

SUPPLY CHAIN & LOGISTICS

COURSE CATALOG 2017-2018





Education. Innovation. Leadership.

For 26 years in a row, the Stewart School of Industrial & Systems Engineering (ISyE) has been ranked the number one program of its kind.* The Georgia Tech Supply Chain & Logistics Institute (SCL) has been on the leading edge of supply chain education and research for more than 70 years. SCL continues the excellence by launching additions to its impressive curriculum for supply chain, trade, and logistics professionals.



SCL brings you more professional development options to support your career goals. Regardless of where you are in your career, you will find an opportunity with us to expand your knowledge and build new skills.

Our Management Series, which includes traditional short courses, is focused on mid-career professionals. The Fundamental Series is offered online and addresses the needs of entry-level and supervisory-level professionals, as well as those seeking to refresh their knowledge of specific supply chain domains, and for veterans seeking to “commercialize” their skills.

In response to industry demands, we have made enhancements to our programs:

- Expansion of fully online course formats to include eight topics as part of the Supply Chain Fundamentals Series
- Restructuring of existing certificates to allow attendees more flexibility when choosing a course, adding a number of senior ISyE faculty as instructors, and the use of supply chain gaming tools all to better serve the professional learner

Logistics Education and Pathways (LEAP) is a special fast-track online certification program for 16-24 year olds in the Atlanta Area to promote increased participation from Atlanta’s minority youth in high-growth logistics careers. Tuition costs are supported by a grant from JPMorgan Chase & Co. To learn more, visit: scl.gatech.edu/LEAP

If you’re considering a degree, take a look at the Master of Science in Supply Chain Engineering, Professional Master’s in Manufacturing Leadership, and interdisciplinary Master of Science in Analytics.

SCL also conducts tailored corporate training programs around the globe to assist companies in improving employee skills in supply chain domain knowledge, innovation, and leadership development. The programs are highly customized and include a mix of lectures, team projects, soft skills development, and online self-study as needed.

Please let us know if you would like assistance in student recruiting, class projects, research, or consulting support. If you have questions or need assistance, please contact us at (404) 894-2343.

Sincerely,

Tim Brown, Managing Director
Georgia Tech Supply Chain & Logistics Institute
tim.brown@gatech.edu

** U.S. News and World Report*



Contents

Custom Corporate Training & Events4
 The Georgia Tech Advantage4

MANAGEMENT SERIES:

Certificate Programs Designed to Advance Your Career

Supply Chain and Logistics Certificates5

Supply Chain Management Certificate Courses (SCM)

- Inventory Planning and Management 6
- Transportation and Distribution Planning 6
- Demand-Driven Supply Chain Strategy 6
- Lean Inbound Logistics 6
- Measuring and Managing Performance in Supply Chain and Logistics Operations 7
- Introduction to Plan for Every Part (PFEP) and Inventory Sizing 7
- Introduction to International Logistics and Compliance 7
- Plan for Every Part (PFEP) and Inventory Layout 7
- Defining and Implementing Effective Sourcing Strategies 8
- Effectively Managing Global Supply and Risk in an Increasingly Complex World 8
- Lean Leadership for the Supply Chain Professional (online) 8

Distribution Operations Analysis and Design Certificate Courses (DOAD)

- Engineering the Warehouse 9
- Warehouse/Distribution Center Layout 9
- Material Handling 101: Fundamentals, Analysis and Selection 10
- Plan for Every Par (PFEP) and Total Cost Management 10
- Lean Warehousing 10

Supply and Demand Planning Certificate Courses (SDP)

- World Class Sales and Operations Planning 11
- Integrated Business Planning 11
- Supply Chain Risk Management 11

Supply Chain Project Management Certificate Courses (SCPM)

- Supply Chain Project Management Fundamentals 12
- Supply Chain Project Management: Vendor Selection & Management 12
- Supply Chain Project Management: Effectively Managing Transformation Projects 12

Health and Humanitarian Supply Chain Management Certificate Courses (HHSCM)

- Pre-planning Strategy for Health and Humanitarian Organizations 13
- Tactical Decision Making in Public Health and Humanitarian Response 13
- Systems Operations in Health and Humanitarian Response 13

FUNDAMENTALS SERIES:

Online Courses Designed to Prepare You for a Career in Supply Chain Management

- Supply Chain Fundamentals Program 14
- Logistics Education And Pathways (LEAP) 15

Top Ranked Graduate Education for Supply Chain Professionals

- Georgia Tech Master of Science in Supply Chain Engineering (MSSCE) 16
- Professional Master's in Manufacturing Leadership (PMML) 16

Georgia Tech Supply Chain Network 16

Partnerships and Student Recruitment 17

Research and Innovation Centers 18



Custom Corporate Training & Events

Corporate training is key to sustainable supply chain management and organizational success.

Georgia Tech Supply Chain & Logistics Institute (SCL) conducts tailored corporate training programs around the globe to help companies improve employee skills in supply chain domain knowledge, innovation, and leadership development. Whether you're looking to equip your employees with essential professional and technical skills, bring customers and/ or suppliers together for collaborative planning and education sessions, or conduct supply chain educational events for management and employees, SCL can tailor on-site and off-site training to fit your organization's needs. The programs are highly customized and include a mix of lectures, team projects, soft skills development, and online self-study as needed.

