

October 9, 2020

Dr. Michael Baumgartner
Executive Director
Coordinating Commission for
Postsecondary Education
140 N. 8th Street, Suite 300
Lincoln, NE 68509

Dear Michael:

Enclosed is a copy of the proposal to create a Master of Science in Supply Chain Management in the Department of Supply Chain Management and Analytics in the College of Business at UNL. The proposal was approved by the Board of Regents at the October 8, 2020 meeting. Also enclosed is the Proposal for New Instructional Program Form 92-40.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Susan M. Fritz, PhD

Executive Vice President and Provost

Enclosures

c: Chancellor Ronnie Green

Executive Vice Chancellor Elizabeth Spiller Dean Kathleen Farrell, College of Business

Vice Provost David Jackson

COORDINATING COMMISSION FOR POSTSECONDARY EDUCATION

140 N. 8th Street, Suite 300 Lincoln, NE 68508

Telephone: (402) 471-2847 FAX: (402) 471-2886

PROPOSAL FOR NEW INSTRUCTIONAL PROGRAM

Form 92-40

SECTION I

Institution Submitting Proposal:	University of Nebraska-Lincoln
Title of Program:	Supply Chain Management
CIP Code:	<u>52.02</u>
Organizational Unit in which program will b	pe located:
Department of College of Bu	f Supply Chain Management and Analytics siness
Name of contact person in the event addition	nal information is needed: <u>Dr. Susan M. Fritz</u>
Telephone: <u>402-472-5242</u>	
Degree, Diploma, or Certificate to be offere	d (use separate submittal for each level):
Master of Scientific Master of	ence in Supply Chain Management
Proposed date to initiate program: When	approved by the Coordinating Commission
List the location(s) where this program will	be offered: <u>UNL</u>
If the program has a projected ending date, I	please so indicate:
Date approved by Governing Board: (Attach <u>all</u> documents related to this proposal upproposal.)	October 8, 2020 oon which the Governing Board made its decision to approve the
Chief Executive Officer's or other Authoriza	ed Officer's signature: Musika M. Huh

TO: The Board of Regents Addendum XI-A-3

Academic Affairs

MEETING DATE: October 8, 2020

SUBJECT: Creation of a Master of Science (MS) in Supply Chain Management in

the Department of Supply Chain Management and Analytics in the College of Business at the University of Nebraska-Lincoln (UNL)

RECOMMENDED ACTION: Approval to create a Master of Science in Supply Chain Management in

the Department of Supply Chain Management and Analytics in the

College of Business at UNL

PREVIOUS ACTION: June 26, 2020 – The Graduate Certificate in Supply Chain Analytics in

the Department of Supply Chain Management and Analytics in the College of Business at UNL was given expedited approval by President

Carter and reported to the Board.

January 29, 2016 – The Board approved the establishment of the Department of Supply Chain Management and Analytics in the College

of Business Administration at UNL.

November 14, 2013 – The Graduate Certificate in Business Analytics administered through Graduate Interdepartmental Business, Marketing, Management, and Economics, and the Graduate Certificate in Supply Chain Management in the Department of Management in the College of Business Administration at UNL were given expedited approval by

President Milliken and reported to the Board.

March 2, 2012 – The Board approved the creation of an undergraduate major, Supply Chain Management, for the Bachelor of Science in

Business Administration at UNL.

EXPLANATION: The proposed online, 30-credit hour MS in Supply Chain Management

program is designed to train students in the concepts and tools associated with supply chain management. Instruction will include key aspects of supply chain management, including logistics, production planning and

control, sourcing and procurement, lean management, project

management, and supply chain software systems and technologies. The curriculum also will cover the statistical methods and decision-making models used to analyze and improve supply chain systems. Graduates of the program will be prepared to take positions in a wide variety of fields related to supply chain management, such as manufacturing, logistics,

transportation, sourcing, and operations consulting.

This proposal has been approved by the Council of Academic Officers and the Executive Graduate Council. This proposal also has been

reviewed by the Academic Affairs Committee.

PROGRAM COST: \$0 (No new faculty/staff resources will be required.)

