



# Supply Chain Analytics Professional Certificate

Created to help you better understand the role and dynamics of analytics in Supply Chain Management (SCM). Learn the key concepts for working with SCM data while obtaining hands-on experience with analytics techniques and tools.



## » VIRTUAL CORE COURSES (4)

### Transforming Supply Chain Management and Performance Analysis (LOG 3250P) **Online**

Apply leading-edge analytical methods and technology enablers across your supply chain. You'll learn the dynamics of supply chains and see an overview of the most relevant planning challenges across strategic, tactical, and operational level. You'll also understand the role of different analytics types (descriptive, predictive, and prescriptive) and the links between predictions and prescriptions.

### Creating Business Value with Statistical Analysis (LOG 3251P) **Online**

Leverage technology to develop effective Key Performance Indicators and to apply statistics to understand and forecast data. Identify the links between operational and business performance metrics, you'll also learn several statistical concepts (e.g. variance analysis, hypothesis testing, forecasting methods), along with the use of statistical methods in inventory management.

### Machine Learning Applications for Supply Chain Planning (LOG 3252P) **Online**

Understand how machine learning algorithms learn patterns from data to support proactive decision making, as it applies to supply chain management. Develop the ability to forecast future demand and use this information to evaluate inventory policies, while also learning the importance of and how to perform customer segmentation.

### Supply Chain Optimization and Prescriptive Analytics (LOG 3253P) **Online**

Utilize advanced analytics and mathematical optimization to find solutions for supply chain problems, through various techniques, such as linear programming, mixed integer programming, and heuristics using the fictional Cardboard Company (CBC) case study with your focus on production processes, distribution network optimization, and routing. Your capstone will culminate in a challenging hackathon, you'll optimize CBC's supply chain performance while designing networks, inventory policies, and scenarios and evaluating the outcomes via simulations.





# Transforming Your Supply Chain

## COURSE INSTRUCTORS

**Melody Shellman** is an optimization engineer for the consulting division at ORTEC that focuses on building tailor made tools for a client's unique supply chain. In this role, Melody translates business challenges to mathematics which answer some of the industries toughest questions. As an experienced operations research professional, she has experience with data analytics and optimization across many industries ranging from open-source optimization tools in the energy sector to donor analytics for an environmental advocacy non-profit.

**Lorenzo Simons** serves as an OR engineer in the Center of Excellence at ORTEC. With a commitment to knowledge dissemination and project alignment with contemporary market trends, Lorenzo brings extensive experience to his roles. Prior to his tenure at ORTEC, Lorenzo conducted research at the Universidad Pontificia Comillas in Madrid, Spain. His work has spanned diverse projects, including route planning, supply chain optimization, and electric mobility. Lorenzo's expertise has led him to be sought after as a guest speaker at numerous universities, where he shares insights into how ORTEC utilizes data science and mathematics in practical applications.

## Recommended

Knowledge of statistics and data analysis, experience with Python and PowerBI, along with basic coding/programming skills.

## 4 LIVE VIRTUAL COURSES\*

### Course 1 - February 17-20, 2025 (Virtual)

Transforming Supply Chain Management and Performance Analysis

### Course 2 - May 24-27, 2025 (Virtual)

Creating Business Value with Statistical Analysis

### Course 3 - May 12-13, 2025 (GT Savannah) and September 15-18, 2025 (Virtual)

Machine Learning Applications for Supply Chain Planning

### Course 4 - December 1-5, 2025 (Virtual)

Supply Chain Optimization and Prescriptive Analytics

*\*Participation requires a computer, high-speed access and compatibility with the online tools being utilized.*

**Provides Continuing Education Units (CEUs) and a Course Completion Certificate issued by Georgia Tech.**

## COURSE INFORMATION

**Location** Virtual instructor-led training

**Register** <https://www.scl.gatech.edu/sca>

## PROGRAM FEE

**Course Price** \$ 1,100



Supply Chain and Logistics Institute

<https://www.scl.gatech.edu/sca>