Examples of corporate training topics include: Lean Supply Chain Management; Optimizing Packaging in the Supply Chain; Supply Chain Network Design Fundamentals, Effectively Managing Global Supply and Risk in an Increasingly Complex World, and more!

Contact Tim Brown, timbrown@gatech.edu, for more information about custom training programs, lectures, and events.

The Georgia Tech Advantage

Join a network of global leaders in Atlanta.

TOP 5

Georgia Tech's Graduate Supply Chain Programs are Ranked in the Top 5*

#1

Georgia Tech Conference Services Voted "Best College or University to Hold a Meeting or Event"†

#1

SCL is a Unit of Georgia Tech's #1 Industrial Engineering Program—26 years in a Row‡



Courses are Taught by Renowned Instructors from Academia and Industry

FORTUNE 500

Atlanta is #3 in Fortune 500 Headquarters



Atlanta is Easily Accessible—#1 Airport in Passenger Volume§

#7

Georgia Tech is Ranked the 7th Best Public University in the Country‡

11

Graduate Engineering Programs Ranked in the Top 10‡

#1 ROI

No. 1 Return on Investment in Higher Education||

Sources: *2014 Gartner Top U.S. Supply Chain Graduate University Rankings; †Unique Venues, Winter 2015; ‡U.S. News and World Report; §Airports Council International;

|| Based on salaries and tuition, Smart Money Magazine



MANAGEMENT SERIES:

Certificate Programs Designed to Advance Your Career

Georgia Tech Supply Chain & Logistics certificates provide supply chain professionals with the necessary skills to maintain a competitive edge in an ever-changing marketplace. In less time than a traditional degree program, students can earn a certificate that offers them the opportunity to learn from internationally recognized experts, build leadership skills, and improve problem solving capabilities.

Supply Chain Management Certificate (SCM)

Developed to provide participants with both a solid cross-domain understanding of supply chain, as well as an opportunity to expand knowledge in specific domains or techniques of interest. Gain essential industry skills to advance your career and start applying practical knowledge, tools, and techniques immediately at your organization.

Distribution Operations Analysis and Design Certificate (DOAD)

Formulated to arm distribution operations professionals to stand out in their careers as experts in facility operations improvement. Emphasis is placed on topics such as: Systematic Methodologies to Facility Layout; Quantitative Analysis of Needed Facility Capabilities; Lean Warehousing Concepts; and Rigorous Tradeoff Analysis of Labor, Equipment, and Facility Alternatives. Develop critical skills needed in both designing new facilities and reengineering a wide variety of existing distribution facility types.

Supply and Demand Planning Certificate (SDP) *Please note, this certificate will not be offered in 2017.*

The program is designed for professionals with broad planning responsibilities, as well as professionals with more focused areas of concern who want to gain a solid understanding of the important techniques, tools, and components associated with integrated supply chain planning.

Lean Supply Chain Professional Certificate (LSCP)

This executive learning program is geared toward supply chain professionals who want to advance their lean knowledge and increase supply chain efficiencies that produce tangible results for their organizations. Over a three-month period participants meet for three days per month and complete application projects between courses to leverage their understanding of learned concepts. Courses are offered in Panama: www.gatech.pa

Supply Chain Project Management Certificate (SCPM)

Individuals who can manage complex supply chain projects and programs are in high demand. These courses help prepare students for project management certification while going beyond that – in preparing students for the complexities of managing projects in the multi-functional supply chain environment. Participants learn techniques to be successful in key areas such as: vendor selection and management, change management concepts, and cross-organization collaboration.

Health and Humanitarian Supply Chain Management Certificate (HHSCM)

Designed for practitioners in non-governmental organizations (NGOs), government, industry, and military who are active participants in humanitarian relief operations. Learn new logistics concepts and strategies to help you improve decision making in preparedness, response, and system design through face-to-face instruction and online interactive tools.

**How to Earn
a Certificate:**

**For certificate requirements, dates, CEUs, locations, and pricing,
visit: pe.gatech.edu/scl-courses**



SCM SUPPLY CHAIN MANAGEMENT CERTIFICATE COURSES

Inventory Planning and Management

Supply chain management and logistics encompasses all the activities involved in getting products to consumers including planning, storing, moving, and accounting for inventory. Inventory availability is the most important aspect of customer service, and the cost of inventory is one of the most important entries on a company's balance sheet. Learn to minimize inventory through understanding your customer's needs.

This course will enable you to:

- Understand the use of inventory throughout the supply chain
- Develop inventory strategies to support business strategies
- Analyze tradeoffs between inventory costs and customer service levels
- Determine how to measure and improve inventory performance
- Understand and manage variability that impacts inventory
- Evaluate how to tradeoff transportation and inventory costs
- Determine how to optimize inventory levels to meet service requirements
- Understand the basics of inventory and forecasting technology

Transportation and Distribution Planning

Effective planning of transportation and distribution networks has become more complex and therefore has become a critical corporate function. This course focuses on understanding capacity development, freight consolidation, network alignment, and synchronization. The course develops the principles, practices, and tools required to address all major issues and tradeoffs in domestic and international transportation, including key financial and performance indicators for transportation and design of supply chains to minimize transportation and distribution costs.

