Course MB-320

Dynamics 365 for Finance and Operations, Manufacturing

Duration: 4 days
Training Mode: Live Virtual and Classroom
Level: Intermediate
Language: English

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Course MB-320T01-A: Configure and use discrete manufacturing in Dynamics 365 for Finance and Operations

Course Objective

Organizations use Dynamics 365 for Finance and Operations to run smarter with connected operations by selecting best-fit manufacturing processes, improving operational procedures, simplifying resource management, accelerating product delivery, and increasing quality and customer satisfaction. This course discusses how to configure and use discrete manufacturing in Dynamics 365 for Finance and Operations.

Audience profile

A Dynamics 365 for Finance and Operations Functional Consultant is responsible for performing discovery, capturing requirements, engaging subject matter experts and stakeholders, translating requirements, and configuring the solution and applications. The Functional Consultant implements a solution using out-of-the-box capabilities, codeless extensibility, application, and service integrations.

Job role: Functional Consultant

Preparation for exam: MB-320

Prerequisites

Basic understanding of ERP and CRM concepts.

Course outline

Module 1: Get Started with Production Control

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This module explains the concepts used in the Production control module in Finance and Operations.

Lessons
- Introduction
- Compare discrete, lean and process manufacturing
- Configure production control for unified manufacturing
- Understand capacity planning
- General ledger and production control module
- Practice labs
- Summary

In this module students learned about:

- Discrete, lean, and process manufacturing methodologies
- Unified manufacturing
- How to configure production control for unified manufacturing
- Capacity planning
- Interconnectivity between the General ledger and the Production control modules
- Production pools
- How to work with allocation keys

Module 2: Get Started with Discrete Manufacturing

Even though each legal entity's manufacturing processes are unique, depending on the nature of the production environment, the core conceptual elements that are used in the Production control module are frequently very similar.

Lessons
- Introduction
- Understand the discrete production process statuses
- Understand the Bill of Materials (BOM)
- Working with BOM and item configurations
- Create BOM
- Production orders
- Practice Labs
- Module summary

In this module students learned about:

- Discrete manufacturing concepts
- Production process statues
- Production stages
- BOMs
- Resources
- Routes and Operations

Module 3: Configure Discrete Manufacturing

Before one can work in the Production control module, and create production orders, production parameters must be set up. The parameters selected have direct impact on the production order and the production life cycle. The parameters can be set by company or by site, which determines whether Dynamics 365 for Finance and Operations uses the company-level parameters or the site-specific parameters. Parameters, Production Orders and Life Cycle reviews how these parameters are defined, how journal names are used, how production orders are created, and the ways in which they are processed through manufacturing based on their status and the production life cycle. This lesson explains how to configure Discrete manufacturing in Finance and Operations.

Lessons

- Introduction
- Prepare general ledger for production
- Configure production control parameters
- Configure calendar and resources
- Configure operations and routes
- Practice lab
- Module summary

In this module students learned how to:

- Configure inventory dimensions in production
- Configure parameters, production orders and status
- Configure calendars and resources
- Configure operations and routes.

Module 4: Create and Complete Production Orders

The life cycle of a production order reflects the actual steps that are taken to manufacture a product. It begins with the creation of a production order and ends with a finished, manufactured product that is ready for the customer. The production order is assigned a status that reflects where it is in the production life cycle. This module reviews the Release, Start, Report as finished, and End stages in the production life cycle in the order in which they are conducted. Release, Start, and Report as finished are considered part of production control

Lessons

- Introduction
- Capacity planning, scheduling, and subcontracting
- Scrap and waste
- Practice Labs

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- Module summary

In this module students learned:

- Understand capacity planning
- Create discrete production orders
- Schedule a production order
- Process production orders
- Control and end production

Module 5: Work with Cost Sheeting

This module describes how to set up a costing sheet that includes material and manufacturing, as well as how the setup affects the BOM calculation results. Students will learn how to configure and manage costing sheet in Finance and Operations.

In this module, students learned:

- How to work with the costing sheet

Module 6: Use Manufacturing Execution

Manufacturing execution is primarily intended to be used by manufacturing companies. Workers can register time and item consumption on production jobs and project activities using the Job registration form. All registrations are approved and subsequently transferred to the relevant Dynamics 365 for Finance and Operations modules. Continuous approval and transfer of registrations give managers the ability to easily track actual costs on production orders.