SOURCE OF FUNDS: Not applicable

SPONSORS: Elizabeth Spiller

Elizabeth Spiller Executive Vice Chancellor and Chief Academic Officer

Ronnie D. Green, Chancellor University of Nebraska-Lincoln

RECOMMENDED: /s/ Susan M. Fritz

/s/ Susan M. Fritz
Executive Vice President and Provost

DATE: September 4, 2020



April 22, 2020

Susan Fritz, Executive Vice President and Provost University of Nebraska 3835 Holdrege Street Lincoln, NE 68583-0743

Dear Susan,

I am forwarding materials relating to a proposal from the College of Business to establish a new Master of Science in Supply Chain Management to be administered by the Department of Supply Chain Management and Analytics. The courses are already established, there are adequate existing resources, and a sufficient number of qualified faculty are available to support the program.

This proposal has been endorsed by the Academic Planning Committee and it has my approval. I am requesting your review and approval, and that it be reported to the Board of Regents at an upcoming meeting.

Sincerely,

Ronnie D. Green, Ph.D.

Chancellor

c: Jennifer Clarke, Chair, Academic Planning Committee
Elizabeth Spiller, Executive Vice Chancellor, Academic Affairs
Kathy Farrell, Dean, College of Business
Tim Carr, Dean, Graduate Studies
Jennifer Ryan, Chair, Department of Supply Chain Management and Analytics
Mike Zeleny, Associate to the Chancellor and APC Secretary
Renee Batman, Assistant Vice Chancellor, Academic Affairs
Suzi Tamerius, Project Coordinator, Academic Affairs
Karen Griffin, Coordinator of Faculty Governance



University of Nebraska-Lincoln New Graduate Major or Degree

I. Descriptive Information

Name of Institution Proposing New Major or Degree
University of Nebraska-Lincoln
Name of Proposed Major or Degree
Supply Chain Management
Degree to be Awarded to Graduates of the Major
Master of Science (MS)
Other Majors or Degrees Offered in this Field by Institution
Graduate certificate in supply chain management Undergraduate major and minor in supply chain management
CIP Code [IEA can help with CIP codes or browse here: http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55]
52.02 (Business Administration, Management and Operations)
Subject Code
SCMA
Administrative Units for the Major or Degree
Department of Supply Chain Management and Analytics (SCMA)
Proposed Delivery Site
University of Nebraska-Lincoln (entirely online program)
Program will be Offered [full program, not individual courses]
On-campus onlyX Distance only Both (on-campus and distance)
Date Approved by the Governing Board
[leave blank]
Proposed Date the New Major or Degree will be Initiated
Fall 2020

II. Details

A. Purpose of the Proposed Major or Degree:

The proposed MS in Supply Chain Management program will train students in the concepts and tools associated with supply chain management. Instruction will include key aspects of supply chain management, including logistics, production planning and control, sourcing and procurement, lean management, project management, and supply chain software systems and technologies. Instruction will also cover the statistical and analytical methods used in supply chain management, including forecasting and data mining, as well as the decision-making models that can be applied to design, analyze and improve supply chain systems, such as optimization and simulation. Thus, graduates of the proposed program will be prepared to take positions in a wide variety of fields related to supply chain management, such as manufacturing, logistics, transportation, sourcing, and operations consulting.

B. Description of the Proposed Major or Degree:

Describe the structure and objectives of the program:

The curriculum for the proposed MS in Supply Chain Management follows the design used for the successful MS in Business Analytics offered by the College of Business at the University of Nebraska-Lincoln, i.e., it combines a subset of the business core fundamentals courses used for the Master of Business Administration (MBA) program with a set of specialized supply chain management courses, and allows students the flexibility to tailor the program to suit their needs and interests through a set of approved electives. The program will consist of 30 credit hours (10 courses) and will be taught entirely online in eight week terms, following the model used by the MBA program and MS in Business Analytics.

The proposed program curriculum is shown in the following table.