This course will enable you to:

- Develop transportation and distribution strategies to support business strategies
- Understand basic transportation physics in the supply chain
- Optimize last mile and long-haul transportation planning
- Design supply chain networks to optimize transportation costs and service
- Determine how to optimize routes and schedules
- Better manage total transportation spending
- Analyze tradeoffs between transportation costs and customer service levels
- Measure and improve transportation performance
- Understand and manage variability that impacts transportation

Demand-Driven Supply Chain Strategy

As supply chain executives become more instrumental in supporting long-term strategic objectives, they need to complement traditional supply chain operational knowledge with a more strategic view of their role in delivering aligned results to the business. Learn about different lenses of strategic planning applied to supply chain management and the specific implications on supply chain operations.

This course will enable you to:

- Fit supply chain management into the strategy of your company
- Refresh your understanding of the basic tenets of corporate strategy, its strengths and opportunities, and how to leverage and enable them
- Assess your company's strategic position in supply chain operations
- Reframe the current supply chain operations to align with objectives
- Understand the customizable framework for supply chain strategy that fits the needs of any industry and any scale of operations
- Use the framework and tailor it to meet your specific needs

Lean Inbound Logistics

The efficient flow of inbound materials through your supply chain can have a significant impact on cost, quality, service, and delivery to your customer. With continued pressures from globalization, market volatility, and innovation expectations, companies are extending their reliance on lean principles to outside the four walls of the manufacturing facility. This course focuses on the why and how to implement lean logistics to support the lean supply chain operations—both in manufacturing and distribution.

This course will enable you to:

- Map the current inbound logistics network
- Appreciate the inbound logistics network as a link to suppliers and manufacturing facilities and part of the overall value chain
- Calculate total logistics costs
- Design a future state network based on lean principles
- Learn the keys to strategic supplier management
- Learn techniques in transportation management, supplier management, and materials planning to achieve improved material flow balances and reduced overall costs
- Understand how lean guiding principles serve as the strategic pathway to lean inbound logistics
- Explore Milk Run development and mode selection



SUPPLY CHAIN MANAGEMENT CERTIFICATE COURSES **SCM**

Measuring and Managing Performance in Supply Chain and Logistics Operations

Corporations often struggle with a lack of alignment between financial goals and operational metrics. Additionally, today's information technology often overwhelms management with data and metrics. In this three-day course, you will learn how to develop metrics that synchronize supply chain and logistics metrics with key company financial metrics and goals.

This course will enable you to:

- Develop competencies so you can increase your proficiency in management of data and metrics
- Develop metrics that synchronize supply chain and logistics metrics with key company financial metrics and goals
- Analyze your company's key performance indicators
- Immediately put the methods learned in the course to use in the corporate environment
- Learn about the latest research on the strategic value of measuring and managing corporate performance

Introduction to Plan for Every Part (PFEP) and Inventory Sizing

Work backwards from customer demand to manufacturing conveyance and presentation to supplier replenishment methods and frequencies in order to develop, deploy and sustain end to end lean material flow processes.

This course will enable you to:

- Recognize key components and phases of designing, deploying, and managing a successful PFEP program
- Explore strategies for inventory sizing and material presentation
- Conduct a current state assessment of your operations to identify opportunities for improvement
- Increase speed, visibility, and stability within the overall supply chain

Introduction to International Logistics and Compliance

Tour the Port of Savannah!

This global trade course provides knowledge needed by international logistics managers to work within the global supply chain, and facilitate the movement of goods efficiently between countries. The course focuses on incoterms, global trade compliance, harmonized tariff schedules, U.S. import and export regulations, U.S. Free Trade Agreements, and supply chain security.

This course will enable you to:

- Develop competency in the structure, content, and classification of goods within the Harmonized Tariff Schedule of the United States (HTSUS)
- Identify methods for valuing merchandise
- Understand the types of customs entries and transportation security protocols
- Learn about special duty programs and multi-modal port operations
- Recognize commercial invoice requirements
- Gain familiarity in U.S. Free Trade Agreements

Plan for Every Part (PFEP) and Inventory Layout

Breakthrough results in inventory right-sizing, on-time-delivery, manufacturing throughput, and cost reduction. In this two-day course you will learn the critical components of PFEP that ensure delivery of the right parts, at the right time, in the right place, in the right quantity, with the right quality, at the right cost.

This course will enable you to:

- Learn strategies for raw-material inventory sizing and conveyance.
- Develop strategies for raw-material inventory sizing and conveyance
- Learn how to slot inventory
- Effectively calculate labor and MHE resources.



SCM SUPPLY CHAIN MANAGEMENT CERTIFICATE COURSES

Defining and Implementing Effective Sourcing Strategies

Strategic sourcing enhances value, which ultimately impacts the profitability of an entire organization. In this essential course, you will learn how to develop and implement a sourcing strategy that aligns with overall competitive strategy. The course and the associated case studies, activities, and discussions provide the context and a framework for making effective sourcing decisions including a comprehensive approach to strategic sourcing.

