2016-2017
SUPPLY CHAIN & LOGISTICS COURSE CATALOG

Georgia Tech
Supply Chain & Logistics Institute

pe.gatech.edu/scl-courses
For 25 years in a row, the Stewart School of Industrial & Systems Engineering (ISyE) has been ranked the number one program of its kind.* As a unit of the Stewart School, 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
timbrown@gatech.edu

* U.S. News and World Report

For more information and to register, visit pe.gatech.edu/scl-courses
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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.

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.

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

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

SCL is a Unit of Georgia Tech’s #1 Industrial Engineering Program—24 years in a Row‡

Courses are Taught by Renowned Instructors from Academia and Industry

Atlanta is #3 in Fortune 500 Headquarters

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

Georgia Tech is Ranked the 7th Best Public University in the Country²

Graduate Engineering Programs Ranked in the Top 10³

No. 1 Return on Investment in Higher Education¹

Sources: * 2014 Gartner Top U.S. Supply Chain Graduate University Rankings; † Unique Venues, Winter 2015; ‡ U.S. News and World Report; § Airports Council International; ³ Based on salaries and tuition, Smart Money Magazine

For more information and to register, visit pe.gatech.edu/scl-courses
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)
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.

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

For more information and to register, visit pe.gatech.edu/scl-courses
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

Optimizing Packaging’s Impact in the Supply Chain
Taking a holistic supply chain view toward packaging decisions is essential to achieving financial benefits as well as direct and positive sustainability impacts. These impacts can be measured in emissions and waste reduction.

This course will enable you to:
➤ Develop competency in understanding how packaging can cause inefficiencies and create waste, and how to work toward effective solutions
➤ Understand supply chain tradeoffs and build a Total Delivered Cost business case around packaging improvements and measuring the positive impact on the supply chain system
➤ Learn about the purposes of packaging testing and how it can save money, reduce damage, and increase customer satisfaction
➤ Learn how to measure and report sustainability improvements created by packaging enhancements
➤ Increase packaging awareness; gain knowledge on issues such as underhang and overhang, cube utilization, pallet efficiency, board weight, vibration and shock, etc.

Introduction to International Logistics and Compliance
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

Supply Chain Network Design Fundamentals
Supply chain network design can deliver significant improvements in service, cost, and the sustainability of an organization. This course introduces students to the methods, tools, analytics, and best practices associated with supply chain network optimization, and incorporates hands-on training with a leading commercial optimization software package. A holistic view is emphasized—balancing methodology, business goals, and the capabilities of software enablers.

This course will enable you to:
➤ Define a supply chain challenge in terms of an optimization model
➤ Understand the data required to support the building of a network model
➤ Identify best practices in managing a network strategy project
➤ Differentiate types of network optimization projects and how the types relate to model structure
➤ Configure, run, and optimize the network model in a commercial software package
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

GEORGIA SUPPLY CHAIN & LOGISTICS

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%

For more information and to register, visit pe.gatech.edu/scl-courses
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

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

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

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
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

For more information and to register, visit pe.gatech.edu/scl-courses
Lean Essentials for the Supply Chain Professional

Explore the principles and tools of lean thinking and see your operations from a new vantage point. From concepts like standardization and process thinking, to tools like value stream maps and dashboards, you will gain the skills and problem solving tools necessary to identify and eliminate waste at the root cause.

This course will enable you to:
➤ Gain the skills and problem solving tools necessary to identify and eliminate waste at the root cause
➤ Create dashboards with metrics that drive continuous improvement, systems thinking, and collaboration
➤ Understand key lean concepts such as quality at the source, visual management, standardization, A3 thinking, flow, JIT, takt time, and others
➤ Create effective measurement systems that drive action, systems thinking, and collaboration

COMPLIMENTARY BOOK: Everything I Know About Lean I Learned in the First Grade

Lean Implementation for the Supply Chain Professional

Connecting lean and waste reduction to supply chain management functions achieves improved inventory visibility, logistics control, and optimal supply chain performance. In this course, understand how to apply pull systems, leveled flow, and waste reduction strategies to your supply chain. Simulations and application exercises will train you how to think from a systems perspective to reduce the total cost of fulfillment.

This course will enable you to:
➤ Understand how to implement lean in your supply chain by applying pull systems, leveled flow, and waste reduction strategies
➤ Learn how to value stream map the extended fulfillment stream
➤ Make decisions based on total cost of fulfillment and systems thinking
➤ Connect lean supply chain guiding principles to top level leadership objectives

COMPLIMENTARY BOOK: Building a Lean Fulfillment Stream: Rethinking Your Supply Chain and Logistics to Create Maximum Value at Minimum Total Cost

Lean Leadership for the Supply Chain Professional (in person or 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

This course is also available in a self-paced, online version: scl.gatech.edu/blsclonline

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

“In lean companies, business is associated with process. In traditional companies, everybody points fingers and asks who is to blame, but it is about the process and not the people. Lean thinkers are hard on process and easy on people, which shift paradigms from looking at how people failed to what happened and how the process failed.”

