

Supply Chain Management (SCMT)

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Degrees Conferred:

M.S. in Supply Chain Management
Ph.D. in Business Administration (BADM)

Program Descriptions: The Master of Supply Chain Management is designed for early-career supply chain professionals who want to return to school to receive advanced, specialized training in supply chain management. The degree is grounded in an understanding of the increasing complexity and breadth of the supply chain discipline, and within this context students will apply statistics, statistical modeling, forecasting techniques, operations research techniques, optimization, mathematical techniques, stochastic approaches, operations analysis, and the design and testing of evaluation models. Effective supply chain management also necessitates cross-functional expertise. Thus, students will choose to specialize in concentrations to complement their supply chain courses, such as Business Analytics, Enterprise Resource Planning, Retail Supply Chain Management, Blockchain Enterprise Systems or Demand-Driven Value Networks.

The Ph.D. Program in Business Administration with an area of study in Supply Chain Management prepares individuals for academic careers in research, teaching and service at universities. The program imparts knowledge of the theoretical and substantive areas of supply chain management, as well as of conceptual skills and methodological tools, and prepares students to conduct independent research.

Requirements for M.S. in Supply Chain Management

Admission Requirements: Students must apply to and meet the admission requirements (<http://catalog.uark.edu/graduatemscatalog/business/>) of the Graduate School of Business and be admitted by the departmental admissions committee.

Academic Standing and Dismissal: Please see the [Graduate School of Business policy](#) for more information.

Additional Degree Requirements: In addition to 30 hours of required coursework, students must take a comprehensive exam. The

comprehensive exam will take the form of the final project in SCMT 57103 MAKE: Achieving Operational Excellence. An individual's grade of B or above in the project will be considered a pass on the comprehensive exam.

Supply Chain Management Core Courses (21 hours)

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|---|--|-----------|
| SCMT 56303 | Foundations for New Product Launch and Integrated Demand-Driven Value Networks | 3 |
| SCMT 56603 | PLAN: Demand Planning and Inventory Operations | 3 |
| SCMT 56803 | SOURCE: Global Procurement and Supply Management | 3 |
| SCMT 56903 | Supply Chain Performance Management and Analytics | 3 |
| SCMT 57303 | Supply Chain Strategy, Governance and Change Management | 3 |
| SCMT 57203 | DELIVER: Customer Service and Distribution Management | 3 |
| SCMT 57103 | MAKE: Achieving Operational Excellence | 3 |
| Choose 9 hours of approved business electives ¹ | | 9 |
| Total Hours | | 30 |

¹ Electives are chosen by the student in consultation with the Supply Chain Management M.S. Program Director. Approved electives (9 hours) may be any graduate course approved by the Supply Chain Management M.S. Program Director.

(Part Time Program): The Walton College also provides an opportunity for professionals in the workplace to complete the program by taking 6 hours per semester in a five-semester program format. Students must obtain approval from the Supply Chain Management M.S. Program Director to enroll in more than six hours per semester.

Ph.D. in Business Administration (Supply Chain Management)

Admission Requirements: Students must apply to the Graduate School of Business (GSB) and meet the requirements (<http://catalog.uark.edu/graduatemscatalog/business/>) of both the Graduate School and the Graduate School of Business. Students must be admitted by the departmental admissions committee.

Program Requirements: The Ph.D. program is composed of 70 credit hours. Up to 3 credit hours of prior coursework may be applied to the requirements for the Business Administration (Supply Chain Management) field of study with the recommendation and consent of the student's Ph.D. Program Advisory Committee.

Required Courses

| | | |
|---|---|----|
| SCMT 6010V | Graduate Colloquium | 12 |
| Students will enroll in the departmental doctoral colloquium (SCMT 6010V) each semester. In addition, students will be expected to complete two summer research papers during the first and second summer term. | | |
| BUSI 61101 | Seminar in Business Administration Teaching I | 1 |
| Select five courses from the following: | | 15 |
| SCMT 64303 | Supply Chain Management Research | |
| SCMT 64403 | Theory in Supply Chain Management | |
| SCMT 64503 | Behavioral Supply Chain Management | |
| SCMT 64703 | Emerging Topics in Supply Chain Management | |