This course will enable you to:

- Select the most appropriate sourcing strategy for a given commodity or service
- Create and execute effective sourcing strategies
- Optimize sourcing initiatives
- Reduce sourcing costs
- Make a significant contribution to overall organizational performance

Effectively Managing Global Supply and Risk in an Increasingly Complex World

Today's supply managers are finding that they need to do more work in terms of conceptualizing, designing, and implementing initiatives that may be effective globally. In addition, supply managers need to understand the risks inherent in sourcing globally and be able to develop mitigation strategies for these risks. This course and the associated case studies, activities, and discussions address key issues and topics that are essential to the global aspects of supply and risk management.

This course will enable you to:

- Describe the major similarities and differences between domestic and global supply
- Discuss the reasons for the increase in global business activity
- Understand the key trends in the global marketplace
- Describe the critical changes affecting global logistics
- Understand and classify supply risk
- Define risk mitigation strategies
- Effectively manage supply risk

Lean Leadership for the Supply Chain Professional (online)

While the first two courses in the series focus on strategic and tactical implementation of the lean supply chain, this final course focuses on transforming an organization's culture from traditional thinking to lean thinking. Learn to navigate the waters of change management to successfully execute and sustain the lean supply chain journey.

This course will enable you to:

- Gain the leadership skills necessary to build, manage, and sustain a lean organization
- Drive business results in total cost reduction and value stream-wide process improvement
- Practice effective communication and positively encounter resistance to change
- Become a change agent through lean management systems

COMPLIMENTARY BOOK: *People: A Leader's Day-to-Day Guide to Building, Managing, and Sustaining Lean Organizations*



EXPECTED JOB GROWTH
Forecasted by the State Department of Labor, from 2012-2022

↑ **140 annual openings**
Transportation, storage, and distribution manager will see an annual growth rate of **1.1%**

↑ **830 annual openings**
Shipping, receiving and traffic clerks will expect an increase of **8.9%** in employment

↑ **150 annual openings**
Logisticians will see a growth rate of **24.6%**

DISTRIBUTION OPERATIONS ANALYSIS AND DESIGN CERTIFICATE COURSES **DOAD**

Engineering the Warehouse

The requirement for high levels of customer service, increasing numbers of SKUs, and high labor costs have dramatically increased the complexity of warehouse operations. Each decision such as where to store or pick products, must be based on careful engineering and economic analysis. Each SKU must identify its own cheapest and fastest path through the warehouse to the customer, and then compete with all the other SKUs for the necessary resources. This results in efficient warehouse operations finely tuned to patterns of customer orders.

This course will enable you to:

- Exchange space for time to better meet business objectives
- Understand when to use either dedicated or shared storage
- Identify the most convenient locations in a warehouse
- Identify and use patterns in customer orders to speed fulfillment
- Evaluate warehouse performance
- Optimally size and stock a forward pick area
- Understand the best practices in order-picking
- Understand how to think about automation
- Evaluate and choose a Warehouse Management System

Warehouse/Distribution Center Layout

Do you work with problems involving the use of material handling equipment in plants, warehouses, and other commercial enterprises? All techniques and layout solutions presented in this course are field-proven and derived from successful implementation. Case exercises are adapted from real situations and projects.

This course will enable you to:

- Improve throughput with systematic layout planning
- Reduce handling costs in storage and order-picking
- Group materials for efficient handling and storage
- Plan for expansions and new facilities
- Improve the performance of warehouse and distribution facilities
- Increase layout planning productivity and effectiveness
- Offer practical approaches to storage, order-picking, packing, material movement, and physical control
- Streamline material flow in warehouses/distribution centers

“With international trade laws changing and the World Trade Organization (WTO)

projecting a **4% increase** in world merchandise trade in 2016

up 3.3% last year and 2.8% in 2014),

knowledge of understanding international logistics and compliance

is in **greater demand** by many corporations.”



DOAD DISTRIBUTION OPERATIONS ANALYSIS AND DESIGN CERTIFICATE COURSES

Material Handling 101: Fundamentals, Analysis and Selection

This workshop will prepare you to organize and lead material handling improvements. This is essential learning for those who are seeking cost reductions through better handling methods, and will also be valuable for those who must replace, upgrade, or add material handling equipment. This workshop focuses on systems analysis, equipment selection, and the relationship of material handling to other activities and operations of the industrial plant or warehouse.

This course will enable you to:

- ▶ Review fundamental principles and economics of material handling
- ▶ Plan and analyze material handling systems by validating your concepts and finding real products that could help you implement your plans
- ▶ Understand how and when to apply material handling automation – Systematic Handling Analysis (SHA) – an organized approach
- ▶ Improve material handling operations by analyzing cost justification and identifying preferred handling methods and equipment

Plan for Every Par (PFEP) and Total Cost Management

Optimize inbound logistics to support a PFEP program and source suppliers and optimize material flow. This course will prepare leaders to measure costs and sustain a PFEP program.