Developing Lean Supply Chain Problem Solvers
Robert Martichenko, CEO of LeanCor
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
- Use decision matrices to drive objective, consensus-driven vendor selections
- Understand the fundamental project management approaches and industry best practices
- Understand the legal and ethical considerations for vendor selection

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 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

For more information and to register, visit [pe.gatech.edu/scl-courses](http://pe.gatech.edu/scl-courses)
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

Now available! National Standard Certification Program for entry-level and supervisory level associates.

LINCS = LEVERAGING INTEGRATING NETWORKING COORDINATING SUPPLIES

Georgia Tech’s Supply Chain & Logistics Institute (SCL), in collaboration with a consortium of eleven other universities and colleges, has developed a new, national standard supply chain education and certification program that focuses on leveraging, integrating, networking, and coordinating supplies (LINCS). The goal of the LINCS program is to support workforce readiness and upward mobility for entry-level and supervisory level associates. An added benefit of the courses is that they provide a solid understanding of supply chain fundamentals for middle managers who may be new to certain supply chain domains. Program exams are developed by the Council of Supply Chain Management Professionals (CSCMP).

Georgia Tech integrated the content developed in the LINCS program into a set of eight new Supply Chain Fundamentals courses which align to the new certification exams.

Courses prepare students to take the CSCMP SCPROM Fundamental Certification exams— which are free through the summer of 2017.

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 corporation’s specific needs.

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

For more information and to register, visit pe.gatech.edu/scl-courses
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 is launching 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 with starting salaries of $34,000 or more. 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 with a goal of receiving an industry-recognized certification for the selected area(s).

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:

1. SUPPLY CHAIN MANAGEMENT PRINCIPLES
2. WAREHOUSE OPERATIONS
3. TRANSPORTATION OPERATIONS
4. CUSTOMER SERVICE OPERATIONS

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 in a career fair.

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

For more information and to register, visit pe.gatech.edu/scl-courses
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.
<table>
<thead>
<tr>
<th>Supply Chain Management (SCM) Certificate</th>
<th>Course Dates</th>
<th>Course Price</th>
<th>SCL &amp; GT Alumni/Org Discount**</th>
<th>Certificate Course Price***</th>
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<tbody>
<tr>
<td>Transportation and Distribution Planning*</td>
<td>May 2-4, 2017</td>
<td>$3,500</td>
<td>$3,150</td>
<td>$2,905</td>
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<tr>
<td>Inventory Planning and Management*</td>
<td>March 2-3, 2017 (Savannah, GA)</td>
<td>$1,450</td>
<td>$1,305</td>
<td>$1,203.50</td>
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<tr>
<td>Demand-Driven Supply Chain Strategy</td>
<td>August 23-26, 2016 (Savannah, GA)</td>
<td>$3,500</td>
<td>$3,150</td>
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<tr>
<td>Measuring &amp; Managing Performance in Supply Chain &amp; Logistics Operations</td>
<td>November 2-4, 2016 November 1-3, 2017</td>
<td>$3,500</td>
<td>$3,150</td>
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<tr>
<td>Introduction to International Logistics and Compliance</td>
<td>October 19-21, 2016 (Savannah, GA) October 18-20, 2017 (Savannah, GA)</td>
<td>$3,500</td>
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<tr>
<td>Defining and Implementing Effective Sourcing Strategies</td>
<td>June 21-23, 2016 (Savannah, GA) June 20-22, 2017 (Savannah, GA)</td>
<td>$1,800</td>
<td>$1,620</td>
<td>$1,494</td>
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<tr>
<td>Lean Inbound Logistics</td>
<td>February 15-16, 2017 (Savannah, GA)</td>
<td>$1,450</td>
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<td>$1,203.50</td>
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<tr>
<td>Distribution Operations Analysis &amp; Design (DOAD) Certificate</td>
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<td>Lean Warehousing*</td>
<td>September 27-29, 2016 September 26-28, 2017</td>
<td>$3,000</td>
<td>$2,700</td>
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<td>Warehouse/Distribution Center Layout*</td>
<td>October 25-27, 2016 October 24-26, 2017</td>
<td>$2,500</td>
<td>$2,250</td>
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<td>Engineering the Warehouse*</td>
<td>March 28-30, 2017</td>
<td>$3,750</td>
<td>$3,375</td>
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<td>Material Handling 101: Fundamentals, Analysis and Selection</td>
<td>March 22-23, 2017</td>
<td>$1,500</td>
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<td>Supply and Demand Planning (SDP) Certificate</td>
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<tr>
<td>World Class Sales and Operations Planning*</td>
<td>June 6-7, 2016 June 5-6, 2017</td>
<td>$1,200</td>
<td>$1,080</td>
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<tr>
<td>Integrated Business Planning* (starts at noon)</td>
<td>June 7-8, 2016 June 6-7, 2017</td>
<td>$1,200</td>
<td>$1,080</td>
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<tr>
<td>Supply Chain Risk Management*</td>
<td>June 9-10, 2016 June 8-9, 2017</td>
<td>$1,200</td>
<td>$1,080</td>
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<tr>
<td>Lean Supply Chain Professional (LSCP) Certificate</td>
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<tr>
<td>Lean Implementation for the Supply Chain Professional*</td>
<td>August 9-11, 2016 (Savannah, GA) October 25-27, 2016 LAST OFFERING</td>
<td>$3,000</td>
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<td>$2,490</td>
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<tr>
<td>Lean Leadership for the Supply Chain Professional – Online Version</td>
<td>ONLINE</td>
<td>$900</td>
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<td>Supply Chain Project Management (SCPM) Certificate</td>
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<tr>
<td>Supply Chain Project Management Fundamentals*</td>
<td>November 8-10, 2016 (Savannah, GA) May 16-18, 2017</td>
<td>$1,950</td>
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<td>Supply Chain Project Management: Vendor Selection and Management*</td>
<td>October 4-6, 2016 October 3-5, 2017</td>
<td>$1,950</td>
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<td>Supply Chain Project Management: Effectively Managing Transformation Projects*</td>
<td>February 21-23, 2017</td>
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<td>$1,755</td>
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<tr>
<td>Health and Humanitarian Supply Chain Management (HHSCM) Certificate</td>
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<tr>
<td>Pre-planning Strategy for Health &amp; Humanitarian Organizations*</td>
<td>TBD 2017</td>
<td>$2,400</td>
<td>$2,160</td>
<td>$1,992</td>
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<tr>
<td>Tactical Decision Making in Public Health and Humanitarian Response*</td>
<td>TBD 2017</td>
<td>$2,400</td>
<td>$2,160</td>
<td>$1,992</td>
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<tr>
<td>Systems Operations in Health and Humanitarian Response*</td>
<td>TBD 2017</td>
<td>$2,400</td>
<td>$2,160</td>
<td>$1,992</td>
</tr>
</tbody>
</table>