Lessons
- Introduction
- Understand the manufacturing executions
- Identify roles
- Planning considerations
- Configure manufacturing execution
- Control production
- Practice Labs
- Module summary

In this module students learned to:

- Understand the manufacturing execution
- Identify the roles in manufacturing execution
- Process production orders
- Understand the process workflows to manage a production

Module 7: Get Started with Product Configuration

Product configuration is a constraint-based product configuration tool that uses the Microsoft Solver Foundation (MSF) product technology that is designed for modelling and constraint solving. One can use product configuration to create and maintain product configuration models, and to reuse components and attribute types. Attributes, constraints, subcomponents, user requirements, Bill of Material (BOM) lines, and route operations are implicitly reused when reusing a component. Components can also reuse table constraint definitions. This module explains how to get started with product configurator in Finance and Operations.

Lessons
- Introduction
- Understand the product configuration model
- Build a product configuration model
- Practice Labs
- Module summary

In this module students learned about:

- The terminology that is important for understanding the concepts and processes that are associated with product configuration
- Product configuration end-to-end scenario
- The different areas that span the product configuration process
- The product configuration model
- How to build a product configuration model

Module 8: Course Conclusion

Final assessment and course summary, as well as a post-course survey for the course.

Lessons

- Final assessment
- Course summary
- Post-course survey

Course MB-320T02-A: Configure and use lean manufacturing in Dynamics 365 for Finance and Operations

Course Objective

Organizations use Dynamics 365 for Finance and Operations to run smarter with connected operations by selecting best-fit manufacturing processes, improving operational procedures, simplifying resource management, accelerating product delivery, and increasing quality and customer satisfaction.

This course discusses how to configure and use lean manufacturing in Dynamics 365 for Finance and Operations.

Audience profile

A Dynamics 365 for Finance and Operations Functional Consultant is responsible for performing discovery, capturing requirements, engaging subject matter experts and stakeholders, translating requirements, and configuring the solution and applications. The Functional Consultant implements a solution using out-of-the-box capabilities, codeless extensibility, application, and service integrations.

Job role: Functional Consultant

<u>Preparation for exam</u>: <u>MB-320</u>

<u>Prerequisites</u>

Basic understanding of ERP and CRM concepts.

<u>Course outline</u>

<u>Module 1: Get Started with Lean Manufacturing</u>

This topic explains how to get started with the Lean manufacturing in Finance and Operations.

<u>Lessons</u>
- Introduction
- Concepts and terminology
- Module Summary

In this lesson, students learned to:

- Understand Lean manufacturing
- Understand Lean concepts and terminology

<u>Module 2: Configure Lean Manufacturing</u>

This topic explains how to configure Lean manufacturing in Finance and Operations. A Lean manufacturing scenario is usually more than an accumulation of unrelated Kanban rules or material-supply policies. The flow of material and products throughout work cells and locations for a specific production or supply scenario can be described as a sequence or small network of process or transfer activities, called a production flow. The activity-based production flows are introduced in Finance and Operations to establish a production and cost context for various Kanban scenarios. All Kanban rules are directly connected to this pre-defined structure. The activity-based model allows users to set up a wider range of scenarios than supported by previous versions of Lean manufacturing for Finance and Operations, without adding complexity for the shop floor workers because all scenarios use the same activity-based user interface.

<u>Lessons</u>
- Introduction
- Configure parameters
- Create value streams and production flow models
- Create production flows
- Practice Labs

- Module summary

In this module, students learned to:

- Configure parameters
- Configure value streams
- Create Production Flows
- Configure lean manufacturing work cells

Module 3: Create and Process Fixed Kanban Rules

In Dynamics 365 for Finance and Operations, a Kanban is implemented as a framework to plan, track, and process based on Pull signals. A Kanban is an essential part of a pull system of supply, which is a critical element of Lean production/supply. When a Kanban has been consumed, it should be passed (triggered) to the source of supply to replenish it. This source of supply is defined through the production flow activities to which the Kanban is linked. Kanban rules in Finance and Operations are tied to production flows as the foundation that defines the activities of a Kanban. Kanban rules can be set up to support a variety of make-to-stock and make-to-order scenarios.

Lessons
- Introduction
- Kanban boards
- Configure a fixed Kanban rule
- Process fixed Kanbans
- Practice Labs
- Module summary

Students understood an overview of Kanbans and Kanban types, and learn how to configure and process Fixed Kanban rules.