Curriculum for Proposed MS in Supply Chain Management								
Business Core Fundamentals	Supply Chain Required Courses	Supply Chain Electives						
(4 courses)	(3 courses)	(3 courses)						
Two required courses: GRBA815: Supply Chain Management Strategies GRBA851: Business Analytics Plus any two of the following: GRBA809: Financial Accounting GRBA811: Managerial Finance GRBA812: Managerial Economics GRBA813: Managerial Marketing	SCMA832: Supply Chain Planning and Control Systems SCMA844: Supply Chain Logistics SCMA839: Global Supply Chain Management*	SCMA831: Enterprise Systems SCMA834: Advanced Topics in Lean SCMA836: Project Management SCMA847: Advanced Supply Chain Technology SCMA837: Risk and Simulation Modeling** SCMA851: Predictive Analytics** SCMA853: Business Data Mining and Descriptive Analytics** SCMA855: Prescriptive Analytics** SCMA857: Prescriptive Analytics** SCMA857: Prescriptive Analytics**						
		Chains (potential future elective) SCMA896: Special Topics in Supply Chain Management (potential future elective)						
	*This course serves as capstone							
	and should be completed at end	**Students may take at most two						
	of the program of study.	analytics courses						

As shown in the table, the proposed MS program consists of three components:

- Business core fundamentals: These four courses provide training in basic business concepts that are fundamental to supply chain management. Two of these courses (GRBA815: Supply Chain Management Strategies and GRBA851: Business Analytics) are required, while the remaining two can be chosen from an approved list of four courses, including introductory courses in accounting, finance, economics, and marketing. GRBA815 and GRBA851 are required in order to provide all students with a solid introduction to both supply chain management and business analytics, i.e., the quantitative tools that are critical to many aspects of supply chain management. All of these business core fundamentals courses are part of the MBA program, and thus already exist and are taught several times per year. Students will be encouraged and advised to take the business core fundamentals courses early in their program of study to provide a solid foundation for their supply chain management courses. Further, GRBA815 is a prerequisite for all of the supply chain management courses included in the program. Thus, it must be taken very early in the student's program of study.
- Required supply chain courses: These three required courses cover the foundations of supply chain management, including production planning and control, logistics, and global supply chain management. The capstone course (SCMA839) is included in this set of required courses and will be taken at or near the end of the student's program of study. Two of the required supply chain courses, SCMA844 and SCMA832, will be prerequisites to SCMA839, which will help to ensure this sequencing. The capstone course will be designed to include a major project, case study and/or simulation that will tie together all of the student's coursework. All of these required courses are currently taught as part of the graduate certificate in supply chain management and the supply chain management specialization within the MBA program.
- Elective supply chain courses: Students will be able to choose three electives from a list eight existing courses. Four of these eight existing courses are in the business analytics area and students are limited to two analytics courses. These analytics courses are currently offered as part of the MS in Business Analytics. The remaining four existing electives cover a variety of specialized topics in supply chain management, such as ERP systems, project management and lean management. These specialized supply chain management courses are currently taught as part of the graduate certificate in supply chain management and the supply chain management specialization within the MBA program. In addition, to provide additional courses to students in areas of importance to the State of Nebraska and industry, two new elective courses will be developed in the long term, when justified by enrollments. These new courses include SCMA8XX: Transportation in Supply Chains, as well as SCMA896: Special Topics in Supply Chain Management. The latter course will cover a rotating set of special topics, focusing on issues of current relevance such as sustainable and responsible supply chains, building resilient supply chains, and service supply chains.

In summary, the focus of the coursework is on developing a foundational understanding of core functional areas of supply chain management, as well as an understanding of analytical and statistical techniques applied in supply chain management. The program allows students to choose two elective courses, which will enable them to customize the program to suit their career needs, interests, and personal goals.

<u>Describe the plans to regularly review and revise the program to reflect new developments in the discipline.</u>

The Supply Chain Management and Analytics (SCMA) Department has an industrial advisory board that meets twice per year (once in the fall semester and once in the spring semester) to provide regular input regarding the department's programs and courses in the field of supply chain management and analytics. The department has consulted with that board in the development of the curriculum for the MS in Supply Chain Management, including the required and elective course work and the learning outcomes (see below). The department will continue to consult regularly with the advisory board to maintain up-to-date course content and learning outcomes. The MS in Supply Chain Management will also submit to regular program reviews by the Association to Advance Collegiate Schools of Business (AACSB), the College of Business' accrediting body.

The primary student learning outcomes of the proposed major or degree.

