Information Session:

Supply Chain Analytics Professional Certificate Program
Course instructors

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Supply Chain Analytics Professional Certificate Program

Transforming Supply Chain Management and Performance Analysis

Creating Business Value with Statistical Analysis

Machine Learning Applications for Supply Chain Planning

Supply Chain Optimization and Prescriptive Analytics
Program Delivery Format

THIS IS A FULLY ONLINE (LIVE / VIRTUAL) PROGRAM

ATTENDANCE AT EACH LIVE WEBINAR IS REQUIRED
Planning Challenges

Strategic
meet long-term goals

Tactical
Policies and procedures to support the strategy (mid-term)

Operating
Carrying out the policies and procedures that support the strategy (short-term)

Supply Chain Design
Warehouse Design
Factory Layout
Product Recommendations
Customer Churn
Cost to Serve
Revenue Management
Inventory Management
Performance Analysis / Supply Chain Visibility
Production Planning
Predictive Maintenance
Route Optimization
Workforce scheduling

Planning Challenges

Strategic
meet long-term goals

Tactical
Policies and procedures to support the strategy (mid-term)

Operating
Carrying out the policies and procedures that support the strategy (short-term)
Analytics Continuum

Impact

Effort

How can we make something better happen.

Prescriptive Analytics

What will happen?

Predictive Analytics

Why is it happening?

Diagnostic Analytics

What’s happening?

Descriptive Analytics
CBC: The Cardboard Company
The CBC Supply Chain Network
Supply Chain Analytics Professional Certificate Program

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Transforming Supply Chain Management and Performance Analysis

Day 1: Using Analytics to Transform Supply Chain Management

Day 2: Exploratory Data Analysis for Supply Chain Data

Day 3: Performance Analysis and Visualization of Supply Chain Data/

Day 4: Using Descriptive Analytics in Supply Chain Management
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Creating Business Value with Statistical Analysis

Day 1: Asking the Right Business Questions; Simulations in Supply Chains

Day 2: Statistics for Supply Chain Data

Day 3: Models for Inventory Management

Day 4: Time Series Models
Analytics Question Framework

- **OUTPUT**
- **DATA**
- **ANALYTICS TYPE**
- **PROJECT**
- **BUSINESS QUESTION**

refinement
BEWARE

The Flaw of Averages

Why We Underestimate Risk in the Face of Uncertainty

Sam L. Savage

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The cover image is a cartoon by Danziger.
Which products are current/future issues?

Which products are easily forecastable?

How much storage space do we need?

What level should we refill to?

What inventory levels should we maintain?

Which products are current/future issues?

How much safety stock do we need?

How much safety stock do we need?

Inventory Policy: Overview

Demand Profiling

Service Profiling

Inventory Policies

Simulation/Trial

Profitability and Cost Efficiencies

Customer Service and Satisfaction
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Machine Learning Applications for Supply Chain Planning

Day 1
A Machine Learning Introduction; Time Series Analysis Recap; An ML Approach to Time Series

Day 2
ML Classification and Clustering

Day 3
Model Evaluation and SCM Applications

Day 4
Feature Importance and Predictive Maintenance
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Supply Chain Optimization and Prescriptive Analytics

Day 1: Introduction to Optimization
Day 2: Production Planning
Day 3: Routing and Network Design
Day 4: Implementing Prescriptive Analytics
Daily Schedule

12:45pm – 1:00pm ET
• Instructors join the webinar to answer questions

1:00pm – 5:00pm ET
• Webinar with lectures, discussions, and small group activities
• Two 15 minute breaks

5:00pm - ?
• Instructors stay on the call to answer questions

All other times
• Instructors available via email for questions and scheduling individual sessions
Assignments

Day 1:
• Attend webinar
• Group Discussion

Knowledge check questions

Day 2:
• Attend webinar
• Group Discussion

Knowledge check questions

Day 3:
• Attend webinar
• Group Discussion

Knowledge check questions

Day 4:
• Attend webinar

Knowledge check questions

• Final assignment
• Final assessment

Feedback survey

Assignments are meant to help reinforce what you have learned. Not all assignments are mandatory. Discussions, attendance, the final assignment with explanations, and the final assessment are mandatory.
## Before, During and After

### Before the course
- Pre-course webinar
- 1-on-1 meetings
- Student survey

### During webinars
- Zoom
- Canvas LMS
- Python via Google Colab
- Miro
- GT speakers

### Outside of course
- Online discussions
- Makeup and review sessions
- Assignment help
- Anonymous survey
Prerequisites

Basic understanding of SCM

Basic understanding of statistics and probability

Basic Python coding skills

Basic Microsoft Power BI skills
Upcoming Dates and Tuition

Courses

1. **Transforming Supply Chain Management and Performance Analytics**
   March 6–9, 2023

2. **Creating Business Value with Statistical Analysis**
   May 15–18, 2023

3. **Machine Learning Applications for Supply Chain Planning**
   July 10–13, 2023

4. **Supply Chain Optimization and Prescriptive Analysis**
   Oct. 9-12, 2023

Course Tuition

- Standard: $1,100.00/course
- Georgia Residents with GA AIM code (SCL_GAAIM): $550.00/course
  *proof of residency required when registering

Certificate Tuition

- Standard total: $4,400.00
- Georgia residents with promo code **SCL-GAAIM** (proof of residency required) total: $2,200.00
- Non-Georgia residents with 17% full-series enrollment discount (promo code **SCL-Cert**) total: $3,652.00
For more information, please visit:

Georgia Tech Supply Chain and Logistic Institute
scl.gatech.edu/education/professional-education

Supply Chain Analytics Professional Certificate
pe.gatech.edu/supply-chain-analytics-professional-certificate

For program and certificate questions, email us:
info@scl.gatech.edu

For questions about courses, email us:
course@scl.atech.edu