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Summary

Cambashi's web-based training offers fast, effective acquisition of industry knowledge, and a consistent training solution across a variety of industries. Our off-the-shelf courses are QAS-approved, and provide the industry knowledge and insight your staff needs to interact with decision-makers more effectively.

Cambashi's training supports your professionals, from onboarding new hires to the most experienced employees by educating them across various industry topics to speak the language and understand the business to support their impact with key decision makers within the organisation. Our curriculum covers the fundamentals of manufacturing, and delves into specific manufacturing, energy, and related industries in more detail, giving your professionals the credibility and confidence they need to seek out and maintain successful, lasting client relationships.

The following provides a description and outline of the courses included in the Introduction to Manufacturing (Level 100) and the Industry Focus courses (Level 100/200).

Your teams will be equipped to:



Industry Knowledge

Position the business value of your products & solutions.



Speak the language

Deepen business and financially orientated conversations with buyers.



Employee's impact

Establish credibility and differentiation from your competitors.



Professional development

On-board new hires or re-deploy experienced staff in a new industry.



Descriptions & Outlines

The Introduction to Manufacturing courses are designed to cover the industry's high level universal rules and concepts. Content is updated where emerging technologies are having a significant impact on company operations.

Industry Focus courses reflect each sector's unique business landscape. The content of these courses focuses on areas such as supply chain structure, products and services, key company business processes, regulations, and sector trends and challenges.

Both groups of courses offer enhancements which provide optimal learner experience. Each course offers 1 CPE credit.

The updates for 2023 include:

- Additional content about sustainability, ESG, and renewables
- Unification of terminology with Insights to support consistency
- Feedback available for end users has been implemented
- · Captions added to all the videos and on every page
- More user friendly navigation
- Visited status added for users to follow progress
- Errors in functionalities have been fixed
- Update of knowledge checks
- Insight link added to support user's knowledge
- Final assessment questions have been randomised
- Some videos have been updated with a new design

Menu

Click on the links below for an outline of the contents of each course.

Introduction to Manufacturing

- Industry Overview
- Logistics
- Plant Operations
- Product Development
- Running the Business
- Sales, Marketing & Customer Service
- Supply Chain Management

Industry Focus

- Aerospace
- Automotive
- Chemicals
- <u>High-Tech</u>
- Machinery
- Oil & Gas
- <u>Utilities</u>



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Industry Overview

1 CPE Credit / Program Level - Beginner / Prerequisite Learning - None



This course provides a basic overview and understanding of the manufacturing industry. No prior knowledge of manufacturing is required.

Completion time: 50-minute hour.

Learning Objectives

- Recall examples of how manufacturing transforms raw materials into useful goods.
- Distinguish between different types of manufacturing and production methods.
- Recognize the characteristics of the manufacturing value chain.
- Identify some of the challenges impacting the industry.

Course Outline

What is Manufacturing?

- Transformation
- Assets Required
- The Soda Can

Supply Chain

- Introduction
- Overview
- Overview Continued
- Case Study Introduction
- Case Study
- Customers
- Knowledge Check

The Manufacturing Environment

- Production Environment
- Types of Manufacturing
- Productions Models
- Knowledge Check
- Knowledge Check



The Business of Manufacturing

- Introduction
- Making Money
- Minimizing Cost
- Knowledge Check

Industry Challenges

- Introduction
- Technology
- Macroeconomics
- Changing Demographics
- Sustainability
- Regulations and Compliance

Data & Systems

- Bill of Materials (BOM)
- Recipes and Formulae
- IT Networks
- Knowledge Check

Final Quiz

Certification Test



Logistiscs

1 CPE Credit / Program Level - Beginner / Prerequisite Learning - None



This course introduces a manufacturer's in-house logistics operations, including both inbound and outbound logistics. No prior knowledge of manufacturing is required.

Completion time: 50-minute hour.