The learning outcomes for the proposed MS in Supply Chain Management are as follows:

- Graduates will understand the strategic importance of operations and supply chain management to various types of organizations, and will understand the relationship between operations and supply chain management and the other functional areas of an organization.
- 2. Graduates will demonstrate a high-level knowledge of supply chain management concepts, including logistics, inventory, and transportation; sourcing, procurement, and supplier relationships; and planning and control of production systems.
- 3. Graduates will be able apply supply chain theories, concepts, and practices to address complex supply chain problems in a competitive and dynamic global environment.
- 4. Graduates will be able to apply and interpret statistical and data analysis techniques in supply chain settings, and will be able to build and interpret quantitative models of supply chain systems to support decision-making.

Admission criteria and selection procedures for students seeking admission to the major or degree.

Admission requirements for the MS in Supply Chain Management will be the similar to those used for the University of Nebraska-Lincoln's MBA and the MS in Business Analytics programs. Specifically, students seeking admission to the MS in Supply Chain Management will be reviewed by a faculty committee based on:

- Personal statement
- Professional resume
- Undergraduate GPA
- Undergraduate transcripts
- Three references
- GMAT or GRE scores

A GMAT score of 600 will be recommended. Alternatively, a comparable GRE score will be considered. GMAT and/or GRE scores must be from the last five years. Applicants who already hold an advanced degree will not be required to submit a GMAT or GRE score.

We will review applicants holistically, but we will recommend that students have completed a bachelor's degree with a GPA of 3.0 or higher. We also recommend that entering students have three or more years of work experience. Students with less than a 3.0 GPA, or without GMAT or GRE scores, but who have significant work experience (five or more years of professional experience) will be considered for the program.

Once students are admitted to the MS in Supply Chain Management program, they will be required to maintain a cumulative college GPA of 3.0/4.0 scale, along with grades of C or better in the program courses, to remain in good standing in the College of Business program.

<u>Include strategies designed to enhance the recruitment, retention, and success of students from diverse backgrounds.</u>

In general, the key program features that will help to attract and retain a diverse population of students are the accessibility of the curriculum, the flexibility of the program design, and the ability of students to enroll in the program from any region of the US and from any country.

The College of Business recruits graduate students by using traditional marketing channels supported by the UNL Academic Services and Enrollment Management (ASEM) staff and technologies, as well as engaging a third-party service provider to implement targeted digital marketing strategies. The digital strategies target specific populations working in relevant industries and displays ads to interested persons based on their personal work and education preferences. In addition, the College of Business Graduate Programs Office employs a full-time staff dedicated to the recruitment of business graduate students.

Further, the University of Nebraska-Lincoln and the College of Business have a number of programs to assist in student retention and success. Below we briefly highlight some of those programs.

- University of Nebraska-Lincoln Writing Center (see https://www.unl.edu/writing/) This program offers assistance to students in preparing professional and well-written documents.
- Business Career Center This center offers career advice and placement assistance to students in the College's graduate programs, including a dedicated Graduate Career Coach on staff.
- The University of Nebraska-Lincoln library offers a variety of services that will be available to students in the MS in Supply Chain Management program, including
 - Consultation with a Subject Librarian by phone, email, Skype, in-person, etc.
 - Virtual reference assistance through AskUs
 - Remote (off-campus) access to electronic resources such as Business Source Complete, JSTOR and Nexis Uni (journals, databases, e-books, etc.)
 - Citation and plagiarism tools, such as RefWorks and Turnitin
 - Access to free business publications, including Barron's and the New York Times
- The University of Nebraska-Lincoln Information Technology Services offers free or discounted software and storage, including Box storage, Grammarly, Adobe Creative, Microsoft Azure, Symantec antivirus (see https://its.unl.edu/services/).

The College of Business and the University of Nebraska-Lincoln also offer a number of programs, initiatives accommodations designed to recruit and retain students in the military. These include the following:

- Waiving the graduate program application fee
- Offering a 15% discount for online graduate business courses
- Access to a Veteran's Affairs specialist on campus to assist with veteran benefits
- Access to the Military and Veteran Success Center on the University of Nebraska-Lincoln campus
- Programs that are approved for military tuition assistance programs
- Programs that provide needed flexibility, e.g., students are not required to take courses every term
- Professors who are willing to work with active-duty students who are deployed midsemester to develop a plan to complete their coursework

Finally, a number of additional accommodations are available to ensure student success, including the following:

- Professors who are willing to work with students who have personal tragedies or students who have been affected by natural disasters to make a plan to complete their coursework
- The Office of Services for Students with Disabilities will assist with accommodations needed for learning (see https://www.unl.edu/ssd/home)

Identify new courses that will be needed to implement the program.

