

**CHARTERED**  
INSTITUTE OF PROFESSIONAL CERTIFICATIONS

# CERTIFIED SUPPLY CHAIN ANALYTICS PROFESSIONAL™

## CSCA™

**Fully Accredited  
By:**

Chartered Institute of  
Professional Certifications

CPD  
Certification Service





# PROGRAM OVERVIEW



This **Certified Supply Chain Analytics Professional (CSCA™)** program will teach you how to optimize your organization's supply chain by adopting **advanced data analytics innovations**. You will learn different types of **analytics models (including predictive and prescriptive analytics)** and how it can help you better **predict future demand and increase the accuracy in your supply chain planning**. With powerful best practices in real-time analytics, you will be able to identify **new supply chain risks** and build a strategic plan to counter these disruptions. In addition, you will learn how to apply continuous integrated planning and build a 360-degree real time supply chain analytics dashboard within your organization that will help you **improve your demand planning and forecasting while reducing excess inventories and overproduction**.

By the end of the program and upon passing the Chartered exam, you will have earned the **Certified Supply Chain Analytics Professional (CSCA™)** designation which you can use to demonstrate your professional credentials and track record in supply chain analytics.

Globally demanded and recognized, this designation is an industry-recognized trademarked charter developed by the **Chartered Institute of Professional Certifications** and has lifelong validity. It's also fully accredited by CIPD (Chartered Institute of Personnel and Development), with 160,000 membership organizations worldwide.

## ACCREDITATIONS



4.8



4.6



# KEY SKILLS YOU WILL GAIN

## From This Program



**SUPPLY CHAIN ANALYTICS  
SUPPLY CHAIN PLANNING  
DATA-DRIVEN SUPPLY CHAIN  
SUPPLY CHAIN OPTIMIZATION**

**SUPPLY CHAIN REAL TIME ANALYTICS  
ADVANCED SUPPLY CHAIN ANALYTICS WITH AI  
DATA SCIENCE FOR SUPPLY CHAIN FORECASTING  
SUPPLY CHAIN DATA ANALYSIS**

**MACHINE LEARNING IN DEMAND PLANNING AND  
FORECASTING  
DISTRIBUTION AND LOGISTICS  
SUPPLY CHAIN DATA VISUALIZATION**

**INVENTORY & WAREHOUSE MANAGEMENT  
LOGISTICS PLANNING  
SUPPLY CHAIN RISK MANAGEMENT  
DIGITIZED SUPPLY CHAIN**

**SUPPLY CHAIN RISK MITIGATION  
SUPPLY CHAIN VISUALIZATION DASHBOARD  
INDUSTRY 4.0 ADOPTION**

# YOUR FACULTY DIRECTOR



## Dr. Yao Zhao

Award Winning Author, Faculty Leader and Contributor

Faculty Leader for CSCA Asia Pacific and Australia Program

Dr. Yao is a renowned **Supply Chain Analytics Professor at Rutgers Business School and a co-director of their Supply Chain Analytics Lab**. He holds a Ph.D. degree in Industrial Engineering and Management Sciences from Northwestern University, and his research interests lie in supply chain management, analytics and healthcare. He has received **several awards for his research**, including the National Science Foundation Career Award on Manufacturing Enterprise Systems and a Dean's Research Professorship. He is also a speaker at university seminar and industry research laboratories, like Columbia DRO, MIT ORC, Chicago Booth, North-western IEMS, Stanford MS&E, Michigan Ross and Maryland Smith. His research has been published by global media including The European Business Review, Aviation Week & Space Technology and International Innovation.

Yao is currently teaching core operations and supply chain courses at Rutgers Business School, where he has received the **Dean's Meritorious Teaching Award**. His instructional game, Hunger Chain simulation, was nominated for an award that recognizes innovative teaching techniques. Yao is also author of the book "**Supply Chain Analytics: Cases, Games and Solutions**", which has been adopted by many supply chain management and analytics programs globally.

# OUR PARTICIPANTS

Over 70% of FORTUNE 500 Companies Have Attended Our Accredited Programs Before



Goldman Sachs



SAMSUNG



ExxonMobil



BURBERRY



citi



IKEA



VOLVO



HYUNDAI



Pfizer

Life is our life's work



Nestlé

# PROGRAM AGENDA

**CSCA™**  
CERTIFIED SUPPLY  
CHAIN ANALYTICS  
PROFESSIONAL™

## MODULE 1 - WHAT IS SUPPLY CHAIN?

- Lesson 1.1 - Sandwich Example
- Lesson 1.2 - Introduction to Supply Chain
- Lesson 1.3 - Global Supply Chain Priorities
- Lesson 1.4 - Objectives of Supply Chain
- Lesson 1.5 - Drivers and Metrics of Supply Chain
- Lesson 1.6 - Elements of Supply Chain
- Lesson 1.7 - Digital Transformation in Supply Chain

