Course Catalog

— Customers
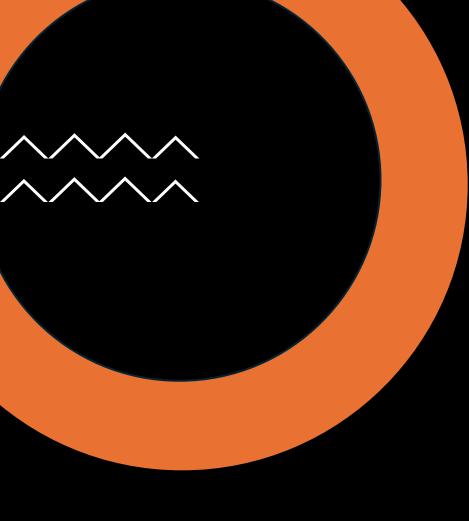
o9

Table of Contents

Category Level – 1
Industry Digital Brain

Category Level – 2

- Business Model Characteristics

- Consumer Products (CP)

- Retail, Distribution and Apparel & Footwear (RDAF)

- Retail, Distribution, Apparel & Footwear and Telecom (RDAFT)

- Supply Industrial Manufacturers (SIM)

Industry Digital Brain

Integrated Planning Processes

05 mins

In this course, you will learn:

- How does lead time drive supply chain decision-making?
- What planning processes are occurring, and at which frequencies and horizons to support supply chain decisions?
- How does o9 support integrated planning processes?

Business Model Characteristics

Overview of New Product Introduction (NPI)

05 mins

In this course, you will learn:

- What is a New Product Introduction (NPI)?
- Which industries are they important for?
- What are the challenges for demand planning and supply planning?
- What is the value leakage if new product introductions are not managed well?

Alternate Parts

05 mins

In this course, you will learn:

- What is the business model characteristic of Alternate Parts?
- What business processes are required for Alternate Parts?
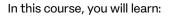- How are Alternate Parts modeled in o9?

Business Model Characteristics

Campaign Optimization

In this course, you will learn:

- What is the business model characteristic of Campaign Optimization?
- What are the advantages of using Campaign Optimization?
- In which industries is Campaign Optimization important?
- What is the value leakage if Campaign Optimization is not managed well?

- Which planning processes and decisions do Campaign Optimization influence?
- What are o9's solutions for Campaign Optimization?

06 mins

Inventory/Deployment Allocation Policies

In this course, you will learn:

- What is the business model characteristic Inventory/Deployment Allocation Policies?
- What are the advantages of using Inventory/Deployment Allocation Policies?
- In which industries are Inventory/Deployment Allocation Policies important?

- What is the value leakage if Inventory/Deployment Allocation Policies are not managed well?
- Which planning processes and decisions do Inventory/Deployment Allocation Policies influence?
- What are o9's solutions for Inventory/Deployment Allocation Policies?

05 mins

Business Model Characteristics

Introduction to Resources and Constraints

In this course, you will learn:

- What are resources and constraints?
- What are the procurement, manufacturing, and distribution resources?
- Which industries are resources and constraints important for?

- Why is it important to model resources in a supply chain network?
- What is the value leakage if resources and constraints are not modeled accurately?

15 mins

Attach Rate Forecasting
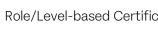
In this course, you will learn:

- What is the business model characteristic of Attach Rate Forecasting?
- What are the advantages of using Attach Rate Forecasting?
- In which industries is Attach Rate Forecasting important?
- What is the value leakage if Attach Rate Forecasting is not managed well?

- Which planning processes and decisions does Attach Rate Forecasting influence?
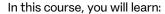- What are o9's solutions for Attach Rate Forecasting?

06 mins

Business Model Characteristics

Production Quarantine

In this course, you will learn:

- What is production quarantine?
- Which industries is it important for?
- What is the value leakage if production quarantine is not considered in planning?
- What are o9's solutions for production quarantine?

09 mins

Vendor Splits & Alternate Vendors for Each Part

In this course, you will learn:

- What are the business model characteristics Vendor Splits and Alternate Vendors for Each Part?
- What are the advantages of using Vendor Splits?
- In which industries are Vendors Splits important?
- What is the value leakage if Vendor Splits are not managed well?

- Which planning processes and decisions do Vendor Splits influence?
- What are o9's solutions for Vendor Splits?

05 mins

Business Model Characteristics

Multi-Tier Distribution Networks

In this course, you will learn:

- What are multi-tier distribution networks?
- Which industries are they important for?
- What is the value leakage if a multi-tier distribution network has incorrect inventory?
- What data does o9 maintain on distribution lanes (also called routes to market or BODlanes)?
- What are the plans that o9 generates regarding multi-tier distribution networks?

21 mins

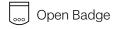## Raw Material Transition Planning

In this course, you will learn:

- What is raw material transition planning?
- Which industries is it important for?
- What is the value leakage?
- What are the o9's solutions for raw material transition planning?

08 mins

Business Model Characteristics

Fulfillment Models

In this course you will learn:

- What are fulfillment models?
- What are build to order, build to stock and configure to order fulfillment models?
- Which industries are characterized by each fulfillment model?

- What is the value leakage if fulfillment models are not modeled correctly?
- How does o9 accommodate fulfillment models?

25 mins

Business Characteristics: Vendor Managed Inventory (VMI)

In this course, you will learn
- What is 'Vendor Management Inventory'?
- Which industries is it important for?
- What is the value leakage?
- Which decisions does it influence?

22 mins

Business Model Characteristics

Business Characteristics: Product Qualification by Line or Factory

In this course, you will learn

- What is 'Product Qualification by Line'?
- Which industries is it important for?
- What is the value leakage?
- Which decisions does it influence?

20 mins

Deal-Based Supply Chains

In this video, you will learn

- What is the business model characteristic of Deal-Based Supply Chains?
- Which industries use Deal-Based Supply Chains?
- What is the value leakage if Deal-Based Supply Chains are not planned properly?
- What are o9's solutions for Deal-Based Supply Chains?

06 mins

Business Model Characteristics

Project-Based Supply Chains

15 mins

In some industries, orders arrive in the form of large projects for the creation, assembly, and installation of high-value, complex products. In this course, the key elements of project-based supply chains, and their implications for planning, are discussed. Learners will see how projects drive demand, and impact activities in installation, distribution, production, procurement, and engineering. Examples of project-based supply chains across industries in capital equipment and telecom infrastructure are shown. The typical life cycle of a project is described, from pre-sales through implementation and post-implementation support.

Potential value leakages and o9 solution capabilities to solve them are highlighted. Learners will review how projects are modeled in supply chain management, including associated orders, order lines, configs, and components, and examine the difference between front-line and supply-line orders. Milestones, endpoints of tasks representing key supply chain deadlines, are explained. Sample milestones are shown at different planning levels, and o9's capabilities of importing milestones, mapping them to supply chain activities, and reporting out supply plans in terms of milestones are covered.

Order Promising

23 mins

This course delves into the foundational concepts and strategic implications of order promising and repromising within supply chain management. Participants will explore key terms such as Available-to-Promise (ATP) and Capable-to-Promise (CTP), understanding their role in securing accurate delivery commitments. The curriculum emphasizes the identification and management of value leakages—such as over-commitments and under-utilization of resources—that can arise from inaccurate order promising.

Through a review of practical scenarios, students will see how effective order promising influences critical supply chain decisions, including inventory management, production planning, and customer relationship management. Additionally, the course will cover some of the strategies used to mitigate risks, enhance operational efficiency, and maintain customer trust in dynamic market conditions.

In this course, you will learn:
- What is Order Promising?
- Which industries is it important for?
- What are the value leakages?
- Which decisions do order promising influence?

Business Model Characteristics

EDI Triangulation

20 mins

EDI (Electronic Data Interchange) triangulation refers to the process of cross-referencing and validating data across three different sources or points of reference within an electronic data interchange system. It involves comparing information received from one party with data from two other parties to ensure the accuracy, consistency, and integrity of the exchanged information.

EDI triangulation is crucial for industries that heavily rely on electronic data interchange for conducting business transactions.

Hands-on   Role/Level-based Certificate   Open Badge   Completion Certificate

o9

Business Model Characteristics

Material Requirements Planning

12 mins

In this course, you will learn:

- What is material requirements planning?
- Which industries is it important for?
- What is the value leakage if you don't have effective material requirements planning?
- What are o9's solutions for material requirements planning?

Storage Constraints

04 mins

In this course, you will learn:

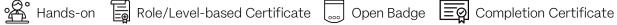- How can you manage storage constraints at DCs, in both the short-term and longer-term?
- How can the o9 system aid in this process by providing visibility into storage constraints, and in later phases, providing rebalancing recommendations?

Business Model Characteristics

Co-manufacturers, Co-packers, and Re-packers

04 mins

In this course, you will learn:

- What are co-manufacturers, co-packers, and re-packers?
- Which industries are they important for?
- What is the value leakage?
- Which of o9's solutions are influenced by co-manufacturers, co-packers, and re-packers?

Production Campaigns

09 mins

In this course, you will learn:

- What are production campaigns?
- Which industries are they important for?
- How are production campaigns integrated into the planning process?
- What is the value leakage if production campaigns are not used in planning?

- How does o9 manage production campaign data?
- How does o9 generate constrained production plans using production campaigns?

Business Model Characteristics

Sourcing Prioritization

In this program, you will learn:

- What is sourcing prioritization?
- What problems does it solve?
- How does o9 compute sourcing prioritization for single-tier and multi-tier distribution networks?
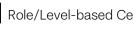
07 mins

Finished Goods Transition Planning

In this course, you will learn:

- What are the business use cases of finished goods transitions?
- How does the o9 system handle finished goods transitions?

07 mins

Business Model Characteristics

Push Planning

In this course, you will learn:

- What is push planning?
- When is push planning needed?
- How does the o9 platform accommodate various push planning use cases?

04 mins

Route to Market

You will learn what route to market is and why it is important in o9. Additionally, you will learn how o9 utilizes route to market to set the foundation for the next step in the process, sourcing prioritization.
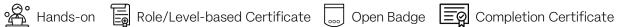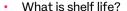
04 mins

Business Model Characteristics

Shelf Life

In this course, you will learn:

- What is shelf life?
- Which industries is it important for?
- What is the value leakage if shelf life is not managed well?
- Which planning processes and decisions influence shelf life?

- What are o9's solutions for managing shelf life?
- How does o9 incorporate shelf life into end-to-end planning?
- How does o9 support inventory rebalancing?

16 mins

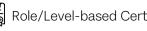## Allocation to Order Mapping and Allocation Swap

This course delves into the crucial supply chain management processes of Allocation to Order Mapping and Allocation Swap, essential for managing limited resources and ensuring high-priority orders are fulfilled efficiently when demand exceeds supply. Participants will explore how these strategies impact various industries, such as semiconductors and automotive supply, where managing long lead times and fluctuating demands is critical. The course addresses potential value leakages like inaccurate forecasting and operational inefficiencies that can arise from mismanaged allocation.

Through practical scenarios, learners will understand how companies adjust allocations in response to changing business conditions, optimize resource utilization, and make informed decisions that affect production planning, inventory management, and customer prioritization.

32 mins

Business Model Characteristics

Product Mix Management

In this course, you will learn:

- What is 'Product Mix Management'?
- Which industries is it important for?
- What is the value leakage?
- Which decisions does it influence?

19 mins

Consumer Products (CP)

Introduction to Consumer Products Industry

17 mins

In this course, you will learn:

- What are the characteristics of the consumer products industry?
- What are the challenges industry clients face in supply chain planning?
- What are the key supply chain decisions that industry clients must make?