The proposed program does not require the development of any new courses, i.e., the SCMA Department and College of Business currently offer sufficient courses for students to complete the proposed MS program, while still providing students with a choice of elective courses. The program design leverages courses that are already offered as part of the MBA program, the MS in Business Analytics, and the Graduate Certificate in Supply Chain Management, all of which are currently offered through the College of Business at the University of Nebraska-Lincoln. However, to provide additional courses in areas of importance to the State of Nebraska and industry, in the long term (when justified by enrollments), two new elective courses will be developed: SCMA8XX: Transportation in Supply Chains and SCMA896: Special Topics in Supply Chain Management.

<u>Identify any collaborative agreements with other postsecondary institutions to expand the</u> curriculum, if applicable.

Not applicable.

The credit hour and course requirements, program of study, research and other academic requirements for students enrolled in the major or degree program.

The proposed MS in Supply Chain Management consists of 30 credit hours and is capable of being completed in one year. Following the model of the MBA program and MS in Business Analytics, the courses in the program will be offered completely online in five eight-week sessions per year. The program is designed with a capstone course (SCMA839) that will serve as the comprehensive exam and which will be taken at or near the end of the student's program of study. The capstone course will include a major project, simulation or case study that will tie together all of the program coursework.

The proposed program will leverage existing courses used for the MBA program, the MS in Business Analytics and the Graduate Certificate in Supply Chain Management. The table below lists the required and elective courses, along with credit hour information.

Course Number	# Credit Hours
GRBA815: Supply Chain Management Strategies	3 credit hours (required)
GRBA851: Business Analytics	3 credit hours (required)
Choose any two of the following:	6 credit hours
GRBA809: Financial Accounting	
GRBA811: Managerial Finance	
GRBA812: Managerial Economics	
GRBA813: Managerial Marketing	
SCMA832: Supply Chain Planning and Control Systems	3 credit hours (required)
SCMA844: Supply Chain Logistics	3 credit hours (required)
SCMA839: Global Supply Chain Management	3 credit hours (required)
Choose three courses from the following:	9 credit hours
SCMA831: Enterprise Systems	
SCMA834: Advanced Topics in Lean	
SCMA836: Project Management	
 SCMA847: Advanced Supply Chain Technology 	
 SCMA837, SCMA851, SCMA853 or SCMA855 (note: at most two of these courses may be selected) 	
 SCMA8XX: Transportation in Supply Chains 	
 SCMA896: Special Topics in Supply Chain Management 	
Note: SCMA8XX and SCMA896 are new courses to be developed in the long term as justified by enrollments	
Total	30 credit hours

A tentative schedule of offering for the most relevant existing courses for 2020-21 academic year:

Course	Fall-A	Fall-B	Spring-A	Spring-B	Summer
GRBA815	Χ	Χ	X	Х	X
GRBA851	Χ	Χ	X	Х	X
SCMA831					
SCMA832	Χ				
SCMA834					X
SCMA836	Χ				
SCMA837			X		
SCMA839			X		
SCMA844				X	
SCMA847	Χ	Χ			
SCMA851		Χ		Х	
SCMA853		Х		X	
SCMA855	Χ		_		

In addition, the GRBA business core fundamentals courses are currently offered four times per year.

How and when advisors are assigned for students in the major or degree.

Once admitted into the program, faculty advisors from the major, along with the Director of the MS in Supply Chain Management program (a faculty member from the Department of Supply Chain Management and Analytics), will be assigned to help guide students through their degree program and to mentor them as they consider employment opportunities. Advisors will work with the

Business Graduate Programs Office in the College of Business to review the student's plan of study and Memorandum of Courses to ensure that the student is making adequate progress towards the degree.

If applicable, national guidelines or accreditations for such programs, and how this program meets the established standards.