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|---|--|-----------|
| SCMT 64803 | Supply Chain Economics | |
| SCMT 65103 | Contemporary Research in Service Supply Chain Management | |
| SCMT 65203 | Theory-Driven Archival Supply Chain Management Research | |
| Supporting Fields | | 9 |
| Research Requirements | | 15 |
| Select five courses from the following: | | |
| ISYS 57203 | Advanced Multivariate Analysis | |
| ECON 66103 | Econometrics I | |
| ECON 66203 | Econometrics II | |
| ECON 66303 | Econometrics III | |
| MKTG 64303 | Seminar in Research Methods | |
| Dissertation | | |
| SCMT 7000V | Doctoral Dissertation | 18 |
| Total Hours | | 70 |

Supporting Courses

Courses for the supporting fields requirement are made in consultation with the student's Ph.D. Program Advisory Committee. All courses taken for the supporting fields must be at the graduate level and/or taken for graduate credit. A minimum of six hours should be taken in graduate research seminars.

Candidacy Exam

Students must take a candidacy examination at the end of their second year in the program. The exam will have two components: a written component that will be administered over a two-day period, and an oral exam. Successful completion of both parts of the comprehensive exam are required for admission to candidacy.

Students must complete a minimum of 72 graduate credit hours beyond the bachelor's degree and 42 graduate credit hours beyond the master's degree. Additional hours may be assessed in individual cases to meet specific coursework deficiencies.

Find a complete list of the university's Graduate School degree requirements (<http://catalog.uark.edu/graduatemanager/objectivesandregulations/>).

Graduate Faculty

Aloysius, John, Ph.D. (Temple University), B.S. (University of Colombo, Sri Lanka), Professor, Oren Harris Chair in Logistics, 1995, 2017.

Dobrzykowski, David, Ph.D., M.B.A., B.B.A. (University of Toledo), Associate Professor, 2019.

Fugate, Brian, Ph.D., M.B.A., B.S. (University of Tennessee), Professor, Oren Harris Chair in Transportation, 2015, 2018.

Hofer, Christian, Ph.D. (University of Maryland University College), B.A. (European School of Business), Associate Professor, 2007, 2012.

Kent, John, Ph.D. (University of Tennessee), M.B.A. (University of Dallas), B.S. (Henderson State University), Clinical Associate Professor, 2014, 2018.

Rosales, Claudia, Ph.D., M.S. (University of Cincinnati), B.S. (Universidad Rafael Landivar), Assistant Professor, 2021.

Rossiter-Hofer, Adriana, Ph.D. (University of Maryland-College Park), M.S. (Federal University of Rio de Janeiro, Brazil), B.S. (Federal University of Pernambuco, Brazil), Associate Professor, 2008, 2016.

Scott, Marc, Ph.D. (North Dakota State University), M.S., B.S. (South Carolina State University), Assistant Professor of Practice, 2016.

Shaheen, Iana, Ph.D., M.S. (University of South Florida), B.A. (National Research University Higher School of Economics, Moscow), Assistant Professor, 2020.

Thomas, Rodney W., Ph.D., M.B.A. (University of Tennessee), B.S.B.A. (Greensboro College), Associate Professor, 2017.

Thomas, Stephanie, Ph.D. (Georgia Southern University), M.B.A., B.A. (University of Tennessee), Associate Professor of Practice, 2017, 2022.

Tyler, Joel, M.B.A., B.A. (University of Arkansas), Instructor, 2019.

Van Hoek, Remko, Ph.D. (University of Utrecht), M.B.A. (London School of Economics), B.S.B.A. (Vanderbilt University), Clinical Professor, 2018.

Waller, Matthew A., Ph.D., M.S. (Pennsylvania State University), B.S. (University of Missouri–Columbia), Professor, Sam M. Walton Leadership Chair, 2002, 2007.

Williams, Brent D., Ph.D., M.S. (University of Arkansas), B.A. (Lyon College), Associate Professor, Garrison Chair in Supply Chain Management, 2011.

Williams, Donnie F., Ph.D. (Georgia Southern University), Clinical Associate Professor, 2019.

Courses

SCMT 51203. Sustainable Logistics and Supply Chain Management. 3 Hours.

Explores key sustainability concepts across supply chain functions of supply management, operations, and distribution. Course topics include values-based leadership, globalizing sustainability, marketing sustainability, voluntary product standards and governance, stakeholder engagement, reverse logistics, humanitarian logistics, and transportation. Overall, we will consider the feasibility and role of firms in producing sustainability in global supply chains. Prerequisite: Graduate Standing and Departmental Consent. (Typically offered: Irregular)

SCMT 51303. Quantitative Methods and Decision Making. 3 Hours.