Learning Objectives

- Identify some of the activities carried out by a manufacturer's logistic operations.
- Recall examples of logistics sector trends and business initiatives.
- Identify some of the metrics used to measure logistics performance.
- Differentiate between the different technologies used to enhance- logistics performance.

Course Outline

Logistics Overview

- Inbound vs Outbound Logistics
- Order Fulfilment
- Inter-Company Networks
- Knowledge Check

Organizing Logistics

- In-house or Outsourced
- Logistics Roles
- Other Business Units
- Knowledge Check

Business Processes

- Introduction
- Logistics Planning
- Logistics Execution
- Knowledge Check

Measuring Performance

- Operational Metrics
- Knowledge Check

Industry Trends

- Introduction
- Logistics Trends

Business Initiatives

- Introduction
- Initiatives
- Knowledge Check

Final Quiz
Certification Test



Plant Operations

1 CPE Credit / Program Level - Beginner / Prerequisite Learning - None



This course provides an introduction to both discrete and process plant operations, focusing on six key activity areas. No prior knowledge of manufacturing is required.

Completion time: 50-minute hour.

Learning Objectives

- Recognize six key areas of plant operations and processes involved in those areas.
- Identify metrics used to access plant performance.
- Identify the scope of plant operations.
- Be aware of trends and challenges affecting plant operations.

Course Outline

Material Flow Model

- Introduction
- Material Flow
- Model Elements
- Plant Operations Activities
- Knowledge Check

Production Planning and Control

- Introduction
- Types of Planning
- Types of Control
- Knowledge Check

Roles and Responsibilities

- Introduction
- Management
- Other Plant Operations Roles
- Knowledge Check



Performance Metrics

- Introduction
- Performance Metrics
- Knowledge Check

Best Practice

- Best Practice
- Knowledge Check

Final Quiz
Certification Test



Product Development

1 CPE Credit / Program Level - Beginner / Prerequisite Learning - None



This course provides an overview of the way manufacturers respond to changes in the market, and advances in technology, by developing new products to meet their customers' needs. No prior knowledge of manufacturing is required.

Completion time: 50-minute hour.

Learning Objectives

- Identify the importance of product development and the strategies behind bringing new products to market.
- Recognize how documentation supports product development activities.
- Identify the teams involved in these activities and their main responsibilities.
- Recall details of the business challenges affecting product development and recognize how companies address these issues.

Course Outline

Development Concepts

- Introduction
- Product Development
- Sustaining and Disruptive Technologies
- Product Development Drivers
- Knowledge Check

Key Activities

- Introduction
- Strategy
- Development Phases
- Portfolio Management
- Performance Metrics
- Knowledge Check

The Development Organization

- Introduction
- Product Development Roles
- Other Key Roles
- Organizational Efficiency
- Knowledge Check



Product Information

- Introduction
- Multiple Parts and Ingredients
- Multiple Parts and Ingredients continued
- Other Key Concerns
- Managing Change
- Knowledge Check

Trends

- Introduction
- The Digital Era
- Reducing Time-to-Market
- Reducing Design Phase Risks
- Protecting Intellectual Property
- Knowledge Check

Final Quiz

Certification Test



Running the Business

1 CPE Credit / Program Level - Beginner / Prerequisite Learning - None



This course introduces the way most manufacturers work at a senior executive level and the groups that support manufacturer's business activity – Finance, Human Resources, and IT.

No prior knowledge of manufacturing is required.

Completion time: 50-minute hour.

Learning Objectives

- Identify the structure of a typical manufacturing company, how it sets business priorities and how it measures success.
- Identify the responsibilities and operations of the Finance & Administration, Human Resources, and IT departments across a manufacturing organization.
- Recall examples of how these departments support and enable the main business processes.
- Identify terminology relating to financial reporting and other business areas.