The College of Business is accredited by the AACSB (the Association to Advance Collegiate Schools of Business). As part of the accreditation process for the existing MBA and MS in Business Analytics programs, assurance of learning data is currently collected in several of the courses included in the MS in Supply Chain Management program, including GRBA809, GRBA811, GRBA812, GRBA813, GRBA815, GRBA851 and SCMA851. For the MS in Supply Chain Management program, similar data collection processes will be designed and implemented to collect assurance of learning data to assess achievement of the program's learning outcomes.

<u>Identify any partnership agreements that will enhance the quality of the program or provide</u> educational or practical experiences for the students.

Not applicable.

<u>Impact on Course Subject Codes; will any subject codes need to be created, modified, or deleted in</u> relation to the creation of this program?

No impact on course subject codes.

III. Review Criteria

A. Centrality to UNL Role and Mission

The proposed degree program is consistent with expectations of the business community, the plans of the College of Business, and the strategic plan of UNL. In particular, the proposed program will offer an academic degree with promising, high salary employment opportunities for students upon graduation. It will develop needed skills and expertise in manufacturing, logistics, transportation, procurement, project management, and related fields, to support the Nebraska business community. It will use a well-planned and efficiently-delivered curriculum, designed in consultation with the Department of Supply Chain Management and Analytics' industrial advisory board, to provide students with expertise and experience in the theories and tools most needed by supply chain management professionals. By doing so, it will address the growing need of local industry for employees trained in those theories and tools.

Further, the proposed program will contribute directly to the following aim from the N2025 Strategic Plan (https://www.unl.edu/chancellor/n2025-draft-report):

Innovate student experiences that prepare graduates for life-long learning and contributing to Nebraska's diverse future workforce.

Because the proposed program will be offered entirely online in flexible eight-week sessions, the intended and expected audience for the program is working professionals who are seeking to expand and enhance their knowledge of business fundamentals and supply chain management theory and practice, with the goal of pursuing, or advancing in, a career in supply chain management, and other closely related fields. As discussed below, supply chain management is critical to major industries in the state of Nebraska. The proposed program will contribute to

meeting Nebraska's workforce needs by producing graduates capable of filling existing and new openings in supply chain management and related fields.

B. Relationship of the proposal to the NU Strategic Framework

The proposed MS in Supply Chain Management will contribute directly to the achievement of the goals outlined in the NU Strategic Framework (https://nebraska.edu/regents/strategic-framework). Below, we highlight two of the specific overarching goals described in this framework and discuss how the proposed MS in Supply Chain Management program will specifically contribute to achievement of those goals.

Goal 1: The University of Nebraska will provide the opportunity for Nebraskans to enjoy a better life through access to high quality, affordable undergraduate, graduate, and professional education.

As discussed in the NU Strategic Framework, achievement of this goal involves the following efforts: expanding lifelong educational opportunities, including those for non-traditional and transfer students; and expanding distance education programs, taking advantage of university-wide marketing efficiencies and campus role and mission, strengths and entrepreneurship.

As a professional graduate degree program designed specifically for working professionals, the proposed new MS in Supply Chain Management will contribute to achieving this goal. The flexible program design and online delivery mode will be attractive to working professionals and other non-traditional students, and will enable their success by allowing them to take just one course at a time and to tailor their program to suit their personal needs and interests. Further, the proposed program leverages existing coursework offered by the MBA program, MS in Business Analytics Program, and Graduate Certificate in Supply Chain Management, enabling it to be offered in an efficient and cost-effective manner.

Goal 3: The University of Nebraska will play a critical role in building a talented, competitive workforce and knowledge-based economy in Nebraska in partnership with the state, private sector, and other educational institutions.

As discussed in the NU Strategic Framework, achievement of this goal involves the following efforts: pursuing excellence in educational attainment aligned with the long-term interests of the state; developing educational programs that prepare students for the flexibility required to respond to the uncertainty of future workforce demands; and developing distance education and other educational programs that permit Nebraskans to prepare for jobs and opportunities to meet future workforce demands.

Supply chain management is a critical component of many Nebraska industries, including transportation (represented by companies such as Crete Carrier, Werner Enterprises, and Union Pacific), manufacturing (represented by companies such as Schneider Electric, Valmont Industries, and Lincoln Industries), engineering and construction (represented by companies such as Kiewit Corporation), and agribusiness and food processing (represented by companies such as ADM and Conagra Brands). Thus, the proposed program will contribute to meeting the workforce needs of many of the leading employers in the state by providing rigorous and comprehensive training in supply chain management both for individuals working in the field of supply chain management and for those looking to transition into a supply chain management career.