- What are o9 solution capabilities clients can use to address challenges?
- What is the value proposition for clients using the o9 platform?

Retail, Distribution, Apparel & Footwear and Telecom (RDAF&T)

Introduction to Retail and Distribution

27 mins

In this course, you will learn:

- What are retailers and distributors?
- What are the sub-industries that comprise the retail and distribution industries?
- What are the business model characteristics of retail and distribution?
- What are o9's solutions for retail softlines?

Retail, Distribution, Apparel & Footwear and Telecom (RDAF&T)

Telecom Retail

o9 Planning Solutions for the Telecom Industry

360 mins

The o9 Planning Solutions for the Telecom Industry program covers all the key supply chain flows for the network supply chain of a Telecom provider. This includes process flows, process maps, user stories, data integrations, data specifications for demand planning, procurement, vendor collaboration, inventory optimization, and order allocation workflows.

After completing this program, you will be able to explain various process flows associated with the Telecom solution, demonstrate basic navigation in the o9 platform, and demonstrate various steps in the process flows: Demand Planning, Supply Planning, Inventory Optimization, and Order Allocation.

Hands-on   Role/Level-based Certificate   Open Badge   Completion Certificate

o9

Retail, Distribution, Apparel & Footwear and Telecom (RDAF&T)

Telecom Devices

Supply Chain Planning for the Telco Devices Industry

108 mins

Telecommunications technology is changing at a rapid pace, and the market is highly competitive. Building strong supply and demand capabilities for Telecom network operators is crucial.
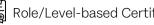
This course is designed to help you understand how o9's Industry Digital Brain platform, with its advanced supply and demand capabilities, enables better and faster decisions.

This course will give you insights into how the o9 Platform supports the Supply Chain Planning domain for the Telecom Device industry.

After completing this course, you should be able to:
- Describe the unique needs of the Telecom Device industry
- Understand how the o9 platform provides Supply Chain solutions to the Telecom industry
- Analyze the value diagnostics of o9's Industry Digital Brain
- Explain Demand Planning and its specifications related to the Telecom Device Industry
- Describe the process flow of the Telecom solution
- Describe Segmentation and demonstrate it on the o9 Platform
- Analyze Outlier Processing and demonstrate it on the o9 Platform
- Explain Demand Forecasting and its specifications related to the Telecom Device Industry
- Describe Stat Forecasting and demonstrate it on the o9 Platform
- Understand the New Product Introduction and demonstrate its components on the o9 Platform
- Explain Cannibalization and demonstrate it on the o9 Platform
- Explain Analyze Post Game Analysis and demonstrate it on the o9 Platform

Retail, Distribution, Apparel & Footwear and Telecom (RDAF&T)

Telecom Devices

Telecom Devices: Industry Overview

22 mins

In this course, you will learn:

- What are the challenges industry clients face in supply chain planning?
- What are the key supply chain decisions that industry clients must make?
- What are o9 solution capabilities clients can use to address challenges?

- What is the value proposition for clients using the o9 platform?
- What are the business model characteristics involved in this industry?
- What is the recommended o9 solution to solve Telecom Devices client challenges?

Retail, Distribution, Apparel & Footwear and Telecom (RDAF&T)

Telecom Infrastructure

o9 Telecom Infrastructure Solution

65 mins

In this course, you will learn:

- What are the challenges industry clients face in supply chain planning?
- What are the key supply chain decisions that industry clients must make?
- What are o9 solution capabilities clients can use to address challenges?
- What is the value proposition for clients using the o9 platform?

- What are the business model characteristics involved in this industry?
- What is the recommended o9 solution to solve telecom infrastructure client challenges?

Applicable for Release 2023.10

Retail, Distribution, Apparel & Footwear and Telecom (RDAF&T)

Retail

o9 Knowledge Masters in Retail

490 mins

Consumers have many options when it comes to choices in retailers, products, channels, and fulfillment options. Retailers face a stream of challenges to drive customer loyalty and financial results.

The o9 Knowledge Masters in Retail Program will help you understand the concepts of Retail Planning and Retail Operations. Through this program, you will learn the competitive strategies retailers use to move past their challenges and move forward to fulfill consumer needs, thereby growing their businesses and maintaining their brands.

After completing this program, you should be able to:

- Describe retailing, the entities involved, and the impact of decisions on a retail business
- List the characteristics of the different types of retailers
- Describe why it is important for retailers to research and understand their customers
- Summarize the key challenges facing retailers
- List the key aspects of efficient retail operations
- Identify retail pricing and sales strategies

Retail Math and Performance Metrics

63 mins

Retail Math and Performance Metrics is an ideal program to learn the fundamental principles and skills necessary to analyze the pricing strategies commonly practiced by retail merchandisers in their daily jobs.

You will learn commonly used performance metrics including Mark-up, turnover, and margin calculations, used to measure retail performance at an individual item, category, or company level.

The core focus is on demonstrating how to apply Retail Math formulas to a specific merchandising situation. You will be solving a bunch of merchandising problem statements for a thorough understanding of the Retail industry.

There is a test at the end of this program, designed to check the knowledge you gained on these basic mathematical principles.

Supply Industrial Manufacturers (SIM)

Max Asset Utilization

17 mins

This course explores the concept of Max Asset Utilization, focusing on how to employ a company's resources—such as equipment, transportation, and technology—to optimize efficiency, reduce costs, and improve customer satisfaction in supply chain management. Participants will learn why maximizing asset utilization is critical, particularly in industries like manufacturing, logistics, pharmaceuticals, semiconductors, and energy. Through detailed analysis of key strategies such as equipment and fleet management, warehouse optimization, and the integration of advanced technologies, the course will address how these approaches can lead to significant competitive advantages.

Course Objectives:
- Understand the importance of Max Asset Utilization across various industries and identify the key assets involved.
- Examine the main sources of value leakage and strategies to mitigate these inefficiencies.
- Explore decision-making processes influenced by asset utilization, including capital investment and operational scheduling.
- Gain insights into the use of technology and analytics to improve asset performance and strategic planning.

Supply Industrial Manufacturers (SIM)

Auto Supplier

Business Characteristics of the Auto Supplier Industry

50 mins

In this course, you will learn about:

- The key industry characteristics of the auto supplier industry.
- The business characteristics, challenges, and value leakage areas for the auto supplier industry.
- o9's solutions and value propositions for the auto supplier industry.
- The o9 Digital Brain and solution building blocks for the auto supplier industry.

Note: This course will be continually updated with the addition of new units. Consequently, each time a new unit(s) is/are added, the overall learning progress percentage will correspondingly alter. To ensure the progress indicator displays 100% or completed status, it is important to view the newly added units.

Supply Industrial Manufacturers (SIM)

Capital Equipment

Capital Equipment and Machinery: Industry Overview

24 mins

In this course, you will learn:

- What are the challenges industry clients face in supply chain planning?
- What are the key supply chain decisions that industry clients must make?
- What are o9 solution capabilities clients can use to address challenges?

- What is the value proposition for clients using the o9 platform?
- What are the business model characteristics involved in this industry?
- What is the recommended o9 solution to solve Capital Equipment and Machinery client challenges?

Supply Industrial Manufacturers (SIM)

Semiconductor

Business Characteristics of the Semiconductor Industry

50 mins

In this course, you will learn:

- The key industry characteristics of the semiconductor industry.
- The business characteristics, challenges, and value leakage areas for the semiconductor industry.
- o9's solutions and value propositions for the semiconductor industry.
- The o9 Digital Brain and solution building blocks for the semiconductor industry.

Note: This course will be continually updated with the addition of new units. Consequently, each time a new unit(s) is/are added, the overall learning progress percentage will correspondingly alter. To ensure the progress indicator displays 100% or completed status, it is important to view the newly added units.

Aggregate Level SLA

20 mins

This comprehensive course delves into the strategic implementation and management of Aggregate Level Service Level Agreements (SLAs) in the supply chain, using the automotive supply industry as a case study, specifically examining a fictitious company, AutoPrime Components. Participants will learn how these SLAs provide a broad framework that ensures consistent service quality across various industries including telecommunications, manufacturing, and retail, with a focus on maintaining operational efficiency and customer satisfaction.

Course Objectives:
- Define Aggregate Level SLA.
- Recognize the industries that use Aggregate Level SLA.
- Identify the value leakages of not engaging in Aggregate Level SLA.
- Know the decisions Aggregate Level SLA influences.

Supply Industrial Manufacturers (SIM)

Telecom Wireless and Wireline

Supplier Collaboration for Telecom Infrastructure

The Supplier Collaboration for Telecom Infrastructure course introduces the concept and functionality of Collaboration through the Buyer and Supplier portals. In this course, users will learn where to find Forecast, Inventory, and Order Collaboration details. The course also guides on how to quickly identify and address exceptions, and later convey that information to the respective teams.
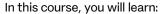
30 mins

Supply Industrial Manufacturers (SIM)

Chemical

Chemical Industry Overview

In this course, you will learn:

- What are the challenges Chemical Industry clients face in supply chain planning?
- What are the key supply chain decisions that Chemical Industry clients must make?
- What are o9 solution capabilities Chemical Industry clients can use to address challenges?

- What is the value proposition for Chemical Industry clients using the o9 platform?
- What are the business model characteristics involved in the Chemical Industry?

13 mins

Category Level – 1
o9 Platform/ Technology

Category Level – 2

- [Big Data Stack](#)
- [Data Integration](#)
- [Data Science](#)
- [o9 Platform Architecture](#)
- [o9 Platform Modeling](#)
- [Performance Improvement Series](#)
- [Solver Plugins](#)

o9 Platform/Technology

Navigating through o9 Platform

This course teaches how to navigate the various end-user-related options on the o9 platform. You will know the multiple visualizations in a solution and learn to navigate through them. You will see selective data, moving from one view to another and viewing various reports within the views. You will also get to see other features, such as Action Buttons, Tasks, Notifications, and Posts.

50 mins

Big Data Stack

Hadoop & Hive

Hadoop Hive Overview

In this course, you will learn:

- Overview of Hadoop
- HDFS Architecture
- Data Replication
- Common Hadoop Tools
- Important Hadoop Ecosystem Tools Used in the ABC Project

- Apache Spark
- Airflow
- ABC Project
- Demo

100 mins

Data Integration

o9 Platform Integration Evolution

09 mins

This course is for anyone who wants to know about the evolution of o9 Platform Integration features.

Embark on a journey through o9's data handling evolution from 2016 to 2023. Explore the progression of Platform Integration over the years, including critical milestones such as File Based Integration in 2016, the launch of Platform API for JSON transmission in 2018, the introduction of Staging APIs in 2019, enhancements with External APIs in 2020, the introduction of the Streaming Ingestion Feature in 2021, and the unveiling of Integration 3.0 and its components in 2023.

SSIS Essentials

424 mins

This is an ideal program if you want to learn the basics and start working with Microsoft SQL Server Integration Services (SSIS).

SSIS is one of the main extensions for Microsoft SQL Server. Professionals use SSIS to build automated workflows that speed up the process of combining data from numerous sources. You can ingest and transfer data between source systems and flat data files, through ETL (extract, transform, and load), or ELT (extract, load and transform).

This program will teach you how to use various control flow and data flow tasks, data sources, connections, transformations, variables, and more to get started with SSIS.

This is a hands-on intensive program; learners must complete the modules and tutorials sequentially before moving on to the next module for effective learning.