*Course required for certificate. **See course pages for discount information. ***To receive the “Certificate Course Price” for each course, you must prepay in one payment for all courses that you would like to take to earn the certificate.

Supply Chain Fundamentals ONLINE and HYBRID courses (SCF Series): For a complete listing visit scl.gatech.edu/fundamentals
## Supply Chain Management (SCM) Certificate

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.

Must take a total of four courses to earn the SCM Certificate. Participants must take either Transportation & Distribution Planning OR Inventory Planning & Management. Participants may choose remaining courses from SCM, or any two courses from the DOAD, SDP, LSCP, SCPM or SCF certificate series.

## Distribution Operations Analysis and Design (DOAD) Certificate

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.

Take four courses within four years to receive your Distribution Operations Analysis and Design Certificate. Required DOAD courses include: Engineering the Warehouse; Lean Warehousing; & Warehousing/Distribution Center Layout. Participants may choose Material Handling 101 or one course in the SCM, SDP, LSCP, SCPM, SCF series for their elective.

## Supply and Demand Planning (SDP) Certificate

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.

Take all four courses within four years to receive your Supply and Demand Planning Certificate. Required SDP courses include: World Class Sales and Operations Planning, Integrated Business Planning, and Supply Chain Risk Management. Participants may choose one of the following as their elective: Inventory Planning & Management; Demand-Driven Supply Chain Strategy; Defining and Implementing Effective Sourcing Strategies; Measuring and Managing Performance in Supply Chain and Logistics Operations; any SCF courses; or any LSCP courses.

## Lean Supply Chain Professional (LSCP) Certificate*

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. Participants have 4 years to complete the 3 course sequence; however, most participants choose to complete the program over a three-month period, meeting three days per month and complete application projects between courses to leverage their understanding of learned concepts.

Take all three LSCP courses within three years to receive your Lean Supply Chain Professional Certificate.

*Please note that the LSCP certificate will be offered for the last time this year, 2016. The certificate will no longer be offered in 2017.

## Supply Chain Project Management (SCPM) Certificate

Individuals who can manage complex supply chain projects & 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.

Take all four courses within four years to receive your Supply Chain Project Management Certificate. Required courses are SCPM Fundamentals, SCPM: Vendor Selection & Mgt, and SCPM: Effectively Managing Transformation Projects. Participants may choose any one course in the SCM, DOAD, LSCP, SCF or SDP series for their elective.

## Health and Humanitarian Supply Chain Management (HHSCM) Certificate

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.

Take all three HHSCM courses within three years to receive your Health and Humanitarian Supply Chain Management Certificate.