This course will enable you to:

- ▶ Learn the key components and phases of designing, deploying, and managing a successful PFEP program.
- ▶ Explore strategies for inventory sizing and material presentation.
- ▶ Understand the importance and key benefits of having a PFEP
- ▶ Conduct a current state assessment of your operations to identify opportunities for improvement.

Lean Warehousing

The ultimate goal of lean thinking is reducing reliance on warehousing. However, warehousing and distribution center management are necessary because of extended lead times and unbalanced business process connections. Consequently, we want to manage warehousing as efficiently as possible. To accomplish this goal, we must bring lean principles into the warehouse and the distribution center. This course covers the lean principles that will help participants reduce waste in warehousing operations by as much as 25%, manage and reduce the flow of inventory, instill disciplined processes, and effectively use visual management.

This course will enable you to:

- ▶ Isolate the key elements of lean thinking to be used in the warehouse
- ▶ Learn value stream mapping for warehouse operations
- ▶ Utilize lean tools to reduce waste in the warehouse
- ▶ Create a warehouse operation based on visual management and real-time problem solving
- ▶ Reduce inventories in warehouse operations
- ▶ Create collaboration between warehousing and other areas



World Class Sales and Operations Planning

This course focuses on defining, executing, and improving the sales and operations planning (S&OP) process. Participants will be introduced to the appropriate stakeholders of S&OP, the importance of S&OP to corporate performance, S&OP cadence, and the use of visionary technology to bring S&OP to the next level. Business cases will be used to show concrete examples of companies where S&OP is effectively applied.

This course will enable you to:

- Understand the need for the S&OP cycle in a company
- Apply principles that are instrumental to the success of the S&OP process
- Experience true market examples relevant to your businesses

Integrated Business Planning

This course provides a holistic view toward corporate profitability and supports effective complexity management. Participants will learn about the challenges of today's operating environment with big data, cross-functional consensus and strategies that impact profitability. Integrated Business Planning (IBP) building blocks will be provided that solve these challenges. Break-out sessions allow participants to apply these IBP concepts with an interactive tool.

This course will enable you to:

- Develop a solid understanding of IBP in terms of definition, challenges, and competitive benefits
- More effectively champion the need for IBP cross-functional activities
- More effectively champion the value of IBP in developing specific strategies and measuring their impact

Supply Chain Risk Management

In today's global economy, operating risks are increasingly on the minds of executives. The specific context of operating risk can range from general areas of business continuity to the effects of natural disasters. In this course, participants will gain a solid understanding of Supply Chain Risk Management principles including effective ways to identify, mitigate, and measure the impact of potential supply chain disruptions.

This course will enable you to:

- Develop a broader and more comprehensive understanding of how your company's supply chain may be at risk
- More effectively communicate to your company's stakeholders the realities of supply chain risks
- Develop a cross-functional understanding of the building blocks for effective Supply Chain Risk Management to be used in your particular business
- Improve your company's Supply Chain Risk Mitigation program

“High-tech executives are modernizing their supply chains to deliver on customer centricity by embracing a variety of supply chain strategies, but two rise to the top: 71% will reduce lead times in the near future, and 71% will focus on improving planning capabilities.”



UPS Change in the (Supply) Chain:
IDC Manufacturing Insights, November 2013



SCPM SUPPLY CHAIN PROJECT MANAGEMENT CERTIFICATE COURSES

Supply Chain Project Management Fundamentals

Supply Chain Management projects can span a wide range of project types including supply chain strategy, network analysis, facility design build, supply chain technology selection and implementation, and continuous process improvement initiatives. This course provides an overview of project management methodologies as applied in the supply chain environment. Class discussion and projects provide an understanding of how fundamental project management approaches and industry best practices can be used to effectively manage the complexities.

This course will enable you to:

- Identify the business processes and functional organizations impacted by specific types of supply chain projects
- Understand an overview of the leading project methodologies and why complex supply chain projects require elements from each to be successful
- Understand the components of the Project Management Book of Knowledge and how they can be applied in the supply chain environment
- Define project requirements and expectations for supply chain projects
- Develop the Work Breakdown Structure (WBS) for supply chain projects
- Identify the critical path for a project from its network diagram
- Be able to form and deploy a supply chain project team
- Understand how to assess, manage, and mitigate project risk
- Properly monitor, control, and close the project

Supply Chain Project Management: Vendor Selection & Management

This course provides a deeper understanding of project management techniques focused on the PMBOK knowledge areas of project integration and procurement applied in the supply chain vendor selection and management process. To keep pace with the continuous moves toward outsourcing of operations and the advancement of technology, companies need to focus on selecting the right suppliers and partnerships to provide the most value to their customers and to remain profitable. This course provides the knowledge, skills, and tools to ensure that you are selecting the right supply chain partners (including 3PL's) based on your business goals. Emphasis is placed on understanding alternative techniques for supplier selection including applied quantitative decision making techniques.