Course Outline

Organizational Structure

- Introduction
- Senior Management Introduction
- Senior Management
- Knowledge Check

Defining Strategy

- Introduction
- Strategy
- Knowledge Check

Measuring Performance

- Introduction
- Financial Reports
- Benchmarking
- Ratio Analysis
- Knowledge Check



Finance and Administration

- Introduction
- Cash-to-Cash Cycle
- Major Responsibilities
- Knowledge Check

Human Resources

- Introduction
- The Role of HR

Information technology

- Introduction
- Overview
- Major IT Systems
- Knowledge Check

Final Quiz
Certification Test



Sales, Marketing & Customer Service

1 CPE Credit / Program Level – Beginner / Prerequisite Learning - None



This course introduces sales, marketing, and customer service operations within a manufacturing company, and how they differ for different types of manufacturers.

No prior knowledge of manufacturing is required.

Completion time: 50-minute hour.

Learning Objectives

- Identify the importance of marketing in manufacturing sales.
- Identify the teams involve in these activities and their main responsibilities.
- Recall details of the business challenges affecting product sales and recognize how companies address these issues.
- Recognize how documentation supports product trading activities.

Course Outline

Overview

- Introduction
- Added Value
- Business Model
- Knowledge Check

Roles and Responsibilities

- Introduction
- Roles and Responsibilities
- Business Integration
- Sales and Operation Planning
- Knowledge Check

Metrics

- Introduction
- Metrics
- Knowledge Check



Customer Interaction

- Introduction
- Customer Interaction
- Marketing Mix
- Knowledge Check

Business Issues

- Introduction
- Sales Issues
- Production Styles
- Knowledge Check

Final Quiz

Certification Test



Supply Chain Management

1 CPE Credit / Program Level - Beginner / Prerequisite Learning - None



This course provides an overview of manufacturing supply chain management and procurement activities and the metrics used to assess supply chain performance.

No prior knowledge of manufacturing is required.

Completion time: 50-minute hour.

Learning Objectives

- Identify a wide range of supply chain terminology.
- Recall examples of how manufacturers manage their supply chains.
- Identify important supply chain trends and challenges.
- Answers questions regarding the roles and responsibilities of key staff.

Course Outline

The Supply Chain Management

- Introduction
- Inventory
- Planning and Execution
- The SCOR Model
- Knowledge Check

Roles and Responsibilities

- Introduction
- SCM Roles Sales and Operations Planning
- SCM Roles Other Business Units
- SCM Responsibility
- Knowledge Check

Supply Chain Coordination

- Introduction
- Supply Chain Coordination
- Trade-Offs
- Knowledge Check



Trends and Challenges

- Introduction
- Reducing Costs
- Regulatory Compliance
- Managing Risk
- Better Service
- Knowledge Check

Business Processes

- Introduction
- Business Processes
- Knowledge Check

Final Quiz

Certification Test



Industry Focus: Aerospace

1 CPE Credit / Program Level – Beginner / Prerequisite Learning - None



This course introduces the aerospace industry, the market segments and key industries business processes. It covers the supply chain and the relationships between the companies involved, as well as business implications of current sector trends and regulations that shape the industry. No prior knowledge of manufacturing is required.

Completion time: 50-minute hour.

Learning Objectives

- Identify differences and similarities between the major aerospace market segments.
- Understand key industries business processes.
- Differentiate between members of the aerospace supply chain and recall the relationships between the companies involved.
- Recognize the business implications of current sector trends.
- Identify how regulations shape the industry.

Course Outline

Market Segments

- Market Segments
- Quiz
- Space Systems
- Shared Market Characteristics
- Knowledge Check

Industry Structure

- Introduction
- Supply Chain
- Knowledge Check

Business Processes

- Introduction
- Programme Management
- Product Development
- Supply Chain
- Production
- Logistics
- Sales and Marketing
- Maintenance, Repair and Overhaul (MRO)
- Knowledge Check



Making Money

• Revenue Sources

Trends and Challenges

- Trends and Challenges
- Sustainability
- Knowledge Check

Industry Regulations

- Introduction
- Regulations
- Knowledge Check

Final Quiz

Certification Test



Industry Focus: Automotive

1 CPE Credit / Program Level – Beginner / Prerequisite Learning - None



This course introduces the automotive industry, and the different categories of automotive products. The business processes of the companies operating in the sector as well as, the structure of the automotive industry, the supply chain and regulations shape the industry. No prior knowledge of manufacturing is required.