## MODULE 2 - WHAT IS DATA & ANALYTICS?

- Lesson 2.1 - Data, Analytics and the Enterprise
- Lesson 2.2 - Analytics Journey
- Lesson 2.3 - Goals and Role of Analytics
- Lesson 2.4 - Industry 4.0 and the Supply Chain
- Lesson 2.5 - Global Lighthouse Network

## MODULE 3 - HARD & SOFT SKILLS

- Lesson 3.1 - Venn Diagram of Skills
- Lesson 3.2 - Hard Skills
- Lesson 3.3 - Soft Skills
- Lesson 3.4 - Project Life Cycle & Food Waste Warriors
- Lesson 3.5 - Waste Tool 1-5
- Lesson 3.6 - SCRUM
- Lesson 3.7 - Waste Tool 6-8

## MODULE 4 - THE FOUR TYPES OF SUPPLY CHAIN ANALYTICS

- Lesson 4.1 - Types of Supply Chain Analytics & Their Application
- Lesson 4.2 - Descriptive Analytics
- Lesson 4.3 - Diagnostic Analytics
- Lesson 4.4 - Predictive Analytics
- Lesson 4.5 - Prescriptive Analytics

## MODULE 5 - REAL-TIME ANALYTICS

- Lesson 5.1 - End2End Supply Chain Insights Model
- Lesson 5.2 - Real-time Analytics
- Lesson 5.3 - Data Management at Scale
- Lesson 5.4 - Big Data & the Data Evolution
- Lesson 5.5 - Cloud Computing
- Lesson 5.6 - Supply Chain SaaS: Kinaxis

## MODULE 6 - TECH TOOLS RELEVANT TO SUPPLY CHAIN ANALYTICS TODAY

- Lesson 6.1 - Computational Thinking
- Lesson 6.2 - History of Programming Languages
- Lesson 6.3 - Use of Programming Languages in Supply Chain Analytics
- Lesson 6.4 - Process Mining

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## MODULE 7 - ADVANCED ANALYTICS

- Lesson 7.1 - Environmental, Social and Governance Agenda
- Lesson 7.2 - Types of AI
- Lesson 7.3 - AI in the Supply Chain
- Lesson 7.4 - Machine Learning Intro
- Lesson 7.5 - Types of Machine Learning
- Lesson 7.6 - Deep Learning

## MODULE 8 - IMPACT OF SUPPLY CHAIN ANALYTICS ON THE ESG AGENDA

- Lesson 8.1 - Environmental, Social and Governance Agenda
- Lesson 8.2 - ESG Analytics
- Lesson 8.3 - ESG Data Management
- Lesson 8.4 - Intelligent Supply Chain Platform by IBM & Chemonics
- Lesson 8.5 - Predictive Reforestation Platform by Deloitte & WWF
- Lesson 8.6 - GreenToken by SAP

## MODULE 9 - FORESEEABLE THREATS, CHALLENGES & OPPORTUNITIES

- Lesson 9.1 - Data Privacy
- Lesson 9.2 - AI Ethics
- Lesson 9.3 - Machine Learning Challenges & Biases

- Lesson 9.4 - Cyber Security Threats
- Lesson 9.5 - The Race Human vs. Machines
- Lesson 9.6 - eCommerce, Delivery Right Now!

## MODULE 10 - THE FUTURE OF SUPPLY CHAIN ANALYTICS

- Lesson 10.1 - Internet of Things
- Lesson 10.2 - Digital Twins
- Lesson 10.3 - Blockchain Technology
- Lesson 10.4 - Augmented Reality & Virtual Reality
- Lesson 10.5 - Quantum Computing

## EXAMINATION

# YOUR CHARTER DESIGNATION



Chartered Institute of Professional Certification's programs are unique as they provide you with professional charter designation and mark that can be used across your lifetime once you have completed our programs.

After completing the program and passing the Chartered exam, you will be awarded the **Certified Supply Chain Analytics Professional (CSCA™)** designation that can be used in your resume, CV and other professional credentials. This designation is a global trademark and industry-recognized with lifelong validity.

Globally demanded and recognized, this designation will help you distinguish your supply chain analytics skillsets and demonstrate that you have attained expertise in **supply chain analytics**.



# ABOUT US

49,525

Business Leaders Have  
Attained Their Chartered  
Certifications Since 2009

390

Certified and Fully  
Accredited Programs

87%

Chartered Leaders Have  
Reported Career Promotions  
and Enhancements

## Chartered Institute of Professional Certifications

All of Chartered Institute of Professional Certifications programs are fully accredited programs. The professional charters and designations are trademarked credentials that can only be used by professionals who have completed and passed our accredited program. It is also independently accredited by CPD as adhering to the highest standards of continuing professional principles.

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# OUR FACULTY DIRECTORS

We Collaborate With  
Instructors From  
Renowned Institutions



**HARVARD**  
UNIVERSITY



**Wharton**  
UNIVERSITY of PENNSYLVANIA



**Stanford University**



**UNIVERSITY OF MICHIGAN**



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School**

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Business  
School**



# CONTACT US TODAY

We Thank You for Your Ongoing Support  
of Our Programs

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