Data Integration

Introduction to Data Warehousing and ETL

This course introduces you to the core concepts of data warehousing, data normalization, extract, transform and load (ETL) process, and dimensional modeling concepts. This will help build a strong conceptual foundation, to be able to work with advanced ETL tools and techniques.

105 mins

Objectives:

- Describe the evolution of Information Management Systems
- Describe the creation of Online Analytical Processing (OLAP) System
- Outline Data Warehousing Concepts
- Define Data Normalization
- Describe the Extract Transform Load (ETL) Process
- Outline the Dimensional Modelling Concepts

Hands-on   Role/Level-based Certificate   Open Badge   Completion Certificate

DSML

Using the DSML Workbench

46 mins

'Using the DSML Workbench' course aims to equip Data Scientists with a comprehensive understanding of the o9 framework for constructing Machine Learning and Statistical models. This is achieved by elucidating the process of data retrieval and integration into the o9 platform, followed by leveraging Python within a familiar Notebook interface. The course delves into fetching data from LS using the LiveFrame feature, as well as importing flat files into o9's Live Server with Dimension/Measure mapping. Additionally, participants will learn to execute plugins at scale using the developed o9Flow framework and effectively analyze the inputs and outputs of their experiments.

Mandatory Prerequisites:

- Data Science with Python Programming
- Mastering Python Programming

Data Science for Supply Chain Planning

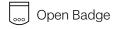## Introduction to Data Science for Supply Chain Planning

04 mins

This short video introduces learners to 'Introduction to Data Science for Supply Chain Planning' guided learning path. The Data Science for Supply Chain Planning Learning Path offered by o9 Academy empowers individuals at all proficiency levels, ranging from beginners to experts, to effectively leverage Data Science and the o9 Platform. By employing Machine Learning techniques, learners can generate data-driven plans and achieve precise forecasts. Throughout this educational journey, participants will establish a strong foundation in key areas such as Python, Data Science, Statistics, Machine Learning, and Artificial Intelligence.

The video outlines the different phases of the learning path, as well as the specific courses encompassed within each phase. Upon successful completion of all the courses within the learning path, participants will earn the associated Credly Badge, which validates their achievement in this learning path.

Data Science for Supply Chain Planning

Essentials

Machine Learning and Artificial Intelligence: Essentials

31 mins

The aim of this course is to provide learners with a comprehensive understanding of Machine Learning (ML) and Artificial Intelligence (AI), its fundamental principles, techniques, and its real-world applications. Through this course, learners will gain the necessary knowledge and skills to effectively navigate the rapidly evolving landscape of ML and AI.

The course aims to help the learner understand:

- Fundamental concepts of Machine Learning, Artificial Intelligence, and Deep Learning
- Differentiate between Traditional Programming and Machine Learning
- Explain Machine Learning's life cycle and its importance
- Advantages of Machine Learning
- Machine Learning Workflow, applications, and use cases
- Machine Learning and its various algorithms

Statistics Essentials

36 mins

The aim of this self-paced course is to provide learners with a solid foundation in Statistics, which is fundamental to the field of Data Science. Through this course, learners will develop the necessary skills to recognize, analyze, and gain insights from data.

The course covers the core principles of Statistics, including analysis techniques and hypothesis testing. By applying these concepts to real-world business scenarios, learners will gain the ability to effectively analyze data, draw conclusions, and derive valuable insights.

The topics covered through the course are:

- The fundamentals of Statistics and probability
- The importance of Statistics in Data Science
- The difference between descriptive and inferential Statistics
- The various statistical analysis techniques
- Hypothesis testing and its types
- Probability and Regression analysis

Data Science for Supply Chain Planning

Essentials

Python Fundamentals

The goal of this course is to equip new programmers with a clear starting point and solid foundation in Python. Learn the principles of Python and become acquainted with the Python programming environment throughout this program.

By the end of the course, learners will have obtained a thorough understanding of Python as well as the skills required to boldly begin their programming adventure.

136 mins

This course will help you comprehend the following often asked beginner questions:

- The Basics of Python
- How to set up a Python environment on your system
- Fundamental concepts, variables, and data types in Python
- Different data structures in Python
- Control structures and functions in Python

Data Science Essentials

In this course, you will understand:
- The fundamentals of Data Science
- Components of Data Science
- Real-life examples of Data Science
- Data Science vs. Business Intelligence (BI) vs. Machine Learning (ML)
- Life cycle and benefits of Data Science
- Who is a Data Scientist, and What is the role of a Data Scientist
- Skills and Challenges for a Data Scientist
- Tools and real-world applications of Data Science

33 mins

Data Science for Supply Chain Planning

Deep Dive

Mastering Python Programming

450 mins

This course is intended to educate learners with the knowledge and skills necessary to become proficient in Python programming.

Get ready to embark on this Python programming journey, while you delve into advanced topics and techniques, from mastering complex data structures to understanding object-oriented programming (OOP) principles. It includes hands-on labs to reinforce your learning and apply problem-solving concepts.

This course covers:

- The basic data structures in Python, such as Lists, Tuples, Sets, and Dictionaries
- Master the rich set of Python modules and packages
- Work with files in Python, including reading, writing, and manipulating data
- Understand object-oriented programming in Python, including classes, objects, and inheritance
- Work with regular expressions in Python to search, match, and extract text
- Use databases in Python to store and retrieve data

Data Science with Python Programming

340 mins

The aim of this course is to provide learners with a comprehensive understanding of Data Science principles and techniques using the Python programming language.

In this course, you will gain practical skills in loading, cleaning, analyzing, and visualizing data. You will have the opportunity to work with Python's robust libraries, including NumPy, Pandas, Matplotlib, and Seaborn, to enhance your hands-on experience.

This will help you to:

- Perform data analysis using NumPy
- Perform data analysis using Pandas
- Visualize data using Matplotlib
- Define Data Visualization using Seaborn

Data Science for Supply Chain Planning

Deep Dive

Applying Data Science Techniques using Machine Learning with Python

555 mins

This course equips learners with the knowledge and skills necessary to effectively apply Data Science techniques and Machine Learning (ML) algorithms using Python.

This course provides a concise introduction to Machine Learning fundamentals, covering its applications and types of algorithms. From supervised and unsupervised learning to reinforcement learning and model evaluation, you will gain a solid understanding of ML concepts and their practical use. It also provides hands-on labs to reinforce your learning and apply the skills learned in real-world problem-solving.

This course will teach you to apply the following techniques using ML and Python:

- Data Preprocessing
- Classification
- Regression
- Anomaly Detection
- Association Rules
- Clustering
- Time Series

Data Science for Supply Chain Planning

o9 Specific Implementation

Configure, Execute & Debug Python Plugin on o9 Platform

This course is best suited for learners whose job role involves the usage of the o9 Platform, Python programming, and Python plugins. A scenario-based approach is used to provide you the knowledge required to configure, execute, and debug Python plugins on the o9 Platform.

30 mins

By the end of this course, you will:

- Understand the Python plugin architecture on the o9 Platform
- Know the steps involved in configuring a Python plugin
- Understand the need for the Anaconda environment for Python plugins
- Know the steps involved in executing a Python plugin
- Learn to identify common Python plugin errors and debug them

Use the available Backup Tenant JSON and Dataset zip files on this course page to configure and execute the Python plugins.

Introduction to Python & PySpark Plugins

The goal of this course is to familiarize you with the Python and PySpark plugins on the o9 Platform. These plugins enable you to execute Python scripts and utilize the built-in Spark features.

95 mins

This will help you to understand:

- What are Python Plugins and their real-world application?
- The architecture behind the Python plugin
- How to configure and run the Python plugins on the o9 Platform?
- How to troubleshoot Python plugin issues?
- Dynamic Arguments
- How to configure and run the PySpark plugins on the o9 Platform?
- How to setup and run Anaconda to execute different packages

Data Science for Supply Chain Planning

o9 Specific Implementation

Python & PySpark Plugin Readiness and Troubleshooting

This course ensures your proficiency in Python and PySpark plugins for the o9 Platform, allowing you to troubleshoot any plugin-related issues. It also guides you in setting up your local system, configuring Visual Studio, and establishing an Anaconda environment for using Python and PySpark plugins.

145 mins

This will help you to understand:

- Local Setup and Debugging
- Python Plugins on the o9 Platform
- Debugging Plugin Errors
- Python Plugins advanced usage for performance
- PySpark Plugins on the o9 Platform

Python Plugin - Performance Optimization

The aim of this course is to help learners understand how to optimize Python plugins for enhanced performance when working with complex data sets. It provides an overview of Python programming, its architecture, and the benefits it offers in the context of the o9 Platform. Additionally, learners will gain knowledge on configuring a basic Python Plugin and grasp the debugging process associated with it.

85 mins

This will help you to understand:

- Python Plugins and Execution
- Code Execution Time
- Tuning Options
- Slice Bucket Count
- Spark Profile Config
- Power User Settings
- Auto Resource Estimate
- Coding Best Practices

Data Science for Supply Chain Planning

o9 Specific Implementation

Introduction to AI Predict Plugins

In this course you will learn how to use the Predict Plugin, understand Machine Learning (ML) forecasting and the plugin architecture.

This will help you understand:

- Artificial Intelligence (AI)/ML Forecasting
- Plugin Architecture
- o9Predict.ai

70 mins

Introduction to Jhub

In this course, you will understand Artificial Intelligence (AI)/Machine Learning (ML), JupyterHub and Git interactions.

You will learn the usage of:

- Jupyter Notebooks
- Anaconda Environment
- Workflows for updating Plugins in Packages
- Git Interactions

60 mins

Data Science for Supply Chain Planning

o9 Specific Implementation

Segmentation, Artificial Intelligence and Machine Learning Clustering

This course will enable you to use Artificial Intelligence (AI) and Machine Learning (ML) clustering to derive detailed cluster membership for each intersection and to derive feature details from a member level using the o9 Platform.

This will help you to:

- Understand AI/ML Clustering
- Review use cases on Store Clustering and Assortment Planning
- Preview demos on sub-segmentation capabilities and AI Clustering

95 mins

AI Store Clustering - Functional Guide

This functional guide covers the functional design for the Artificial Intelligence (AI) Store Clustering Module. The guide lists the tool design, functions, and features to transform the business requirements of a client into functional requirements.

120 mins

Data Science for Supply Chain Planning

Case Studies

Basic Exploratory Data Analysis using Python - A Case Study

In this case study, you will learn to perform a basic Time Series Exploratory Data Analysis on a data set for the requirement stated in the problem statement.

By reviewing the problem statement document, you will:

- Understand the case study guidelines
- Identify the method by which you can solve the problem and submit the solution
- Understand the problem statement

Note: The case study solution document has the instructions to solve the problem. We recommend that you first try solving the problem and then review the solution document.

40 mins

Forecasting with Time Series using Python - A Case Study

In this case study, you will learn to perform Time Series Decomposition on a data set for the requirement stated in the problem statement.

By reviewing the problem statement document, you will:

- Understand the guidelines for the case study
- Determine the best strategy for solving the challenge and submit your answer
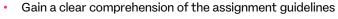- Recognize the problem statement

Note: The methods for solving the problem are included in the case study solution document. We recommend that you first attempt to solve the problem before reviewing the solution document.

30 mins

Data Science for Supply Chain Planning

Case Studies

Exploratory Data Analysis, Forecasting, and Outlier Treatment - An Assignment

60 mins

This assignment will help you gauge your Data Science skills using Python programming. You can review the assignment document and download the required lab files from the course page.

