

# Supply Chain Management Fundamentals

## Overview

The demand for supply chain professionals is currently at an all-time high where companies increasingly rely on their integrated supply chain networks internationally.

The Supply Chain Management Fundamentals executive certificate, offered in partnership with Arizona State University's W. P. Carey School of Business, gives you the essential tools and added expertise in supply chain management to advance your career as the Fourth Industrial Revolution accelerates. The program faculty present an entrepreneurial curriculum enriched by their experiences in multinational firms and organizations in the public sector.

By earning a Thunderbird Executive Certificate of Supply Chain Management Fundamentals, you broaden your business acumen through exploring the fundamentals of Operations, Procurement, and Logistics – the three building blocks of SCM. You will learn how to manage the different types of manufacturing and service processes that make up an organization, how to strategically develop and manage an organization's supplier network to meet its strategic objectives, and what a well-designed logistics system looks like and the tools that aid in developing and managing this system.

The Supply Chain Management Fundamentals is awarded to those who complete three Certificates: Supply Chain Operations Management, Supply Chain Procurement Strategy, and Supply Chain Logistics Management.

In partnership with:



Online



On Demand

**15**  
Weeks  
(self paced)

**12**  
Modules

## Curriculum

With Thunderbird's Executive Certificate in Supply Chain Management Fundamentals, you will explore the fundamentals of Operations, Procurement, and Logistics – the three building blocks of SCM. The following courses will equip you to advance in your career:

- **Supply Chain Operations Management**
- **Supply Chain Procurement Strategy**
- **Supply Chain Logistics Management**

## Key Benefits

- Master skills and techniques necessary to personally impact your organization's Global Supply Chain
- Discover the evolving and urgent business issues of today's Global Supply Chain
- Learn with faculty from one of the top ranked Supply Chain Management Programs in the United States

## Individual Certificates

### Supply Chain Operations Management

Delineate and map real manufacturing and service processes. Identify the types of decisions and decision criteria to manage process capacity, inventory, performance metrics, and sustainable performance.

**Delivery: Online | Duration: 5 weeks | Start: On Demand | \$990 | 3 CEU**

#### Module 1: Processes and Managing Their Capacity

- Demonstrate an understanding of how changing capacity can create economies or diseconomies of scale.
- Examine factors influencing organizations' decisions of where to add capacity.

#### Module 2: Managing Inventory

- Identify demand and supply uncertainties driving the need for inventory in manufacturing processes.

- Demonstrate an understanding of how to manage inventory linked to independent demand, or inventory linked to a dependent demand.

#### Module 3: Managing Quality

- Analyze a process to identify causes of output variance and ways to measure and reduce the variance.
- Analyze cost of quality to determine where investments best ensure product or service quality.

#### Module 4: Managing Sustainability

- Demonstrate an understanding of sustainability issues and best practices for developing and executing a sustainability approach that addresses these issues.
- Identify the steps used to act on sustainability and social responsibility issues, challenges and tools used to improve supply chain sustainability, and business practices associated with the circular economy.

### Supply Chain Procurement Strategy

Evaluate, manage and develop different resources, suppliers, technologies and skills to achieve strategically-aligned supply management objectives. Examine best practices of different organizations or sectors and assess their applicability to your organization's Procurement function.

**Delivery: Online | Duration: 5 weeks | Start: On Demand | \$990 | 3 CEU**

#### Module 1: Global Supply Strategies

- Recognize the role of procurement in a supply chain management context and examples of tasks performed in this function.
- Identify key market drivers of industrial competitiveness that form a given organization's corporate strategy.

#### Module 2: The Sourcing Decision & Supplier Evaluation

- Evaluate a sourcing decision in a given situation by examining factors driving

the decision, alignment with supply chain objectives, and outcomes of the decision.

- Identify how different financial factors impact sourcing decisions.

#### Module 3: Leveraging Information Technology in Procurement

- Identify different supply chain technologies and their applicability in procurement to achieve a firm's supply chain objectives.
- Describe experiences of different supply chain technologies being used in your

company and assess their suitability in achieving its supply chain objectives.

#### Module 4: Leading the Supply Function

- Explain how leadership attributes, styles and goals impact an organization's ability to achieve supply chain objectives.
- Assess how the composition and structure of teams impacts an organization's ability to achieve supply chain objectives.

# Individual Certificates (Continued)

## Supply Chain Logistics Management

Examine tools for designing a good logistics system, including costs and trade-offs in network design, types of logistics service providers, forecasting, and lean logistics practices that enable advancement in logistics planning. Assess best practices in other organizations and sectors to determine their applicability to your organization's Logistics planning and management.

**Delivery: Online | Duration: 5 weeks | Start: Immediately | \$990 | 3 CEU**

### Module 1: Logistics Networks in Supply Chain Management

- Demonstrate an understanding of the data requirements for logistics network analysis.
- Analyze your business unit, company or industry to identify design issues or challenges in the existing logistics network.

### Module 2: Operating the Network

- Analyze a company's decision to use a given supply logistics service provider.

- Describe the various components of a global logistics operation.

### Module 3: Forecast Management

- Describe the role of forecasting for different time horizons and identify some fundamental truisms regarding forecasting.
- Demonstrate an understanding of four simple time series forecasting models, when and how to use each, and how to use BIAS and MAD calculations to test their accuracy.

### Module 4: Inventory Management

- Demonstrate an understanding of how demand uncertainty affects safety stock and the EOQ model.
- Demonstrate an understanding of three different lean practices in inventory management –Vendor Managed Inventory (VMI), Cross docking, and Milk runs.



**Dr. Kevin J. Dooley**  
Professor



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Updated 01-27-23