Utilization of information, quantitative techniques, and computer application in decision making and problem solving for managers. Prerequisite: Graduate Standing and Departmental Consent. (Typically offered: Fall)

SCMT 51403. Leveraging Supply Chain Value. 3 Hours.

This course is designed to align traditional supply chain management and supply chain finance. This course focuses on connecting supply chain strategy, tactics and structure with profitability and value creation. This course will explore the impact of service / constraints, costs, capital and cash flows on the supply chain value proposition. Content includes capital budgeting and investment, ROI, cost optimization and working capital management from a supply chain perspective. Real-life supply chain cases will be used throughout the course. Prerequisite: Graduate standing and department consent. (Typically offered: Summer)

SCMT 5600V. Special Topics in Logistics. 1-6 Hour.

Explores current events, concepts, and new developments in the field of logistics and transportation. Topics are selected by the Marketing and Transportation faculty for each semester the course is offered. Prerequisite: Graduate Standing and Departmental Consent. (Typically offered: Irregular) May be repeated for up to 6 hours of degree credit.

SCMT 56103. Supply Chain Risk, Disruption, and Resilience. 3 Hours.

This course explores the area of Business Continuity and Risk Management in a comprehensive manner to provide for organizational resilience. Particular emphasis is placed on assessing threats which may lead to disastrous events, evaluating control alternatives and implementing strategies. Practical solutions to enable an organization to mitigate risk, manage crisis and recover after a disaster are discussed. Prerequisite: Graduate standing and department consent. (Typically offered: Fall)

SCMT 56203. Technology-enabled Supply Chain Design and Optimization. 3 Hours.

This course focuses on supply chain network design and the underlying strategies needed to manage a supply chain as business conditions change and evolve. The purpose of this course is to provide the student with design thinking skills that they can employ to design solutions that optimize supply chain performance considering costs, constraints and structure. The course is a combination of lecture and supply chain optimization case studies (network, transportation and inventory). Prerequisite: Graduate Standing. (Typically offered: Fall and Spring)

SCMT 56303. Foundations for New Product Launch and Integrated Demand-Driven Value Networks. 3 Hours.

Supply chain management is the integration of key business processes from end user through suppliers. The focus of this course is on the business fundamentals and core processes that must be linked throughout the supply chain in order to ensure the effective development and delivery of products and services that satisfy customers. Prerequisite: Graduate Standing and Department Consent. (Typically offered: Fall and Spring)

SCMT 56603. PLAN: Demand Planning and Inventory Operations. 3 Hours.

This course focuses on 'plan' in the plan, source, make, deliver framework. It examines the integrated planning and management of supply chain activities including, notably, demand forecasting and replenishment. In addition to modeling related decisions both in within-firm and supply chain contexts, strategic issues related to interfirm coordination and collaboration will be discussed. Prerequisite: Graduate Standing and Department Consent. (Typically offered: Fall and Spring)

SCMT 56803. SOURCE: Global Procurement and Supply Management. 3 Hours.

In the global supply chain sourcing and procurement plays a critical role in ensuring supply, growing margins and contributing to reliable delivery to customers. This course covers the core sourcing and procurement processes of strategic sourcing, supplier relationship management and takes a leadership approach to those covering topics such as change management and business alignment issues involved. Prerequisite: Graduate Standing and Departmental Consent. (Typically offered: Spring)

SCMT 56903. Supply Chain Performance Management and Analytics. 3 Hours.

This course will survey standard and advanced analytical techniques used to transform data into actionable business intelligence and students will gain hands-on experience with these techniques. They will gain an understanding of the practical considerations that arise in real-world applications by means of a term project. They will gain exposure to data science software capable of advanced predictive analytics and also through cases, expose them to innovative ways in which firms are using analytics to improve supply chain management processes. Prerequisite: Graduate Standing and Department Consent. (Typically offered: Fall)

SCMT 57103. MAKE: Achieving Operational Excellence. 3 Hours.

This course focuses on understanding the key processes involved in providing valuable products and services for customers as well as important approaches to continuously improving these processes. Learners will leave this course with skills necessary to continuously improve the key manufacturing and service processes involved in providing valuable products and services to customers, as well as the project management competencies necessary to embedded new, innovative capabilities in their supply chains. Prerequisite: Graduate Standing and Departmental Consent. (Typically offered: Fall and Spring)

SCMT 57203. DELIVER: Customer Service and Distribution Management. 3 Hours.