The problem statements are from the following two topics:

- Data Pre-processing, Forecasting, and Hierarchical Forecasting
- Outlier Correction

By reviewing the problem statement document, you will:

- Gain a clear comprehension of the assignment guidelines
- Determine the submission method for your solution
- Comprehend the problem statement

Data Science for Supply Chain Planning

Certification Exam

Data Science for Supply Chain Planning Certification Exam

200 mins

This exam assesses the learner's knowledge of Data Science concepts using Python as a Programming Language.

The exam covers the following topics related to Data Science and Python:

- The fundamental concepts include variables, data types, control structures, functions, and classes.
- Advanced topics like object-oriented programming, modules and libraries, exception handling, and file input/output.
- Python libraries, such as NumPy, Pandas, and Matplotlib, for data manipulation, visualization, and analysis.

- Data Science techniques involving supervised and unsupervised learning and algorithms.
- Exploring methods for accurate forecasting.

This exam includes coding exercises and real-world scenarios in the form of multiple-choice questions to test the learner's understanding and practical skills. Learners are expected to demonstrate their ability to work with data sets, apply statistical analysis techniques, and visualize data using Python libraries such as NumPy, Pandas, Matplotlib, and Seaborn.

o9 Platform Architecture

o9 Platform Architecture – About Live Server

In this session, you will get a high-level insight into the components of o9 Platform Architecture, focusing more on Live Server or GraphCube Server.

24 mins

o9 Platform Architecture

This module provides a high-level overview on how all the components work and communicate with each other that forms the architecture of the o9 Platform.

15 mins

Hands-on   Role/Level-based Certificate   Open Badge   Completion Certificate

o9 Platform Modeling

o9 Platform Technical Configuration Essentials

This course focuses on the basic concepts of the o9 Platform. This course enables you to perform basic configuration of the o9 Platform. In this course, you will learn to identify the various modeling entities and their uses, understand and compose IBPL select queries, understand the rules for data manipulation and the scopes they are bound within, and identify the different kinds of widgets available and use them in the dashboards.

521 mins

By passing the exam, you can earn the Credly Open Badge - Enterprise Model Configuration – Technical Associate.

Report Designer Widgets (2023)

275 mins

This course provides an overview of the following widgets:

- Pivot - Beginner
- Pivot - Advanced Part I
- Pivot - Advanced Part II
- Pie Chart
- Bubble Chart
- Horizontal Bar Chart

- Waterfall Chart
- Gauge Chart
- Line Chart
- o9 Online Meeting
- Bubble Chart
- Calendar
- KPI

Note:
- Most of the videos in this program are for "view only". You cannot simulate the navigational steps, as you might not have access to a working environment (tenant).
- Guage Chart, Geo Map, Calendar & KPI have simulations as they are part of our recent SCORM development project. Do let us know in your feedback on your experience.
- Keep a watch on this course as there will be an addition of more widgets.

o9 Platform Modeling

o9 Platform Technical Configuration - Level I

548 mins

This program includes the following modules:

- o9 Platform Architecture
- Introduction to Candy & More (Case Study)
- Platform Environment and Tenants
- Basic Modelling Constructs
- Reading or Interpreting Data
- Version & Scenarios
- NamedSets and Scope Types
- Regular Scope
- Rules & Scope - More Examples
- Active Rules & Reporting Measures
- Creating Widgets and UI Elements
- Creating Pulse Widget
- Alerts & Tasks
- Creating Action Buttons
- Data Security Rules
- Tenant Backup and Restore

Note:

- Download the dataset zip file, from the "files" section, to perform the tutorials & assignments.
- To practice the assignments & tutorials, you will need access to a tenant. Please reach out to your Project Manager for further details.

o9 Platform Modeling

o9 Platform Technical Configuration - Level II

367 mins

This Learning Program focuses on writing complex business logics using more scope types. You will understand how to use other scope types and learn to write simple plugins using R or Python. You will implement Cartesian Scope, Spread Scope, and Recurrence Scope, and explore Action Buttons by adding more field binding types. You will explore some advanced concepts such as Plugins, using JavaScript and Web API connections, working with Edges and Measures in Graph Model, and many more. These concepts will give you more insight into further configuring your Model.

This program includes the following modules:
- Implement Cartesian Scope
- Implement Spread Scope
- Spread Scope - Other Types
- Implementing Evaluate Member and Recurrence Scope
- Action Buttons – More Field Binding Types
- Creating Procedures
- Graph Modeling
- Graphs - Working with Edges and Measures
- Using JavaScript and API
- Config Management
- Model Library
- Debugging Common Errors and Using Logs
- Plugins Using R
- Plugins Using Python

Note:
- Download the dataset zip file, from the "files" section, to perform the tutorials & assignments.
- To practice the assignments & tutorials, you will need access to a tenant. Please reach out to your Project Manager for further details.

o9 Platform Modeling

o9 Platform Technical Configuration - Level I Exam (Japanese)

By passing the exam, you can earn the Credly Open Badge - Enterprise Model Configuration Associate.

70 mins

o9 Platform Technical Configuration - Level II Exam (Japanese)

By passing the exam, you can earn the Credly Open Badge - Enterprise Modeler Configuration Professional.

70 mins

o9 Platform Modeling

Parameterized Procedures

In this module, you will learn how to create Parameterized Procedure and the idea behind creating a Parameterized Procedure. The module discusses a few use-cases demonstrating the use of Parameterized Procedures.

20 mins

Action Buttons - DataSource Fieldbinding Types

In this course, you will learn about the functionality of various Fieldbinding types that are categorized as DataSource Fieldbindings.

30 mins

o9 Platform Modeling

Action Buttons - Miscellaneous Moustache Templates

In this course, you will learn about the functionality of various Fieldbinding types that are categorized as Miscellaneous Moustache templates.

30 mins

Action Buttons - Parent Attribute Fieldbinding Types

In this course, you will learn about the functionality of various Fieldbinding types that are categorized as ParentAttribute FieldBindings.

30 mins

o9 Platform Modeling

Action Buttons - Basic Fieldbinding Types

In this course, you will learn about the functionality of various Fieldbinding types that are categorized as Basic FieldBindings.

45 mins

IBPL for Beginners

This Integrated Business Planning Language (IBPL) beginners course gives you an insight into how to use IBPL to query your member data, manage your members, understand the concepts of graphs and relationships, create rules, and implement data security. The topics of this course module are published as PDF documents.

180 mins

o9 Platform Modeling

Configuring Solutions using Config 2.0

170 mins

This course explores Config 2.0 and its enhancements over Config 1.0 within the o9 Platform.

In the o9 platform, the configuration (aka config) is a collection of platform entities that come together to enable a certain business functionality on a tenant. For example, if you want to run the o9 Demand Planning Reference Product on a tenant, you will instantiate a tenant and load on it a collection of dimensions, measures, rules, reports, workspaces, etc. (aka platform entities) that constitute the o9 Demand Planning product.

Config 2.0 is a paradigm shift in:
- How o9 platform configuration is stored
- How users collaboratively work on platform configuration
- How reference products are built and released
- How customer implementations adopt and extend reference products

The series of videos in this course discuss these new concepts in detail and also provide several demonstrations in the o9 Platform using the simple Candy and More model.

Mandatory Prerequisites:

- o9 Platform Technical Configuration Essentials

Performance Improvement Series

LS Modelling Best Practices - Model Construction

This program talks about some best practices related to modeling constructs; and some dos and don'ts that one should keep in mind while designing a model.

340 mins

Profiling & Fine Tuning in UI

The overall objective of this course is to educate learners on tuning strategies that can be adopted to improve the overall performance of the model. The course will give a good handle on the below areas:

- Profiling techniques to debug the performance issues & bottlenecks in UI
- Fine tuning strategies that can be used to improve performance
- Examples and use cases from implementations that had proven results

94 mins

Performance Improvement Series

Profiling & Fine Tuning in SCS

The overall objective of this course is to provide a good understanding of performance considerations to be done in solver. The course will give a good handle on these areas:

- Profiling solver run times for identifying bottlenecks
- Understanding solver traces and Understanding solver traces and how to optimize solver behavior
- Performance tuning parameters in the solver configuration

120 mins

Profiling & Fine Tuning in IBPL & LS

The overall objective of this course is to educate learners on tuning strategies that can be adopted to improve the overall performance of the model. The course will give a good handle on the below areas:

- Profiling a model to debug the bottlenecks & identify performance improvement areas
- Fine tuning strategies that can be used
- Examples and use cases from implementations with proven results

238 mins

Solver Plugins

Supply Chain Solver (SCS)

Beginner's Guide to Supply Chain Solver (SCS)

200 mins

The primary goal of the Supply Chain Solver (SCS) is to make a demand supply match by adhering to the business priorities/rules such as Demand/Customer Priorities, Inventory Policies, and Demand Fulfilment. The secondary goals include the following:

- Excess inventory to be minimized
- Costs to be reduced
- Product time to market to be improved
- Agility and resilience to be enhanced

The solver takes inputs and processes them to generate the feasible plan or output.

In this course, you will learn the basics of:
- Supply Chain Solver Inputs
- Supply Chain Solver Algorithms
- Supply Chain Solver Outputs

SCS Debugging Series

30 mins

This module includes short videos on various features available for users when Debugging in SCS.

The videos available in this series are:

- How to Create SCS TFS?
- Solver Timings Increased
- Output Changed on Porting to New Environment
- How to Validate SCS Plans?
- How to Read Logs?

Solver Plugins

Supply Chain Solver (SCS)

SCS Features and Capabilities

The Supply Chain Solver (SCS) is the flagship feature of the o9 Platform. This module provides an overview of the features and capabilities of the SCS.

60 mins

Category Level – 1
Solution Building Blocks

Category Level – 2

- [Demand Planning](#)

- [Digital Twin (Data & Knowledge Management)](#)

- [Integrated Business Planning](#)

- [Multi-Tier Supplier Relationship Management](#)

- [Supply Chain Plan & Analytics](#)

- [Merchandise Planning](#)

o9

Solution Building Blocks

Solution Building Blocks

These knowledge videos talk about the big picture of Integrated Planning, connecting planning across merchandising, demand, and supply chain planning, connecting plans across different planning cycles (daily/weekly/monthly/annual), and connecting these to the broader digital transformation.

100 mins

- The DP L1 knowledge videos address broader questions on key constructs of the demand planning process.
- The DP L2 knowledge videos address the specific Collaborative Demand Planning building block.
- The Global Supply Planning L2 knowledge videos (aka Supply Chain Master Planning in o9 terminology) address the specifics of what it is, key outputs/decisions, and inputs/capabilities.

Note:
- These videos will be UPDATED frequently. Therefore, please revisit this program every month.
- More videos will be added, so keep a watch.

Introduction to o9 Building Blocks

In this course, you will learn:
- What are building blocks?
- Why does o9 use building blocks?
- What are the components of a building block?

08 mins

Solution Building Blocks

Connected Decision Models

32 mins

This course explores how connected decision models coordinate the various planning processes in supply chain planning. Participants will learn why integrated business planning, master planning, operational planning, and scheduling and execution differ in horizon, cadence, and granularity. The course compares connected decision models to telescopic buckets and explains why connected decision models are the preferred approach. In addition, it shows how the connected decision models approach prevents conflicts from overlapping decision horizons and how it communicates decisions made by one planning process to other planning processes.