The proposed program will also help to prepare students to fill future workforce demands by providing education in the statistical and analytical methods used in supply chain management, in addition to education in the functional areas of supply chain management. In particular,

coursework in the program will provide training in the statistical and data analysis methods used in supply chain management (such as forecasting), as well as the optimization and simulation tools that can be applied to design, analyze and improve supply chain systems. Students in the program will learn how to apply spreadsheets to model and analyze supply chains, and will gain exposure to other commonly-used software tools, such as Microsoft Project, Crystal Ball and R, through their choice of elective courses. Thus, graduates of this program will possess the analytical and quantitative skills that will be needed in the future to adapt to changing information technologies, the increasing importance of big data, and evolving competitive environments and industry needs.

C. Consistency with the Comprehensive Statewide Plan for Post-Secondary Education

The proposed program is consistent with and meets the goals outlined in the Comprehensive Statewide Plan for Postsecondary Education by the Nebraska Coordinating Commission for Postsecondary Education (CCPE). At a high level, the CCPE would like to make certain that postsecondary education produces graduates who can contribute and succeed in a highly technical world. The proposed MS in Supply Chain Management contributes to the achievement of this goal by:

- Developing the skills, knowledge, and critical thinking abilities of graduates;
- Meeting the needs of the State of Nebraska by providing workforce development and ongoing training in the field of supply chain management;
- Contributing to the health and prosperity of the people of Nebraska by helping to address the supply chain management needs of Nebraska companies;
- Recruiting students across Nebraska and the Midwest regardless of economic status, age, culture, disability, color, national origin, or gender; and
- Meeting accountability and effectiveness goals by developing and sustaining exemplary teaching through faculty coordination with peers and firms involved in supply chain management.

In addition, one specific statewide goal highlighted in the Comprehensive Statewide Plan for Post-Secondary Education is workforce development. The plan states "Higher education in Nebraska will be responsive to the workforce development and ongoing training needs of employers and industries to help sustain a knowledgeable, trained, and skilled workforce in both rural and urban areas of the state." As noted above, and discussed further in the next section, the state of Nebraska has significant workforce needs in the area of supply chain management. The proposed program will directly contribute to meeting those workforce needs.

Finally, the Comprehensive Statewide Plan for Post-Secondary Education provides a list of peer institutions for the University of Nebraska-Lincoln. The table below indicates whether each institution offers an MS in Supply Chain Management and, if so, whether that program is delivered online.

Institution	MS in Supply Chain Management	Delivery Format
Auburn University, Auburn, Alabama	No	Not applicable
Colorado State University, Fort Collins, Colorado	No	Not applicable
Iowa State University, Ames, Iowa	No	Not applicable
Kansas State University, Manhattan, Kansas	No	Not applicable
Louisiana State University, Baton Rouge,	No	Not applicable
Louisiana		
Oklahoma State University, Stillwater,	No	Not applicable
Oklahoma		
Purdue University, West Lafayette, Indiana	Yes	On-campus
University of Colorado, Boulder, Colorado	Yes	Online and on-campus
University of Georgia, Athens, Georgia	No	Not applicable
University of Kansas, Lawrence, Kansas	Yes	Designed for military only
University of Missouri, Columbia, Missouri	No	Not applicable
University of Tennessee, Knoxville, Tennessee	Yes	Online and on-campus

Evidence of Need and Demand

1. Need:

Address institution, community, region, state, and nation. Evidence may include quantifiable and/or qualitative data regarding workforce needs, job and educational opportunities for graduates, potential for the program to contribute to society and economic development.

To demonstrate the need for workers trained in the area of supply chain management, we computed an estimate of the annual number of supply chain management job openings that require at least a college degree. This estimate was computed following a procedure suggested by Dr. Eric Thompson, Director of Bureau of Business Research at UNL, using data obtained from O*NET, which was the source of information on education requirements for specific types of supply chain management jobs, and the Nebraska Department of Labor, which was the source of information on forecasted annual job openings. Some of the job titles included in this analysis include operations manager; production manager; purchasing manager; transportation, storage, and distribution manager; logisticians; and management analysts. As a result of that analysis, we estimate that the state of Nebraska will have approximately 400 job openings per year in the field of supply chain management that require at least a college degree.