This course will enable you to:

- Understand the common types of supply chain selection projects
- Ensure stakeholder alignment through the supply chain project lifecycle
- Manage a supply chain selection project including defining operational requirements, the RFI/RFQ/RFP process, and selecting the right vendor
- Use decision matrices to drive objective, consensus-driven selections
- Understand the supply chain solution provider landscape and types of systems available in the market
- Understand the best practices when selecting the right partners based on the PMBOK project Integration and Procurement Knowledge areas
- Monitor and measure vendor performance as part of the selection process
- Understand the legal and ethical considerations for vendor selection

Supply Chain Project Management: Effectively Managing Transformation Projects

Complex supply chain transformation requires managing resources from many different departments, ensuring internal and external stakeholder alignment, mitigating large amounts of risk, and implementing communication, risk mitigation, and change management plans to ensure a successful project. Successful project management in complex supply chain environments requires application of well-planned integrated approaches. This course conveys an integrated view to supply chain transformation incorporating elements of change management, test plan development, project management techniques, and establishing effective project management teams.

This course will enable you to:

- Understand the common types of supply chain transformation projects
- Understand the barriers to cross-organizational alignment and how to overcome them
- Build and execute a change management strategy
- Develop and implement an effective communications plan
- Understand the importance of executive alignment to project success
- Understand how to evaluate project team readiness and address gaps
- Design KPIs to ensure you are measuring what you intend
- Assess and manage risk through each phase of the project
- Design testing and training strategies to ensure a successful implementation
- Monitor post implementation performance against KPIs to understand how your project has performed against your goals
- Define, measure, and manage impact to the customer

Pre-planning Strategy for Health and Humanitarian Organizations

Relief requirements for public health and humanitarian events are, in general, unknown in size and type, and are affected by dynamic and hard-to-measure factors. Preparing for long-term development and response to emergency events often involves uncertainty in timing, scope, or scale. Learn how to make pre-planning decisions in advance of an unpredictable event.

This course will enable you to:

- Develop and apply analytical models to aid distribution and routing decisions
- Identify and apply the appropriate forecasting technique, considering characteristics such as seasonality and trends
- Discover current trends and procedures to help organizations and your team members get ahead
- Build a critical knowledge base to make tactical decisions around inventory, routing, and distribution
- Deliver best practices to measure and evaluate outcomes of humanitarian relief efforts
- Ultimately transform the humanitarian sector with increased capacity to participate in planning and strategic decision making for effective supply chain management

Tactical Decision Making in Public Health and Humanitarian Response

Numerous tactical decisions must be made in response to a public health or humanitarian event. Many of these decisions are concerned with the timely and efficient procurement, allocation, and distribution of resources (e.g., funds, supplies, and volunteers) through a supply chain.

This course will enable you to:

- Optimize procurement decisions considering key factors affecting inventory policies such as lead time, variability, and product type (e.g., perishable goods)
- Compare and contrast inventory techniques for a single event versus ongoing operations
- Optimize routing and storage of supplies on the transportation network across time and mitigate bottlenecks
- Evaluate resource allocation tradeoffs in response to a health or humanitarian crisis and develop policies for the allocation of scarce resources in alignment with the supply chain network
- Develop resource allocation strategies in alignment with the supply chain network structure
- Develop strategies for allocating funds incorporating the interdependencies of decisions across time and space

Systems Operations in Health and Humanitarian Response

Despite having common goals, the lack of cooperation and coordination between organizations active in humanitarian response often contributes to inefficiencies. A systems view of a humanitarian effort is needed to ensure appropriate use of scarce resources to meet the goals at hand. This course will focus on conceptual and modeling skills to understand and effectively manage health delivery and humanitarian response from a systems perspective.

This course will enable you to:

- Identify methods for mitigating or reducing inventory variability and costs through information sharing among supply chain partners
- Identify opportunities for coordination within organizations and collaboration across organizations for increased efficiency and improved outcomes
- Describe the strategic behavior of decision makers and the impact of the market (or contract) structure on the participant's actions and the overall system dynamics
- Define evaluation metrics in alignment with the system goals, and structure system operations and incentives that address and evaluate these metrics
- Discover current trends and procedures to help organizations and their team members get ahead, and stay ahead of the curve
- Improve problem solving abilities
- Set metrics and benchmarks that will define opportunities for improvement in sourcing
- Reduce supply related costs and improve efficiency
- Make a significant contribution to overall organizational performance





FUNDAMENTALS SERIES:

Online Courses Designed to Prepare You for a Career in Supply Chain Management



GEORGIA TECH SUPPLY CHAIN FUNDAMENTALS PROGRAM

Program for entry-level and supervisory level associates.

The courses are offered online, but can be offered in alternative formats (in classroom, on-site, and hybrid) and as custom tailored offerings to meet a corporations specific needs.

For more information about the Georgia Tech Supply Chain Fundamentals Program, visit: scl.gatech.edu/fundamentals

COURSES INCLUDE:

- **Supply Chain Management of Principles**
- **Warehousing Operations**
- **Transportation Operations**
- **Customer Service Operations**
- **Supply Management and Procurement**
- **Inventory Management**
- **Demand Planning**
- **Manufacturing and Services Operations**



Logistics Education And Pathways (LEAP) – Atlanta

Introducing 16-24 year olds in Metro Atlanta to careers in Logistics

The Georgia Tech Supply Chain & Logistics Institute presents a fast-track certification program to help promote increased participation from Atlanta's minority youth in high-growth careers. The program is supported by a \$350,000 grant from JPMorgan Chase & Co. toward the firm's global New Skills at Work initiative that promotes workforce development to bridge the gap between the talent employers need and the qualifications of the local talent pipeline.