The objectives for this course are:

- Discuss why planning processes differ in horizon, cadence, and granularity
- Identify the advantages of connected decision models compared to telescopic buckets
- Define frozen horizon, planning horizon, and decision horizon
- Describe how upstream and downstream handoffs occur
- Discuss how the use of daily production planning rather than only weekly production planning affects the structure of connected decision models

Hands-on   Role/Level-based Certificate   Open Badge   Completion Certificate

o9

Demand Planning

Functional Insights into Demand Planning Core Solution Building Blocks

546 mins

This course is geared towards end users and business consultants. Upon completion of the course, you will be able to perform the Demand Planning and Analyst function. The course is designed to provide an insight into the o9 Demand Planning Core Solution Building Blocks and the associated features for the 2023.07 version of the Demand Planning Product.

The course covers the key concepts of Demand Planning, highlights the key differentiators of the industry-leading o9 Demand Planning solution along with the salient capabilities of the o9 Demand Planning Reference Product, such as Machine Learning Forecast, Analysis Cockpit, Demand Assumptions, Forecast Layers, Demand Sensing, Active Assortments, Segmentation, etc. This course comprises hands-on exercises that will guide you to use various workflows thereby executing specific processes.

A Day in the Life of a Planner [Demand Planning by Solution Building Blocks]

40 mins

This course will walk you through the activities comprising the Day in the Life of a Planner, or DILOP. You will be introduced to the phases, steps, activities, and roles within each building block inside the o9 Demand Planning and IBP solutions. Within each building block video, you will also see our demand planning solution dashboard that displays the various outputs a planner would use in their day-to-day work.

The key demand planning and IBP building blocks covered in this course are:
- Basic ML/Stat Forecasting
- Collaborative Demand Planning
- NPI Forecasting*
- IBP Foundation*

Note: Coming soon. Keep an eye on this section for additional modules in the future.

Demand Planning

A Day in the Life of a Planner [Demand Planning]

58 mins

This course will walk you through the demand planning process flow and the activities comprising the Day in the Life of a Planner, or DILOP. It explains how demand planning is transformed from old working methods and can be performed in the digital world. Through this course, you will be introduced to the demand planning solution building blocks and their phases, steps, roles, activities, data flow, and timeline of demand planning. Within each process flow video, you will also see our demand planning solution dashboard that displays the various outputs a planner would use in their day-to-day work.

The key topics covered in this program are:
- Introduction to DILOP
- Collecting and reviewing the input data
- Performing post game analysis
- Adjusting the input data
- Generating the system forecast
- Analyzing the plan
- Adjusting and finalizing the plan
- Submitting and archiving the plan

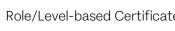## What's New in Demand Planning Solution Building Blocks R2023.07?

404 mins

The R2023.07 Demand Planning and IBP products introduce several significant improvements in this release. These enhancements include three primary changes: Config Blocks, Config 2.0, and support for Additional Dimensions.

In this course, you will find a comprehensive video that explains these key enhancements. Additionally, there is a document that starts by outlining these fundamental changes and then goes on to provide detailed explanations of the various enhancements within each config block. To assess your understanding of these improvements, there is also an assessment included in the course.

Demand Planning

What's New in Demand Planning Solution Building Blocks R2024.03?

16 mins

This course will help discover the latest Demand Planning Core Solution Building Blocks R2024.03 enhancements. This release includes 12 significant updates, covered by the specific configuration blocks they belong to. You'll explore new features in Demand Planning Stat ML Forecasting, Demand Planning Collaborative Planning, Demand Planning Deal Forecasting, Key Account Forecasting, and IBP Foundation.

In the Stat ML Forecasting config block, you will learn about multi-level and multi-horizontal forecasting, the planning cycle dimension in the lag model, and the importance of CML forecast drivers. In the Collaborative Planning block, you'll explore Regrain Demand Planning Accuracy and KPI Lag with location, Bulk Demand Assessment Creation via File Upload, and rolling over the Consensus Forecast from the previous week to the current week.

In the Deal Forecasting config block, you will learn about the Opportunity Win Probability Override and Opportunity Cycle over Cycle Change features. In the Key Account Forecasting block, you will learn about the new feature, Electronic Data Interchange (EDI) Triangulation.

In the IBP Foundation block, you will explore how to publish Risk and Opportunities to Demand Planning, add and edit Probabilities to Risk and Opportunities, and utilize two new dashboards: Cycle over Cycle Change and Target Adherence Workflow Dashboards.

By the end of this course, you will have a comprehensive understanding of these new features and how to apply them effectively in your demand planning tasks, enhancing your processes with the latest tools and methodologies. Detailed use cases and examples will help you grasp and implement the functionalities successfully.

Mandatory Prerequisites:
The learner must have attended the following Instructor-Led Workshops:
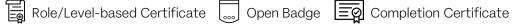- o9 IBP Functional Workshop
- o9 Platform Technical - Basics Workshop

The learner ideally should have completed the following o9 Academy courses and its certification:
- Functional Insights into Demand Planning Core Solution Building Blocks
- What's New in Demand Planning Solution Building Blocks R2023.12?

Demand Planning

What's New in Demand Planning Solution Building Blocks R2023.12?

66 mins

Discover the latest enhancements in Demand Planning Core Solution Building Blocks R2023.12 version in this course. Explore improvements in NPI & Stat Forecasting and new features like Planner & Post Game Dashboards, Deal Based Forecasting, and Forecast using CML.

By completing this course, you will learn about the following:
- Deal Based Forecasting for CTO Products
- Opportunities Management
- Planner Dashboards
- Post Game Dashboards
- NPI Forecasting Improvements
- Enhanced Bestfit Algorithm Selection
- Analysis Cockpit Enhancements
- Forecast Stability Measurement
- User Driven Execution Mode
- Rule Tree Update for New Launches
- Forecast using CML

Mandatory Prerequisites:
The learner must have attended the following Instructor-led Workshops:
- o9 IBP Functional Workshop
- o9 Platform Technical - Basics Workshop

The learner ideally should have completed the following o9 Academy course and its certification:
- Functional Insights into Demand Planning Core Solution Building Blocks

Demand Planning

What's New in Demand Planning Solution Building Blocks R2024.06?

22 mins

This course will help you discover the latest features and enhancements of the o9 Demand Planning (DP) Reference Product Release 2024.06, which includes 17 significant updates across specific configuration blocks. The FVA Dashboard introduces additional metrics, a lag model for greater flexibility, and a new "Touched %" metric to help planners understand adjustments and new KPI tiles to enhance visualization. Forecast decomposition is now available for CML forecasts, breaking down overall forecast numbers into individual components. The Stat Process Summary & Exceptions Dashboard provides insights into workflow completion and failure points. NPI forecasts and cannibalization impacts are integrated into the consensus process, adhering to the MECE principle for comprehensive planning. Planners can now centrally create and manage cannibalization profiles, defining cannibalization periods for evaluating new product impacts.

The DP feature enhancements include Assortment Management, allowing planners to create placeholders or new items with associated assortments and impacting dependent workflows like NPI. Demand Assumption workflow enhancements include parameterized disaggregation, enabling negative volume inputs, and file upload compatibility. Multiple CML backtest cycles can now be run automatically, improving statistical significance. Advanced feature engineering for holiday flags and other indicators enhances forecast accuracy.

A new method for short-history items generates synthetic history for better long-term forecasts. Users can now turn off statistical forecasting for selected intersections. Analysis Cockpit enhancements include COCC Violations and honoring planner overrides in Bestfit Violations. Improved Bestfit functionality incorporates COCC Violation for stable forecasts. The Set & Delete Transitions feature streamlines many-to-many product transitions. Enhanced Sell Out to Sell In Conversion considers lead time, in-transit inventory, and min/max inventory policy for more accurate forecasts.

Mandatory Prerequisites:

The learner MUST have attended the following Instructor-Led Workshops:
- o9 IBP Functional Workshop
- o9 Platform Technical - Basics Workshop

The learner ideally SHOULD have completed the following o9 Academy courses and their certification:
- Functional Insights into Demand Planning Core Solution Building Blocks
- What's New in Demand Planning Solution Building Blocks R2024.03?

Hands-on   Role/Level-based Certificate   Open Badge   Completion Certificate

Demand Planning

Capabilities in New Product Introduction [NPI] Solution Building Block

40 mins

Delve into the capabilities of the New Product Introduction [NPI] Solution Building Block, focusing on the 2023.07 version of the Demand Planning Reference Product.

Explore the intricacies of the new product forecasting process, emphasizing PLC profiles, Like Item Search Setup, and Like Item Match features. Gain insights into the impact of Cannibalization on existing products resulting from introducing new ones.

Demand Planning

Basic ML / Stat Forecasting

Stat/Basic ML Forecasting Building Block - Analysis Cockpit

These knowledge videos talk about the L3 Solution Capabilities within Stat/Basic ML Forecasting Building Block. This is one of the foundational building blocks in Demand Planning. These videos cover the what and the why of the capability.

03 mins

Stat/Basic ML Forecasting Building Block - Outlier Correction

These knowledge videos talk about the L3 Solution Capabilities within Stat/Basic ML Forecasting Building Block. This is one of the foundational building blocks in Demand Planning. These videos cover the what, the why, and the how of the capability.

06 mins

Hands-on   Role/Level-based Certificate   Open Badge   Completion Certificate

o9

Demand Planning

Basic ML / Stat Forecasting

Stat/Basic ML Forecasting Building Block - Segmentation

These knowledge videos talk about the L3 Solution Capabilities within Stat/Basic ML Forecasting Building Block. This is one of the foundational building blocks in Demand Planning. These videos cover the what, the why, and the how of the capability.

05 mins

Forecast Process

In this course, you will learn the Forecast Process in the Retail industry. The course covers the workflows related to Retail Forecast, Daily Forecast and Wholesale Forecast.

31 mins

Demand Planning

Collaborative Demand Planning Foundation

Collaborative Demand Planning Building Block - Forecast Layers

These knowledge videos talk about the L3 Solution Capabilities within Collaborative Demand Planning Building Block. This is one of the foundational building blocks in Demand Planning. These videos cover the what, and the why of the capability.

04 mins

Collaborative Demand Planning Building Block

This short program is about one of the Foundational Building Block in the Demand Planning space. The videos in this program talks about the need for this building block, what are the decisions made, the inputs, the outputs and lists some of the capabilities.

15 mins

Demand Planning

Collaborative Demand Planning Foundation

Collaborative Demand Planning Building Block - Process Orchestration

These knowledge videos talk about the L3 Solution Capabilities within Collaborative Demand Planning Building Block. This is one of the foundational building blocks in Demand Planning. These videos cover the what, the why, and the how of the capability.

05 mins

Collaborative Demand Planning Building Block - Scenarios

These knowledge videos talk about the L3 Solution Capabilities within Collaborative Demand Planning Building Block. This is one of the foundational building blocks in Demand Planning. These videos cover the what, the why, and the how of the capability.
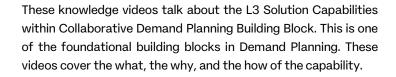
05 mins

Demand Planning

Collaborative Demand Planning Foundation

Demand Planning 101 Series

This series of short videos will familiarize you with Demand Planning concepts.

40 mins

o9 Knowledge Masters in Demand Planning

o9 Knowledge Masters in Demand Planning will help you to understand Demand Planning concepts and the application of forecasting solutions in complex business scenarios. The Program covers associated parameters that will help to optimize a demand forecast and improve Supply Chain Performance. The Program further delves into the usage of cutting-edge technologies like AI, Machine Learning, and Deep Learning-based Models to help planners create a reliable Demand Forecast Model. The program is also packed with the guiding principles to implement Demand and Supply Integration (DSI) for businesses to help them contribute to a seamless Supply Chain Operation.

