be able to:

- Create qualifications and assign them to objects in SAP S/4HANA PEO

Lesson 2: Setting Up Buyoff Cycle Templates

Lesson Objectives

After completing this lesson, you will be able to:

- Set up a buyoff cycle template

Lesson 3: Assigning Qualifications and Buyoffs to Operation Activities

Lesson Objectives

After completing this lesson, you will be able to:

- Assign qualifications and buyoffs to operation activities

Lesson 1: Defining Trackable Tools and Assigning them to Shop Floor Routings

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the concept of tool tracking
- Set up material master and equipment for trackable tools
- Assign a trackable tool to an operation activity
- Assign activity handles for automatic claiming and registering of tools

Lesson 2: Releasing the Shop Floor Routing, Creating a Production Version, and Approving Workflow Review Steps

Lesson Objectives

After completing this lesson, you will be able to:

- Release the shop floor routing, create a production version, and approve workflow review steps

Lesson 1: Claiming and Registering Tools During Production Execution

Lesson Objectives

After completing this lesson, you will be able to:

- Use the Track Tool Usage app to monitor status of trackable tools
- Start operation activities directly in the Perform Work app
- Claim and register tools during the production execution

Lesson 1: Defining Status and Action Schemas

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the purpose of using status and action schemas in SAP S/4HANA PEO
- Define status and action schemas

Lesson 2: Defining Reason Codes and Reason Code Groups

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the purpose of using reason codes and reason code groups in SAP S/4HANA PEO
- Create a reason code, create a reason code group, and assign the reason code to the group

Lesson 3: Setting Up Action Properties

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the settings that can be configured for an action in SAP S/4HANA PEO
- Set up action properties

Lesson 4: Configuring Action Type Handlers

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the purpose of using action type handlers in SAP S/4HANA PEO
- Assign type handlers to an action or an operation activity

Lesson 1: Creating a Project for a Complex Product Using the Manage Major Assembly Projects App

Lesson Objectives

After completing this lesson, you will be able to:

- Explain how project management is integrated with the PEO complex assembly process
- Assign reference points to the major assembly's BOM items
- Create a new complex assembly project from Manage Major Assembly Projects app

Lesson 2: Assigning Reference Points to the Major Assembly BOM Items (Installation Kits)

Lesson Objectives

After completing this lesson, you will be able to:

- Create reference points in Customizing
- Assign reference points to the project's network activities

Lesson 3: Exploding the BOM for a Major Assembly

Lesson Objectives

After completing this lesson, you will be able to:

- Explode the BOM for a major assembly using the BOM-PS interface

Lesson 4: Monitor Project Requirements for Installation Kits and Run MRP for Planned Order Creation

Lesson Objectives

After completing this lesson, you will be able to:

- Monitor project requirements for installation kits and run MRP to cover open demand

Lesson 5: Converting Planned Orders to Production Orders

Lesson Objectives

After completing this lesson, you will be able to:

- Convert the planned orders for the installation kits into production orders to trigger the execution process

Lesson 6: Checking Major Assembly Projects

Lesson Objectives

After completing this lesson, you will be able to:

- Perform consistency checks for your major assembly projects

Lesson 1: Creating and Releasing a New EBOM Version

Lesson Objectives

After completing this lesson, you will be able to:

- Create and release a new EBOM version

Lesson 2: Managing Unassigned Modified EBOM Versions

Lesson Objectives

After completing this lesson, you will be able to:

- Manage unassigned EBOM versions
- Reuse an existing planning scope and create a new change record with new versions for EBOM and MBOM

Lesson 3: Performing Change Impact Analysis

Lesson Objectives

After completing this lesson, you will be able to:

- Analyze the impact of the changes and add impacted objects to the change record

Lesson 4: Implementing Engineering Changes and Performing Execution

Lesson Objectives

After completing this lesson, you will be able to:

- Implement engineering changes
- Use the favorites and routing comparison capabilities
- Implement engineering changes, execute the updated production order, and view the as-built record for the production order