Students learned how to configure and work with:

- Kanban rules
- Manufacturing Kanbans
- Withdrawal Kanbans
- Fixed quantity Kanbans

Module 4: Create and Process Event Kanban Rules

In this module we discuss the event kanbans and different ways to trigger them.

Lessons
- Introduction
- Configure event Kanban rules
- Configure sales, Kanban, stock replenishment and BOM line events
- Practice labs
- Module summary

Students learned how to configure and process event Kanban rules.

Students learned how to configure and work with:

- Kanban rules
- Manufacturing Kanbans
- Withdrawal Kanbans
- Create and manage Sales line event Kanban
- Create and manage BOM line event Kanban
- Students also understand sample scenarios for event Kanbans processes and different event Kanban types.

Module 5: Create and Process Scheduled Kanban Rules

The planned orders of type Kanban are created based on the Kanban rule and follow the standard Master Planning logic and horizons. Master Planning item coverage settings determine how the planned orders are created and whether they are automatically or manually firmed. In this module we discuss the scheduled Kanban in Dynamics 365 for Finance and Operations.

Lessons
- Introduction
- Configure scheduled Kanban rules
- Understand Kanban quantity calculations and circulation Kanbans
- Practice labs
- Module summary

Students learned how to configure and work with:

- Kanban rules
- Manufacturing Kanbans
- Withdrawal Kanbans
- Create and manage scheduled Kanban
- Supply schedule
- Kanban quantity calculations

Module 6: Configure Activity-Based Subcontracting and Production Flow Costing

The basic principle of a production flow does not change when activities are subcontracted using Finance and Operations; material still flows between locations, process activities convert material to products, and transfer activities move material or products from one location to another. In Dynamics 365 for Finance and Operations, there are two approaches for subcontracting: production orders and Lean manufacturing. The first approach models the subcontracting work as a service that is related to an activity of a production flow. A cost group type, direct outsourcing, is required to be configured, so that the subcontracting services are not as part of a BOM. The cost accounting of subcontracted work is completely integrated in the new costing for manufacturing in Microsoft Dynamics 365 for Finance and Operations.

Lessons
- Introduction
- Configure activity-based subcontracting
- Understand production flow costing
- Practice labs
- Module summary

In this lesson, students learned how to:

- Configure activity-based subcontracting
- Configure production scheduling and subcontracting
- Designate vendors as subcontractors
- Configure production flow costing

Module 7: Course Conclusion

Final assessment and course summary, as well as a post-course survey for the course.

Lessons
- Final assessment
- Course summary
- Post-course survey

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Course MB-320T03-A: Configure and use process manufacturing in Dynamics 365 for Finance and Operations

Course Objective

Organizations use Dynamics 365 for Finance and Operations to run smarter with connected operations by selecting best-fit manufacturing processes, improving operational procedures, simplifying resource management, accelerating product delivery, and increasing quality and customer satisfaction. This course discusses how to configure and use process manufacturing in Dynamics 365 for Finance and Operations.

Job role: Functional Consultant

Preparation for exam: MB-320

Prerequisites

Basic understanding of ERP and CRM concepts.

Course outline

Module 1: Get Started with Process Manufacturing

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This topic explains how to get started with the process manufacturing in Finance and Operations.

Lessons
- Introduction
- Understand process manufacturing
- Understand formula management
- Understand co-products and by-products
- Configure approved vendors
- Practice labs
- Module summary

In this module students learned:

- Understand process manufacturing
- Understand formula management
- Understand co-products and by-products
- Understand approved vendors

Module 2: Identify and Configure Batch Attributes for Process Manufacturing

This topic explains how to configure batch attributes in Finance and Operations.

Lessons
- Introduction
- Identify and configure batch attributes
- Create and configure catch weight items
- Setup potency management
- Practice labs
- Module summary

In this module students learned to:

- Understand Batch Attributes
- Identify and configure batch attributes
- Understand Lot and Batch Control processes
- Configure batch rework

Module 3: Configure Commodity Pricing and Product Compliance

This topic explains how to work with commodity pricing, and compliance in Finance and Operations.

Lessons
- Introduction
- Configure commodity pricing
- Configure product compliance
- Practice labs

- Module summary

In this module students learned to:

- Configure commodity pricing
- Configure product compliance

Module 4: Course conclusion

Final assessment and course summary, as well as a post-course survey for the course.

Lessons
- Final assessment
- Course summary
- Post-course survey