Completion time: 50-minute hour.

Learning Objectives

- Identify the different categories of automotive products.
- Recall the business processes of the companies operating in the sector.
- Identify the structure of the automotive industry and the activities of the industry supply chain.
- Recognize the ways in which regulations shape the industry.

Course Outline

The Automotive Supply Chain

- Introduction
- Supply Chain
- Supply Chain Process
- Support Businesses
- Customers
- Knowledge Check

Automotive Products

- Cars
- Light Commercial Vehicles (LCVs)
- Knowledge Check

Business Functions

- Introduction
- Procurement
- Product Development
- Cost Control
- Supply Chain
- Production
- Sales and Marketing
- Knowledge Check



Trends and Challenges

- Introduction
- In-Vehicle Electronics
- Weak Economic Growth
- Digitalization & Servitization
- Electric & Hybrid
- Trends
- Knowledge Check

Industry Regulations

- Introduction
- Regulations
- Knowledge Check

Final Quiz

Certification Test



Industry Focus: Chemicals

1 CPE Credit / Program Level - Beginner / Prerequisite Learning - None



This course introduces the chemical industry, the structure and how companies interact within the supply chain, as well as, the various business functions, key performance metrics and the industry trends, challenges, and business initiatives. No prior knowledge of manufacturing is required.

Completion time: 50-minute hour.

Learning Objectives

- Identify differences between the major chemicals sectors.
- Apply knowledge of the structure of the chemicals and identify how companies interact within the supply chain.
- Recognize the role of various business functions within a typical chemical manufacturing company.
- Recall key metrics used to measure business performance.
- Answer questions regarding industry trends and business initiatives.

Course Outline

Industry Structure

- Introduction
- Chemicals Sector
- Company Structure
- Resellers
- Knowledge Check

Business Processes

- Introduction
- Portfolio Planning & Management
- Research and Development
- Procurement
- Distribution
- Sales
- Knowledge Check



Measuring Performance

- Introduction
- Profitability Ratios
- Supply Chain Metrics
- Sector Specific Metrics
- Knowledge Check

Industry Challenges

- Introduction
- Cost Pressures
- Production Flexibility
- Cyber Security
- Regulations
- Knowledge Check

Business Initiatives

- Introduction
- Industry Digitization
- Services
- Knowledge Check

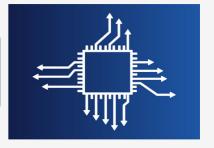
Final Quiz

Certification Test



Industry Focus: High-Tech

1 CPE Credit / Program Level – Beginner / Prerequisite Learning - None



This course introduces the high-tech industry. The structure of the industry and the technologies used, as well as, key business process, performance indicators and the trends and the challenges facing the industry. No prior knowledge of manufacturing is required.

Completion time: 50-minute hour.

Learning Objectives

- Answer questions about the structure of the High-Tech industry.
- Identify the scope of High-Tech and the technologies used.
- Recall key business process and performance indicators.
- Distinguish between the trends and the challenges facing the industry.