With the goal of attracting 16-24 year olds in Metro Atlanta to careers in Logistics, the new program can help prepare participants to compete for jobs. As an Equal Education Opportunity Institution, applications from veterans, underrepresented minorities and women are strongly encouraged.

Over the first two years of the program, 300 students will be invited to participate with tuition costs covered through the grant. Students will have the opportunity to train in one or more supply chain topics/courses.

COURSES FOCUSING ON LOGISTICS & SUPPLY CHAIN CAREER READINESS

Four main areas of instruction will be covered, based on input received from supply chain intensive companies based in Atlanta, including Coca-Cola and UPS:



Students will be able to learn at their own pace while progressing toward certification. In addition to the course content, students will receive career coaching, resume advice, and participate.

For more detailed program information, visit: scl.gatech.edu/LEAP



Top Ranked Graduate Education for Supply Chain Professionals

Earn a graduate degree from the #1-ranked Stewart School of Industrial and Systems Engineering.*

Georgia Tech Master of Science in Supply Chain Engineering (MSSCE)

Beyond the MBA: A faster and more focused path to a global supply chain career.

The Georgia Tech Master of Science in Supply Chain Engineering is a professional graduate degree program created to meet the growing demand for business-savvy engineers who can design and synchronize highly complex global supply chains. The program's intensive 12-month curriculum delivers academic knowledge in analytic methods, supply chain engineering, and enterprise management while building professional practice skills and real-world industry experience, all leading to a respected graduate degree from Georgia Tech's top-ranked College of Engineering.

Program applicants may come from a wide range of academic, business, and geographical backgrounds, but they will share a common motivation: to pursue a highly focused graduate education experience in supply chain engineering and to subsequently explore immediate career opportunities with global enterprises.

For more detailed information, visit: sce.gatech.edu

Professional Master's in Manufacturing Leadership (PMML)

The manufacturing industry of the 21st century needs modern leaders and novel approaches to solve complex challenges.

Georgia Tech now offers a professional master's degree in manufacturing leadership. Available in a convenient, hybrid format that combines face-to-face instruction with online learning, PMML provides the type of education that only a top-ranked technology and engineering university can deliver. Georgia Tech's Professional Master's Degree in Manufacturing Leadership covers a variety of topics ranging from technical competencies, including sustainable system design and manufacturing continuous improvement, to leadership skills, like leading change and handling conflict. These offerings are the result of a collaborative effort by our colleges of business and engineering.

For more detail information, visit: pe.gatech.edu/pmml-scl

Georgia Tech Supply Chain Network

Join supply chain and logistics professionals of Georgia Tech.

The Georgia Tech Supply Chain Network is a new cross-disciplinary professional and social group for alumni, students, faculty, staff, professional education students/ alumni, and friends of Georgia Tech with an interest in supply chain.

The goals of the group are to foster the development of the extended Georgia Tech Supply Chain Ecosystem and the overall objectives of Georgia Tech.

Note: You don't have to be a Georgia Tech graduate to join—though you must share an affinity with Georgia Tech and work toward the common goals noted above.

For more information on activities and to join for free, visit: scl.gatech.edu/gtscn

* U.S. News and World Report



GEORGIA TECH
SUPPLY CHAIN NETWORK



Georgia Tech Partnerships & Student Recruitment

Interested in finding your next star employee at Georgia Tech? Our outstanding students from the H. Milton School of Industrial and Systems Engineering (ISyE) are intelligent, self-motivated, accomplished, and have a strong work ethic! Depending on your staffing needs, ISyE offers a variety of opportunities for you to engage and recruit these exceptional students.

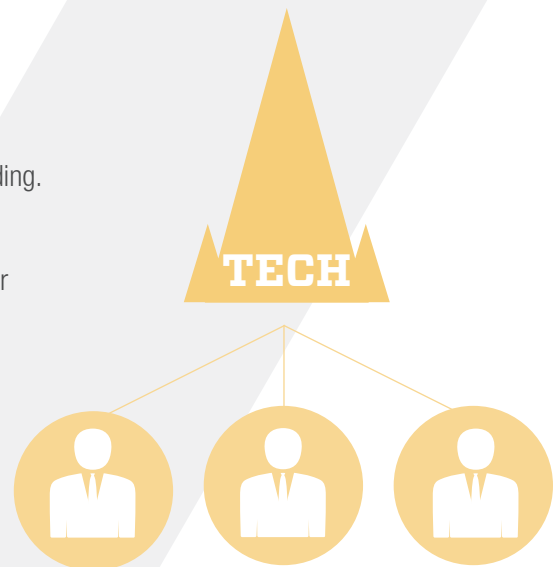
- **Publicize a job or internship position**
- **Participate in the spring or fall career fair**
- **Host a company information session at the Georgia Tech campus**
- **Submit a potential project for Senior Design**
- **Partner with us in our Master's degree capstone projects**
- **Participate in opportunities at Georgia Tech's Center for Career Discovery and Development**

For more information, visit: scl.gatech.edu/partnerships or call 404-894-2343

SUPPLY CHAIN & LOGISTICS RECRUITING

If you have a supply chain and logistics-specific opportunity or need, ISyE's Supply Chain & Logistics Institute can help. Among its various activities, SCL hosts four dedicated supply chain and logistics recruitment fairs each year. These "Supply Chain Days" are attended by ISyE students and are held in ISyE's main building. Priority placement is given to SCL's member companies, but if space is available, other companies are invited to host a table. SCL also works with organizations to host dedicated company-specific events, arrange company representatives to deliver class lectures, conduct meetings with Georgia Tech faculty, serve as a matchmaker for interns, and identify student group projects.