This course is designed to provide students with a broad understanding of the customer service and delivery processes needed to drive demand-driven value networks. The emphasis of this course will focus on systemic alignment across the functional capabilities of customer fulfillment service quality, transportation, distribution and return capabilities across the supply chain, with a specific emphasis on governance, performance management and the integration of advanced technologies. Prerequisite: Graduate Standing and Departmental Consent. (Typically offered: Fall and Spring)

SCMT 57303. Supply Chain Strategy, Governance and Change Management. 3 Hours.

Evaluate and select appropriate supply chain strategies, change management approaches, and governance structures for business situations. This course leverages plan, source, make, deliver, customer service, and new product development capabilities to meet strategic and financial goals in demand-driven value networks. Prerequisite: Graduate Standing and Departmental Consent. (Typically offered: Fall and Spring)

SCMT 6010V. Graduate Colloquium. 1-6 Hour.

This course familiarizes students with academic and professional issues in the discipline of supply chain management with exposure to current research and contemporary research practices, current industry trends, the publication process, professional service opportunities, and pedagogical issues. Prerequisite: Admission to the PhD program in Supply Chain Management. (Typically offered: Fall and Spring) May be repeated for up to 12 hours of degree credit.

SCMT 6360V. Special Topics in Supply Chain Management. 1-6 Hour.

Independent reading and investigation in supply chain management. Prerequisite: Doctoral standing. (Typically offered: Fall, Spring and Summer)

SCMT 64303. Supply Chain Management Research. 3 Hours.

Introduces students to major streams of SCM research and discusses the interest and merit of the research question(s), the appropriateness of the theoretical framework and/or hypothesis development, the adequacy of the research design, including data collection, measurement, and analysis (methodology), the accuracy of the discussion of the results. Prerequisite: Admission to doctoral program. (Typically offered: Irregular) May be repeated for up to 6 hours of degree credit.

SCMT 64403. Theory in Supply Chain Management. 3 Hours.

Provides an overview of theories from fields such as strategic management and marketing and explores applications of these theories to supply chain management research. Emphasis is placed on the development of theoretically grounded testable hypotheses in the context of a broad range of SCM research areas. Prerequisite: Admission to doctoral program. (Typically offered: Irregular)

SCMT 64503. Behavioral Supply Chain Management. 3 Hours.

Focuses on human behavior in supply chain management. Topics may include but will not be restricted to behavior in inventory and ordering processes, in retail store execution, in global supply chain management, in the face of adversity and catastrophic supply chain risk, and in supply chain relationships. Prerequisite: Admission to doctoral program. (Typically offered: Irregular) May be repeated for up to 6 hours of degree credit.

SCMT 64703. Emerging Topics in Supply Chain Management. 3 Hours.

Covers various emerging topics, such as information technology applications in the supply chain, humanitarian logistics, supply chain security, and individual-level decision-making in the supply chain. Prerequisite: Admission to doctoral program. (Typically offered: Irregular) May be repeated for up to 6 hours of degree credit.

SCMT 64803. Supply Chain Economics. 3 Hours.

This course familiarizes students with economic concepts and philosophies underlying the organization of economic activity in the discipline of supply chain management. Enables students to evaluate, critique, and judge the quality of scholarly supply chain research that is grounded on economic principles and ideas. Provides training in developing supply chain research grounded in economic principles and ideas into an academic paper. Prerequisite: Admission to PhD program in Supply Chain Management. (Typically offered: Fall and Spring)

SCMT 65103. Contemporary Research in Service Supply Chain Management. 3 Hours.

This seminar is designed for doctoral students interested in carrying out research on topics related to Service Supply Chain Management (SSCM). Therefore the course will cover recent and classic literature in the service management, operations management, and supply chain management domains. The seminar is organized as a discussion forum for conceptualization, design and execution of research on these topics. Prerequisite: Instructor Consent. (Typically offered: Irregular)

SCMT 65203. Theory-Driven Archival Supply Chain Management Research. 3 Hours.

The purpose of this seminar is to learn how to work with and analyze archival data in a manner that is consistent with theory and meets the rising standards and expectations of leading empirical SCM and OM journals. Particular attention will be paid to issues such as data collection, sampling, measurement, econometric issues, estimation methods, the presentation/interpretation of the results, and the assessment of the sensitivity of the results. Students will gain "hands-on" experience collecting, manipulating and analyzing large data sets. Prerequisite: Instructor Consent. (Typically offered: Irregular)

SCMT 7000V. Doctoral Dissertation. 1-18 Hour.

Dissertation studies in supply chain management. Prerequisite: Candidacy. (Typically offered: Fall, Spring and Summer) May be repeated for degree credit.