235 mins

After completing this Program, you should be able to:

- Formulate an ideal Demand Planning approach based on your business scenario
- Estimate a Demand Function analyzing the dependents
- Arrive at a Consensus Forecast from within your organization
- Tune the Forecast further using Machine Learning and Deep Learning Models
- Enable Demand Supply Integration (DSI) to exhibit Demand Planning Excellence

Demand Planning

NPI Forecasting

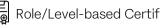### New Product Introduction [NPI] Solution Building Block

27 mins

The NPI Solution Building Block is essential for facilitating product lifecycle management functions by predicting demand for new products, assessing the impact of cannibalization on existing products resulting from new product introductions, and managing product transitions and discontinuations. This course aims to discuss the role of this building block in streamlining new product launches and enhancing market share and revenue growth through product evolution.

This course will enable you to understand:

- The purpose of the NPI solution building block and the crucial planning capabilities that it provides to address various challenges in generating NPI forecasts.
- What are the inputs, outputs, decisions, and key capabilities of the NPI forecasting building block?

Demand Planning

ML Advanced Forecasting

Using Demand Planning Forecast Results Template

56 mins

This course provides a standard template to effectively present forecast results to internal teams, partners, and clients. The Forecast Results template is a best practice methodology for status, measurement, and planning, making collating and presenting crucial data easier.

Forecast Results derive from analyzing system-generated forecasts, offering insights into the data, methods, parameters, and levels used in forecast creation. They validate project status, forecast suitability, and refinement steps, and provide pathways to improving system-generated forecasts. This course shares the best practice approach to delivering forecast results from internal initiatives, proof of concepts, and client implementations.

The objective of this course is to demonstrate how to use a standardized format for presenting forecast results to customers. You will learn how to explain what information was received from the customer, what actions were taken with this information, and what the next steps are in the forecasting journey. The course will teach you how to give relevant context to explain forecast results and provide a systematic presentation approach with templates to analyze and showcase insights.

A Forecast Results presentation provides context on how and why a system-generated forecast was created, summarizing insights along with select deep dives. It highlights areas of strength and areas for improvement in the generated results.

The Forecast Results template can be used in three core business situations: signing off on forecasting for client implementations, presenting proof-of-concept results, and internal initiatives to improve the o9 product.

Mandatory Prerequisites:
The learner must have attended the following Instructor-Led Workshops:
- o9 IBP Functional Workshop
- o9 Platform Technical - Basics Workshop

The learner ideally should have completed the following o9 Academy course and its certification:
- Functional Insights into Demand Planning Core Solution Building Blocks

Digital Twin (Data & Knowledge Management)

Market Knowledge Packs

Enhancements in Knowledge Hub R2024.06

07 mins

The Knowledge Hub is an extensive compilation of market intelligence, offering an ever-expanding list of external data across various categories. This course covers the latest enhancements in release R2024.06.

The enhancements include a Knowledge Hub workspace on every tenant, allowing users to access updated market drivers directly within their tenants and improving forecasting with external data.

A new model library package, including the Weather Driver Engineering tool, is also available as an add-on for demand forecasting. Enhancements to the Data Explorer include new trend line options—linear, exponential, and logarithmic—and a toggle for a logarithmic scale, enabling users to browse better and compare data series within the Knowledge Hub.

Mandatory Prerequisites:
- Basic computing and market and/or domain knowledge.
- Should have completed the course "Knowledge Hub - Market Intelligence for o9 Digital Brain".

Digital Twin (Data & Knowledge Management)

Planning Data Foundation

Integrations using SSIS & Reference Product Integration R2022.09

19 hours

This is an ideal course to learn the technique of extraction, transformation, and loading (ETL) with SQL Server Integration Services (SSIS) and the data integration mechanism used at o9. Apart from using various transformation tasks in SSIS, you will learn about SSIS CozyRoc components, o9-specific SSIS components, and the o9 Reference Model Integration. This course revolves around tutorials, i.e., hands-on labs and case studies to reinforce learning.

At the end of this course, you will get an overview of GitHub, the Big Data ecosystem, Hadoop, Hive, and Spark. You can perform the Tutorials and Case Studies if you have access to o9 tenant. You start by preparing your practice environment, go through tutorials to get familiar with SSIS, solve case studies that are based on SSIS, and SSIS with Reference Model Integration.

What's NEW in Reference Model Integration R2022.12?

138 mins

This course revolves around additional features and updates that were added as part of the o9 Reference Model Integration Product R2022.12. This is an ideal course to learn the technique of extraction, transformation, and loading (ETL) with SQL Server Integration Services (SSIS) and the data integration mechanism used at o9.

You can go through this course to upgrade your skills to align with the latest o9 Reference Model Integration Product (R2022.12), but for doing so you need a vivid knowledge of the previous o9 Reference Model Integration Product (R2022.09).

Digital Twin (Data & Knowledge Management)

Planning Data Foundation

Introduction to Integration 3.0 Powered by Delta Lake

In this course, you will learn about the current data integration landscape used at o9, its challenges, and o9's future tech stack for data integration. You will understand the features of Delta Lake, and how data integration is performed using Delta Lake and Integration 3.0. You will also learn about high-level data ingestion flow and inter-tenant data share in Demand and Supply Planning.

33 mins

Hands-on   Role/Level-based Certificate   Open Badge   Completion Certificate

o9

Digital Twin (Data & Knowledge Management)

Planning Data Foundation

Integrations using Int 3.0 and EKG Configurator R2024.03

700 mins

This course is designed to provide learners with a comprehensive understanding of the latest advancements in o9 Solutions' technology stack. It focuses on data integration using Integration 3.0 and Enterprise Knowledge Graph (EKG) Configurator R2024.03.

This course empowers you to master the latest data pipeline management and integration strategies. You begin by delving into Integration 3.0 (Int 3.0), exploring its transition from SSIS to a Spark-based architecture, enabling seamless data processing with enhanced scalability and performance. You will thereafter learn to harness its robust features, such as dynamic pipeline generation, Airflow integration, and advanced parameterization techniques that streamline complex data workflows.

In addition, you will discover the versatility of Datastores within Int 3.0, allowing you to connect seamlessly to diverse data sources, including S3, GCS, ADLS, SFTP, and GraphCube. You will gain proficiency in managing data entities through Datanodes and structuring data flow using Pipeline Groups and Pipelines, employing data connectors for efficient data transformation and movement across systems.

Mandatory Prerequisites:
The learner must have attended the following Instructor-Led Workshops:
- o9 IBP Functional Workshop
- o9 Platform Technical Workshop

The learner ideally should have completed the following o9 Academy courses and their certification:
- o9 Platform Technical Configuration Essentials Exam
- Introduction to Integration 3.0 Powered by Delta Lake
- Platform Integration Evolution
- Python Fundamentals
- Mastering Python Programming

NOTE
- Successful completion of this course will result in earning Credly Open Badge, "Integrations using Int 3.0, Delta Lakes, & EKG Configurator R2024.03 - Integrations Specialist"
- Learners should pass the assessment(s) and complete feedback to be eligible to earn the Credly Open Badge.
- Credly Open Badges will be issued every second/third week of the month.

Digital Twin (Data & Knowledge Management)

Planning Data Foundation

What's New in EKG R2024.06?

10 mins

This course is designed to provide learners with a comprehensive understanding of the latest features and enhancements of the Enterprise Knowledge Graph (EKG) Configurator Product Release 2024.06.

With the introduction of Integration 3.0 (Int 3.0) in the o9 platform, the integration tech stack has changed to Delta Lake for storage, Spark for ETL, and Int 3.0 for orchestration.

The EKG Configurator is now more adaptable than ever, offering low code/no code options to specify ETL logic. It automatically generates Int 3.0 pipelines and PySpark code for data transformation, allowing you to tailor your data operations to your specific needs.

New features include:
- User access control
- Distinct select query support
- Environment diagnostics
- Headerless file support
- API inbound integration
- Pipeline notifications

Enhancements include:
- Improved user input validation
- New deployment buttons
- Date-time format handling
- Big Data table support
- Customizable LSU hierarchy checks

Mandatory Prerequisites:
The learner MUST have attended the following Instructor-Led Workshops:
- o9 IBP Functional Workshop
- o9 Platform Technical Workshop
The learner ideally SHOULD have completed the following o9 Academy courses and their certification:
- o9 Platform Technical Configuration Essentials Exam
- Integrations using Int 3.0 and EKG Configurator R2024.03

Integrated Business Planning

IBP Foundation

AOTP Retail Functional Class

In this program, you will learn about the o9 Retail Platform. The program covers the key differentiators and capabilities of the o9 Platform. The program introduces you to retail and wholesale workspaces and functionalities developed for o9 Customers.

You will learn the process of Merchandise Financial Planning, Open-to-Buy Management, Assortment Planning, and the activities of Forecasting and Replenishment in a retail context. You will also be able to explore Allocation Planning capabilities through use cases. You will be able to experience these activities through interactive simulations during the program.

600 mins

Navigating o9's Integrated Business Planning Capabilities Using o9 Platform

This course explores the Functional capabilities of o9's Integrated Business Planning solution.

Commencing with an in-depth examination of the Digital Supply Chain's significance, integrated workflows, interconnections, decision-making aspects, handoffs, and L0-L2 process diagrams, the course then delves into key functions like Demand Planning, Supply Planning, Deployment Planning, SC Simulation, and Integrated Business Planning. It covers major capabilities within these functions, empowering planners to utilize them for understanding associated workflows and interpreting reports.

This course incorporates hands-on exercises, guiding participants through various workflows to execute specific processes. Emphasis is placed on practical usage of these capabilities when logged into the o9 Platform.

369 mins

Multi-Tier Supplier Relationship Management

o9 Knowledge Masters in Procurement Management

900 mins

The o9 Knowledge Masters in Procurement Management Program is a specialized training designed to cater to both freshers and professionals with 2-3 years of experience in Supply Chain or related fields. Through a series of micro-videos, the learners will develop a strong foundation in procurement management, covering fundamental principles, strategic sourcing techniques, supplier relationship management, and sustainable procurement practices.

The program will focus on building essential skills such as supplier relationship management, purchase order processing, contract negotiation, and sustainable sourcing practices. The learners will also delve into procurement evaluation and supply chain dynamics to enhance their ability to optimize procurement outcomes.

Whether you are starting your procurement journey or seeking to advance your career, this program equips you with the knowledge and expertise to excel in procurement management.

Supply Chain Planning & Analytics

Functional Insights into Supply Planning Core Solution Building Blocks

325 mins

This course explores the Functional capabilities of o9's Supply Planning solution.

Commencing with an overview of the Supply Chain and Business Strategies, Fulfillment Models, and Key Decision Indices, the course delves into an in-depth examination of Reference Process Models. It discusses various planning process interconnections, decision-making aspects, handoffs, and integrated workflows, through the L0-L1-L2 process flows. The course also covers major capabilities within the Master Supply Planning functions, empowering planners to utilize them to understand associated workflows and interpret reports.

This course incorporates hands-on exercises, guiding participants through various workflows to execute specific processes. Emphasis is placed on the practical usage of these capabilities when using the Supply Planning Reference Product.

NOTE
- Successful completion of this course will result in earning a Credly Open Badge, "o9 Supply Planning Core Solution Building Blocks - Functional Associate"
- Learners should pass the assessment(s) and complete feedback to be eligible to earn the Credly Open Badge.
- Credly Open Badges will be issued every second/third week of the month.