For more information email info@scl.gatech.edu





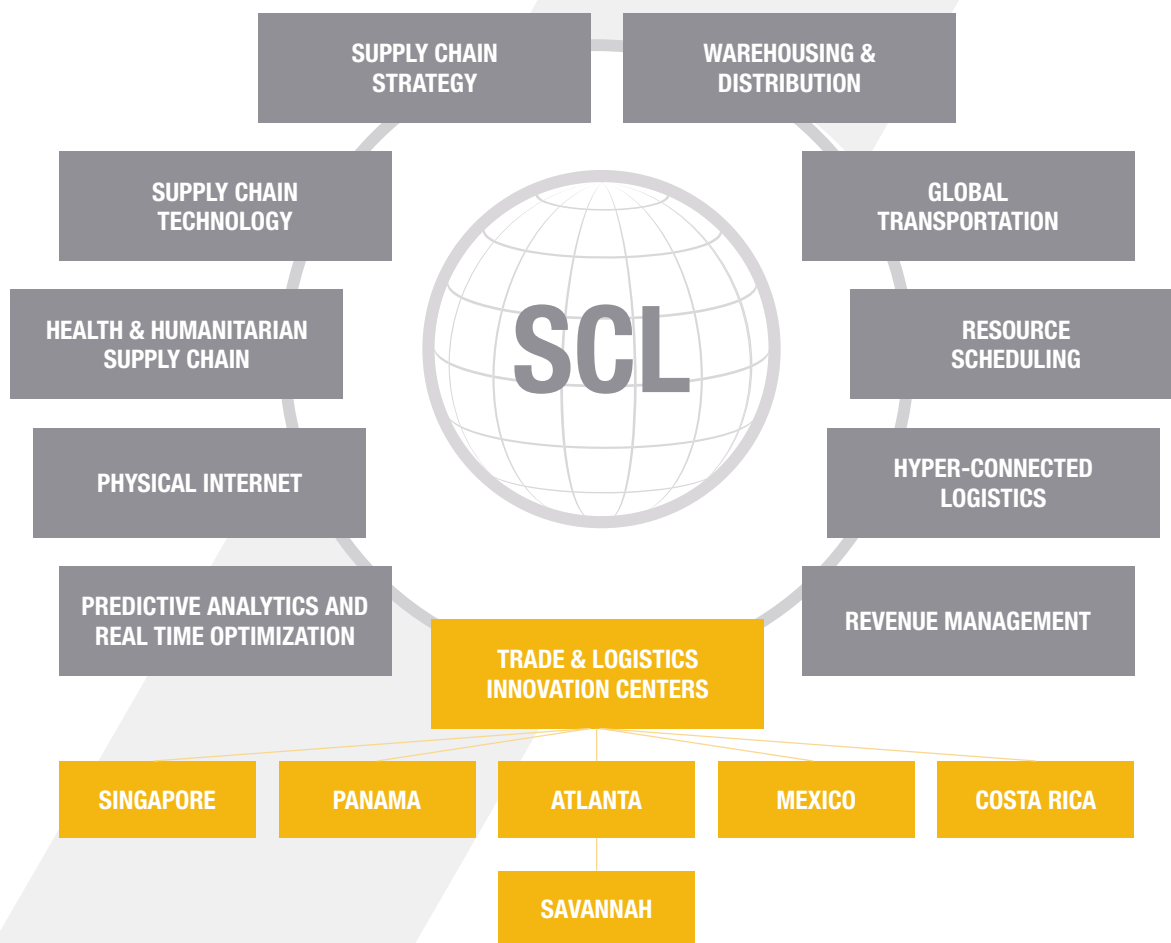
Georgia Tech Supply Chain & Logistics Institute Research and Innovation Centers

New ideas and tools are born in the robust research and consulting environment supported by the Georgia Tech Supply Chain & Logistics Institute. Solutions and improvements produced by researchers provide businesses with the high level of competitiveness that is critical to their success, both in the domestic and international marketplace.

The Supply Chain & Logistics Institute's research activities cover the full spectrum of issues ranging from efficient warehousing and distribution systems to newer concerns such as hyper-connected logistics or delivering humanitarian relief to places with limited infrastructure.

For more information, visit: scl.gatech.edu/research or call 404-894-2343.

RESEARCH AND INNOVATION CENTERS



Georgia Institute of Technology
Professional Education
P.O. Box 93686
Atlanta, GA 30377-0686