Course Outline

Market Segments

- Introduction
- Customers
- Products
- Technology
- Moore's Law
- Knowledge Check

Industry Structure

- Introduction
- Key Companies
- Knowledge Check

Business Process

- Business Processes
- Industry Collaboration
- Product Development
- Knowledge Check



Trends and Challenges

- Connectivity
- Adjacent Industries
- Technology
- Sustainability
- Knowledge Check
- Knowledge Check

Final Quiz

Certification Test



Industry Focus: Machinery

1 CPE Credit / Program Level – Beginner / Prerequisite Learning - None



This course is an introduction to the companies and technologies within the industrial equipment and machinery sector. The range of products and manufacturing processes that create them. As well as, key business processes, performance indicators and the trends and challenges facing the industry today. No prior knowledge of manufacturing is required.

Completion time: 50-minute hour.

Learning Objectives

- Answer questions about the structure of the industry.
- Identify a wide range of products & recall the manufacturing processes that create them.
- Identify key business processes and performance indicators.
- Distinguish between the trends and challenges facing the industry today.

Course Outline

Industry Overview

- Industry Supply Chain
- Industry Segmentation
- Knowledge Check

Business Processes

- Introduction
- Procurement
- Product Development
- Product Development Continued
- Production
- Sales
- Services
- Knowledge Check

Measuring Performance

- Introduction
- Investor Metrics
- Business and Performance KPIs
- Random Fact
- Knowledge Check



Trends

- Electronics and Software Introduction
- Electronics and Software
- Product-as-a-Service
- Additive Manufacturing
- Internet of Things (IoT)
- IoT Examples
- Knowledge Check

Industry Challenges

- Introduction
- Profitability
- Regulatory Compliance
- Uncertainty
- Cyber Security
- Knowledge Check

Final Quiz

Certification Test



Industry Focus: Oil & Gas

1 CPE Credit / Program Level - Beginner / Prerequisite Learning - None



This course is an introduction covering the trends and challenges facing the global oil and gas sector, including the structure and activities of the industry from exploration to retailing. As well as the different types of company operating in the sector and the key performance metrics used to measure various aspects of company performance. No prior knowledge of manufacturing is required.

Completion time: 50-minute hour.

Learning Objectives

- Identify the different types of company operating in the sector.
- Distinguish between upstream, midstream, and downstream activities and how these contribute to company profitability.
- Identify the business implications of current trends and challenges.
- Distinguish between the metrics used to measure various aspects of company performance.

Course Outline

The Value Chain

- Introduction
- Overview
- · Company Integration
- Industry Participants
- Companies
- Knowledge Check

Measuring Performance

- Introduction
- Metrics
- Health, safety, and environmental
- Knowledge Check

Business Processes

- Operations
- Refinery Costs
- Trading
- Operational Efficiency
- Knowledge Check A
- Knowledge Check B



Trends and Challenges

- Supply and Demand
- Big Data
- Others
- Sustainability
- Regulations
- Knowledge Check

Final Quiz
Certification Test



Industry Focus: Utilities

1 CPE Credit / Program Level - Beginner / Prerequisite Learning - None



This course introduces the electricity, gas, and water utility industries, including the structure of each of the industries. No prior knowledge of manufacturing is required.

Completion time: 50-minute hour.

Learning Objectives

- Differentiate between various terminology used within the utilities industry.
- Identify the roles and the different business units in a typical company and the basic industry structure.
- Identify metrics used to measure aspects of corporate performance.
- Identify some of the key trends and drivers affecting the utilities industry.
- Recalls examples of how IT is used to improve business performance.

Course Outline

Industry Overview

- Market Dynamics
- Competition
- Electricity Sector
- Gas Sector
- Water Sector
- Knowledge Check

Business Processes

- Introduction
- Business Processes
- Energy Trading
- Knowledge Check

Performance Metrics

- Introduction
- Customer Service
- Financial
- Operational
- Knowledge Check



Trends and Challenges

- Introduction
- Electricity
- Water
- Gas
- Renewable Energy
- Smart Grid
- Battery Storage & Regulatory Impact
- Cyber Security
- Knowledge Check

Information Technology

- IT Spending Areas
- Customer Management and Billing
- Geographic Information Systems
- Knowledge Check

Final Quiz

Certification Test