Merchandise Planning

Introduction to Merchandise Planning

This course gives an overview of Merchandise Planning. Learners will gain detailed insights into why Merchandise Planning is important and how to plan for merchandise in a retail setting. The course also introduces the key components of Merchandise Planning, which include Merchandise Financial Planning (MFP), Assortment Planning (AP), Markdown Optimization, Size Profiler, Pack Optimization, and Store Clustering.

14 mins

Merchandise Planning

What's New in Retail R2024.06?

28 mins

This course will help you explore the latest features and enhancements of the o9 Retail Solutions for Release 2024.06 across three key areas: Retail Replenishment Planning, Merchandise Financial Planning, and Retail Assortment Planning.

You will learn about the new Big Data Platform 2.0 (BDP 2.0), which was created to support the large data volume of Retail solutions. This enables quick and efficient data computation. All the key features from IBPL/Python have been converted to pyspark with Delta Lakes enabled.

Merchandise Financial Planning now includes value tracking, omni-channel transfer capabilities, and new measures for sales planning. Enhancements include adding placeholder stores and configuring named nodes for plans.

Retail Assortment Planning features a multivariable heat map for KPI analysis, size profile assignments, receipt computation based on aggregation logic, and disaggregation of style color receipts to the size level. New capabilities for creating style placeholders and integrating with store segmentation are also available.

Mandatory Prerequisites:

The learner must have attended the following Instructor-Led Workshop:
- o9 Retail Functional Training Workshop

The learner ideally should have completed the following o9 Academy courses:
- Assortment Planning
- Introduction to Merchandise Financial Planning: Functional Overview

Merchandise Planning

Assortment Planning Foundation

Retail Assortment Planning

The videos in this program introduce you to Assortment Planning. The videos also cover Assortment Planning Process, Workspace, and workflows within the various Page Groups.

271 mins

Hands-on   Role/Level-based Certificate   Open Badge   Completion Certificate

Merchandise Planning

Merchandise Financial Planning

Retail - Merchandise Financial Planning (MFP)

The videos in this program introduce you to Merchandise Financial Planning (MFP). The videos also cover o9 MFP Ref Model Hierarchy/ Dimensions, Bottom-Up Planning, Store Planning, and In-Season Planning.

253 mins

Merchandise Financial Planning (MFP)

In this course, you will learn the critical workflow steps in Merchandise Financial Planning Process in both pre-season and in-season.

75 mins

Hands-on   Role/Level-based Certificate   Open Badge   Completion Certificate

Merchandise Planning

Merchandise Financial Planning

Introduction to Merchandise Financial Planning: Functional Overview

This course gives an overview of Merchandise Financial Planning. Learners will gain insights into what Merchandise Financial Planning is, why it is important, and how to create a Merchandise Financial Plan in a retail setting. The course also gives details of the following:

- Key Data Inputs - Master Data, Transactional Data and External Data
- Outputs - Retail/Cost Target Plans (Pre-season Plan) and Open to Buy (In-season Plan)
- Key Capabilities of the o9 MFP Solution
- Detailed process to create a Merchandise Financial Plan

Mandatory Prerequisite:
- Completing the course, 'Introduction to Merchandise Planning' in the o9 Academy.

55 mins

Supply Chain Planning & Analytics

MEIO

Multi-Echelon Inventory Optimization (MEIO) Building Block

Multi-echelon inventory optimization (MEIO) balances inventories across the entire supply chain network, considering the interdependencies between echelons. Organizations that go beyond single-echelon inventory optimization (IO) offer highly competitive service levels and see a reduction in – or elimination of – stockouts.

32 mins

This course will enable you to understand:

- How does the Multi-Echelon Inventory Optimization (MEIO) building block address the complexities and inefficiencies in multi-tiered supply chains by providing optimum inventory targets?
- What are the inputs, outputs, decisions, and key capabilities of the MEIO building block?

Day in the Life of an Inventory Planner

This course explains how powerful of a tool Multi-Echelon Inventory Optimization (MEIO) can be in helping inventory planners manage all kinds of uncertainty in the supply chain, including demand uncertainty and lead time variability. It also covers the various inputs for inventory planning and then walks you through the inventory planning cycle from a strategic and tactical standpoint.

15 mins

The key topics covered in this course are:

- Introduction to MEIO
- MEIO Key Inputs Deep Dive
- MEIO Strategic Planning
- MEIO Tactical Planning

Supply Chain Planning & Analytics

MEIO

MEIO Essentials: Navigating Functional Capabilities

These refresher tutorials include hands-on exercises designed to help end users familiarize themselves with the MEIO functionalities.

Note: Watch out for more content being added to this course.

120 mins

Supply Chain Planning & Analytics

MEIO

What's New in MEIO R2024.06?

07 mins

The Multi Echelon Inventory Optimization (MEIO) Release 2024.06 course provides a comprehensive overview of the latest features and enhancements designed to improve Inventory management and optimization across the supply chain.

New Features include:

- Inventory Overrides at Higher Levels
- Failure/Exception Remarks
- Max Stock Factor for EOQ

Feature Enhancements include:

- Advanced & Incremental Sensitivity
- Network Exclusion (Inactive Material Node) & BOM Component Effectivity
- Metric for Shelf-Life Comparison
- RCA at Customer Level
- Storage Association Validation
- Histogram for Days for Cover Inventory
- Plugin Slicing by Grouping Time Buckets

Significant feature enhancements include running advanced and incremental sensitivity analyses, excluding inactive material nodes from network calculations, applying shelf-life constraints to various inventory metrics, and validating storage associations to prevent solver failures. These enhancements enable more precise and efficient inventory management, ensuring better control and optimization of supply chain operations.

Mandatory Prerequisites

The learner must have attended the following Instructor-Led Workshops:

- o9 IBP Functional Workshop
- o9 Platform Technical Workshop

The learner ideally should have completed the following o9 Academy courses and their certification:

- Functional Insights into Supply Planning Core Solution Building Blocks
- Multi-Echelon Inventory Optimization (MEIO) Building Block
- MEIO Essentials: Navigating Functional Capabilities

Supply Chain Planning & Analytics

Production Scheduling

o9 Production Scheduling: An Overview

In this program, you will understand the overview of the Production Scheduling process and its key concepts. This program explains the powerful capabilities of o9's platform that enables state-of-the-art Production Scheduling processes across various industries. You will also understand the functional capabilities from an end-user perspective.

50 mins

Supply Chain Planning & Analytics

Production Scheduling

What's New in Production Scheduling R2024.06?

16 mins

This course provides an in-depth overview of the latest features and enhancements in Production Scheduling for the R2024.06 release. The Production Scheduling capability generates executable plans for the near-term horizon, accommodating various operational constraints encountered on the shop floor. Key new features include a graphical representation of Production Requirements vs. Schedule, standard measure-based coloring schemes in the Gantt chart, and an Inter-Operation View Trace for monitoring work order progress.

Enhancements include a detailed tooltip for changeovers in the Gantt chart, the ability to manage BOM Component Validity Effective Dates, and improved resource consumption tracking during changeovers. Additional updates cover re-graining of Item-Level Changeovers, the flexibility of the Earliest Start Date, and an enhancement to WIP Operations for tracking work order progress.

The release also introduces Calendar Exceptions with periodicity, inventory updates to differentiate between unrestricted and in-quality inspection quantities, and tools to maintain resource efficiency factors. Violation and alert distinctions for capacity and materials are highlighted with distinct coloring schemes. Finally, enhancements to output workflows and data validation workflows ensure a robust and user-friendly production scheduling experience.

Mandatory Prerequisites:

The learner must have attended the following Instructor-Led Workshops:

- o9 IBP Functional Workshop
- o9 Platform Technical Workshop

The learner ideally should have completed the following o9 Academy courses and their certification:

- Functional Insights into Supply Planning Core Solution Building Blocks

Supply Chain Planning & Analytics

SC Master Planning Foundation

Supply Planning Reference Product R2022 - Master Planner

555 mins

This Certification Program enables you to learn about Master Planner workflows of o9's Supply Planning Reference Product. You will learn the strategy behind the design of this Reference Product, get a process deep dive and understand the overall data flow.

This Program provides a detailed explanation of how to deal with Plan Inputs Data at various levels from the UI screens. Important

Plan Parameters and their impact on the Supply Chain Solver runs are mentioned. An overview of various Plan Outputs is also given.

Provision for hands-on activity has been given in multiple modules. The Files section under this Program contains the relevant dataset and configuration files that can be used to perform the hands-on activities using Tenants. Please contact your o9 PoC for tenant access.

Supply Planning Reference Product R2022 - Implementer

720 mins

This Certification Program enables you to learn about o9's Supply Planning Reference Product. You will learn the strategy behind the design of this Reference Product, get a process deep dive and understand the overall data flow.

This program provides a detailed explanation of how to deal with Plan Inputs Data at various levels. Important Plan Parameters and their impact on the Supply Chain Solver runs are mentioned. An overview of various Plan Outputs is given.

Provision for hands-on activity has been given in multiple modules. The Files section under this Program contains the relevant dataset and configuration files that can be used to perform the hands-on activities using Tenants. All the documentation used in respective modules has also been attached in this section.

Supply Chain Planning & Analytics

SC Master Planning Foundation

o9 Knowledge Masters in Supply Chain Management

373 mins

o9 Knowledge Masters in Supply Chain Management will enable you to develop key skills and expertise in various aspects of the Supply Chain. The program focuses on the fundamentals of the Supply Chain, such as Supply Chain Network Design, Inventory Management, and concepts related to Logistics, Transportation, And Warehousing. It also provides an understanding of Supply Chain Planning Processes, Risk Management, Analytics, and Reporting Techniques that are being used across multiple industries. You will learn about how various cutting-edge technologies enable optimizing the Digital Supply Chain.

After completing this Program, you should be able to:

- Define terminologies and definitions of Supply Chain, drivers within Supply Chain, Supply Chain Capabilities, Network and Operations
- Optimize the Inventory, Transportation, Warehousing Services, and Costs
- Explain Planning Processes, Data Analytics skills, and tools to improve Supply Chain Performance
- Discuss how to minimize Disruptions, Reduce Risk and make your Supply Chain Resilient
- Explain how the cutting-edge technologies, existing system implementations, and proven best practices can improve the efficiency of Supply Chain

Demand Netting Overview

In this course, you will learn the basics of Demand Netting.

30 mins

Supply Chain Planning & Analytics

SC Master Planning Foundation

Pineapple Computers - Case Study

This case study enables you to build a Model from scratch, configure the Solver and implement some of the Supply Planning concepts such as Pegging, Lead Times, Capacity Constraints, maintaining Safety Stock and Lot Sizes.

480 mins

Basics of Supply Chain

This course explains the system in which a supply chain works. You will be able to identify the different stages that are involved in a supply chain function of any industry. Some of the stages include Manufacturing, Transportation or Shipping, Production, and Distribution.

60 mins

Hands-on   Role/Level-based Certificate   Open Badge   Completion Certificate

o9

Supply Chain Planning & Analytics

SC Master Planning Foundation

Modelling details of Supply Planning Reference Product

In this course, you will learn the basic concepts regarding Supply Chain Solver in context to our o9 Platform.

This course has 3 Modules. The basic objectives of the Modules are to answer the following questions:

- In a Supply Chain, what are the Fulfillment and Process Models?
- What are some of the core components involved during planning a Supply Chain?
- What do you need to configure as a pre-requisite in the o9 Platform in order to effectively use the Supply Chain Solver?

270 mins

Insights into Control Tower

This course will introduce you to the concept of Control Tower, its components, and its future trends and innovations. You will uncover the diverse Control Tower applications across industries and understand its real-world impact on business dynamics.
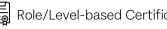
31 mins

Supply Chain Planning & Analytics

SC Master Planning Foundation

Essentials of Supply Planning

This course offers valuable insights into the customer-consumer landscape, highlighting its profound influence on the intricacies of supply planning. You will develop proficiency in the essential vocabulary of Supply Planning, fostering effective communication within the industry, along with a comprehensive understanding of the strategies and processes that underpin successful supply planning across diverse organizational contexts.

120 mins

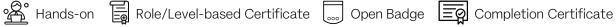### Integrated Workflows in Supply Planning

This course will help you to understand the comprehensive and seamless process encompassing all supply chain stages, from planning to execution, using a single, scalable data model. This course will discuss a unified framework, facilitating efficient decision-making and optimizing supply chain performance through five different workflows in the supply chain: Strategic, Tactical, Operational, Near-term, and Executional.

164 mins

Supply Chain Planning & Analytics

SC Master Planning Foundation

Supply Planning - Planning Processes

190 mins

This course is about understanding and mastering the steps involved in planning for business success. You will understand Sales and Operations Planning (S&OP), its definition, the decision-making process, and the tools involved. You will also understand Demand Management, covering its purposes and elements. The course then deep dives into Production Planning, discussing various strategies and the roles of Master Production Schedule (MPS) and Material Requirements Planning (MRP), explaining their steps, outputs, and benefits.

In addition, the course covers Capacity Requirement Planning (CRP), outlines its steps, and explores various approaches. The course concludes with Scenario Planning, preparing you to create successful strategies for any future business scenario.

Overall, this course equips you with the essential knowledge and skills to navigate the planning process.

Supply Planning - Planning Entities

155 mins

This course on Supply Planning Entities is designed to empower you with fundamental concepts and insights into:

- Inventory Basics: Dive into the foundational concepts of inventory and grasp the essentials of inventory management.
- Purchasing and Physical Distribution: Gain an understanding of the pivotal roles played by purchasing and physical distribution within the intricate web of the supply chain.

- Manufacturing Processes: Delve into the diverse manufacturing processes adopted by organizations to fulfill their requirements, gaining valuable insights into their operational dynamics.
- Decipher the Supply Chain Network: Gain a comprehensive understanding of how the entire supply chain network operates, from end to end.

Supply Chain Planning & Analytics

SC Master Planning Foundation

SC Master Planning Foundation Solution Building Block

23 mins

The SC Master Planning Foundation solution building block drives the synchronization of the end-to-end supply chain and positions the material and capacity across the supply chain in anticipation of customer demand. This course explores how this building block moves the planning process from siloed to synchronized planning across the supply chain to position the right-sized inventory and capacity across distribution, manufacturing, and supplier networks to meet the agreed-upon targets set in the Integrated Business Plan (IBP).

This course will enable you to understand:

- The purpose of SC Master Planning Foundation solution building block and how it factors in different constraints to generate synchronized, prioritized, and capacity constrained plans.

- What are the inputs, outputs, decisions, and key capabilities of the SC Master Planning Foundation Solution Building Block?

Supply Chain Planning & Analytics

SC Master Planning Foundation

What's New in Supply Planning Solution Building Blocks R2024.06?

 51 mins

This comprehensive course will help you explore the latest features and enhancements of the o9 Supply Planning (SP) Reference Product Release 2024.06. It is designed to help you further optimize your supply planning processes by covering 16 significant updates across specific configuration blocks.

You'll learn about dynamic prioritization, inline edits for plan publishing, and improved margin visibility. New workflows enhance planning BOM and CRM integration, while features like product substitution, QA inventory hold, and flow plan aggregation streamline processes. Enhancements in production plan handoff, continuous capacity consumption, and safety stock aggregation boost resource management and forecast accuracy.

These updates give planners advanced tools and flexibility to improve workflows, forecast accuracy, and resource management. You'll be equipped to handle complex supply chain scenarios more efficiently with dynamic prioritization, better margin visibility, enhanced integration capabilities, and streamlined planning processes. The course empowers organizations to achieve superior planning outcomes and drive operational excellence.

Mandatory Prerequisites:

The learner must have attended the following Instructor-Led Workshops:

- o9 IBP Functional Workshop
- o9 Platform Technical - Basics Workshop

The learner ideally should have completed the following o9 Academy course and its certification:

- Functional Insights into Supply Planning Core Solution Building Blocks
- What's New in Supply Planning Solution Building Blocks R2024.03?

Supply Chain Planning & Analytics

SC Segmentation & Operating Policy Foundation

**Procurement Analytics
Reference Product R2021.07**

Procurement analytics is the process of collecting and analyzing procurement data to form meaningful insights and aid effective business decision-making.

This program covers the following:

- Major Categories of Supply Chain Analytics
- Supply Chain Assumptions - Observed & Predicted
- Key Inputs & Outputs of Procurement Analytics
- Demo of the Procurement Analytics Dashboard

95 mins

Supply Chain Planning & Analytics

SC Segmentation & Operating Policy Foundation

What's New in Segmentation Foundation R2024.06?

05 mins

This course focuses on the latest features and enhancements in the Segmentation Foundation module for the R2024.06 product release. The Segmentation Foundation empowers businesses to segment data flexibly using machine learning, set and monitor policy parameters, and track key performance indicators across segment and dimension hierarchies. It also provides insights through the analysis of transactional data, such as sales, purchase, and production orders, offering a comprehensive say-do analysis across the supply chain.

New features in this release include the AI Segmentation Handshake plugin, which integrates store grading and clustering into the assortment planning process, enhancing precision and control. Additionally, a new section for Production Analytics introduces Touchless Planning and Plan Attainment metrics, allowing users to evaluate the planning system's effectiveness and adherence to published plans. The Inventory Components Analysis feature provides a detailed breakdown of on-hand inventory, helping users manage current and future inventory needs with insights into various stock types.

Feature enhancements include the ability to evaluate plan attainment at a chosen lag in Procurement and Distribution Analytics, offering planners a way to assess planning system performance weeks before actual purchases or distributions. These updates and improvements to existing features like the SSIS Batch Orchestrator continue to enhance the Segmentation Foundation's ability to deliver valuable insights and support data-driven decision-making.

Mandatory Prerequisites
The learner must have attended the following Instructor-Led Workshops:
- o9 IBP Functional Workshop
- o9 Platform Technical Workshop

The learner ideally should have completed the following o9 Academy courses and their certification:
- Functional Insights into Supply Planning Core Solution Building Blocks
- Functional Insights into Demand Planning Core Solution Building Blocks

Supply Chain Planning & Analytics

SC Segmentation & Operating Policy Foundation - **Optimization**

Enhancements in Optimization R2024.06

05 mins

The Enhancements in Optimization R2024.06 course focuses on the latest updates for the Linear Programming[LP] Objective Penalty and Priority Setup within the o9 Shared and o9 Supply Planning Foundation building blocks. This release introduces a framework using the Attribute Based Data Management [ABDM] model to set up LP objectives for high-level grains and spread penalty costs and priorities to the lowest level grains. It also populates the LP Objective active flag, which forms objective functions and LP solver inputs. A new UI workflow allows planners to choose the optimization type, maintain objectives, and manage penalty attributes and levels within the hierarchies. This framework ensures planners can maintain objectives and penalties flexibly and efficiently.

Mandatory Prerequisites

The learner must have attended the following Instructor-Led Workshops:

- o9 IBP Functional Workshop
- o9 Platform Technical Workshop

The learner ideally should have completed the following o9 Academy courses and their certification:

- Functional Insights into Supply Planning Core Solution Building Blocks

Supply Chain Planning & Analytics

AATP Order Promising

Allocated Available-to-Promise (AATP) Order Promising Solution Building Block

10 mins

Allocated Available-to-Promise (AATP) Order Promising is an integrated, frequently batched process that matches customer orders to available supply in an omnichannel environment. This course aims to elaborate on the significance of AATP order promising, playing a pivotal role in effective supply chain management and upholding elevated levels of customer satisfaction.

This course will enable you to understand:
- The purpose of AATP and the factors influencing its order-promising process.
- What are the inputs, outputs, decisions, and key capabilities of the AATP Solution Building Block?

Supply Chain Planning & Analytics

AATP Order Promising

Integrated Order Promising (IOP): Enhancing Customer Satisfaction

15 mins

In this course, you will learn about Integrated Order Promising (IOP), a feature introduced in release 2024.06.

This is the first official release of IOP, and it introduces features such as:

- Data Management for order promising inputs
- Order Prioritization based on business rules
- Allocation Setup enables user-defined allocation policies
- Allocation Confirmation enables order confirmation based on allocated quotas
- ATP order promising with various fulfillment policies

IOP is essential for enhancing customer satisfaction through accurate delivery dates, optimized Inventory, and improved Order fulfillment efficiency. It supports better Demand Planning, reduces expedited costs, and provides a competitive advantage with reliable service. IOP offers real-time visibility into supply chain constraints, aiding in proactive risk management and aligning sales with operations for cohesive planning, ultimately improving efficiency, customer loyalty, and profitability.

Mandatory Prerequisites

The learner must have attended the following Instructor-Led Workshops:

- o9 IBP Functional Workshop
- o9 Platform Technical Workshop

The learner ideally should have completed the following o9 Academy courses and their certification:

- Functional Insights into Supply Planning Core Solution Building Blocks
- Allocated Available-to-Promise (AATP) Order Promising Solution Building Block

Hands-on   Role/Level-based Certificate   Open Badge   Completion Certificate

o9

Supply Chain Planning & Analytics

SC Operational Planning Foundation

SC Operational Planning Foundation Solution Building Block

31 mins

The SC Operational Planning Foundation solution building block provides a synchronized supply chain plan that responds to short-term demand changes and supply disruptions. This course explores how Operational planning, like Master planning, positions the material and capacity across the supply chain but provides more detailed and executable plans at the daily level. It supports the daily production, deployment, and materials planning processes.

This course will enable you to understand:

- The purpose of SC Operational Planning Foundation solution building block and how it defines the plans in the operational horizon by positioning the right-sized inventory and capacity across distribution, manufacturing, and supplier networks to support order fulfillment.

- What are the inputs, outputs, decisions, and key capabilities of the SC Operational Planning Foundation Solution Building Block?

Supply Chain Planning & Analytics

Supplier Relationship Management (SRM)

What's New in Next Generation Procurement [NGP] R2024.06?

10 mins

This course provides a comprehensive overview of the latest features and enhancements of the Next Generation Procurement (NGP) in release 2024.06. This release introduces features to enhance collaboration between suppliers and buyers. This includes features like Supplier Onboarding, Forecast Collaboration, Order Collaboration, and Inventory Collaboration, all aimed at improving supply chain efficiency.

Among the new features, the Purchase Order Confirmation feature streamlines the process for suppliers, enabling them to accept or propose changes to POs within a single workflow, improving efficiency, and reducing the time required to manage orders. The Supplier Delivery Performance report provides in-depth insights into suppliers' on-time and in-full delivery rates, helping buyers make informed decisions and enabling suppliers to track and improve their performance. The Supplier Onboarding Dashboard allows buyers to monitor the progress of supplier onboarding, ensuring a smooth and efficient process. Additionally, the new Supplier Invoice Management system offers a unified view of all invoices, simplifying the management and tracking of payments.

Mandatory Prerequisites:

The learner must have attended the following Instructor-Led Workshops:

- o9 IBP Functional Workshop
- o9 Platform Technical Workshop

The learner ideally should have completed the following o9 Academy courses and their certification:

- Functional Insights into Supply Planning Core Solution Building Blocks