Further, the Department of Supply Chain Management and Analytics has an involved and supportive industrial advisory board with members representing Nebraska-based companies, and companies with a significant presence in Nebraska, with significant workforce needs in the area of supply chain management. As evidence of the need for the proposed MS in Supply Chain Management from the perspective of potential employers for graduates of the program, we have attached to this document letters of support from representatives of Conagra, Crete Carrier and Schneider Electric. Each of these letters testifies to the current and future need for employees with high-level training and expertise in supply chain management.

2. Demand:

Include the extent of student interest in the proposed program. Evidence may include quantifiable and/or qualitative data regarding expected number of students to enroll in each of the first five years of operation, and minimum number of students required to make the program viable.

To demonstrate demand for the proposed MS in Supply Chain Management, the university contracted with ADV Market Research and Consulting to conduct a market assessment. The full

report (attached) is titled "Snapshot Overview of Masters in Supply Chain Management." The key takeaways from this report are highlighted below (quoting directly from the report):

- Demand for master's programs in Supply Chain Management—regardless of modality—is relatively small but growing quickly (27% growth between 2013 and 2017).
- Online programs account for about 40% of all options available in the market today and account for a greater share of degrees awarded – students appear to be interested in online options in this field.
- There are few regional competitors for an online Master's in Supply Chain Management.
- There are successful examples of online programs at other flagship and land-grant universities.
- The data point to solid demand and opportunity for an online Master's in Supply Chain Management at UNL.

The study concludes that "[t]here appears, therefore, to be a high level of demand for online options in Supply Chain Management. What's more, the share of degrees awarded by online programs grew substantially over time," a conclusion that supports the development of an online MS in Supply Chain Management at UNL.

The report further indicates that within UNL's region, there are very few online master's programs in supply chain management. Finally, they note that a number of other universities within the Big Ten offer an online master's programs in supply chain management, including Michigan State University, Penn State (World Campus), Rutgers University and Indiana University.

A review of other local universities indicates that University of Nebraska at Kearney, University of Nebraska at Omaha, Creighton University and Bellevue University do not offer an MS in Supply Chain Management. Like the University of Nebraska-Lincoln, the University of Nebraska at Omaha does offer an MBA with a concentration in supply chain management. Bellevue University offers an MS in Management with a concentration in project management; however, project management is only one aspect of supply chain management.

Thus, the proposed MS in Supply Chain Management program will fill an unmet need in the state of Nebraska that must currently be met by universities in other states, which could draw potential University of Nebraska-Lincoln students out-of-state, and potentially force Nebraska employers to look out-of-state for qualified graduates.

Finally, the demand for graduate level training in supply chain management can be seen from the current enrollments in the graduate certificate in supply chain management and the MBA with a specialization in supply chain management, both offered by the College of Business at the University of Nebraska-Lincoln. Enrollments in this certificate program and MBA specialization over the past three years are shown in the table below.

Enrollments	Fall 2016	Fall 2017	Fall 2018	Fall 2019
Supply Chain Management Certificate	5	3	20	19
Supply Chain Management Specialization in MBA	23	24	17	15

In addition, because the program does not require any prior coursework related to supply chain management or other fields of business, we anticipate that this program will be accessible and attractive to students from a wide variety of backgrounds, including non-business majors such as engineers and scientists, who are working in operations, manufacturing and supply chain

management, or other students who are looking to transition to a field with promising, high salary employment opportunities.

D. Avoidance of Unnecessary Duplication

As noted above, University of Nebraska at Kearney, University of Nebraska at Omaha, Creighton University and Bellevue University do not offer an MS in Supply Chain Management.

While the University of Nebraska-Omaha does offer an MBA with a concentration in supply chain management, that program includes only nine (9) credit hours of supply chain management coursework, *including* the core (introductory) course in supply chain management. In contrast, the proposed MS in Supply Chain Management will require 15 credit hours of focused supply chain management courses *in addition to* the core (introductory) course in supply chain management, including a capstone course. Thus, the proposed MS in Supply Chain Management will provide significantly more in-depth coursework in the field of supply chain management than does an MBA with a concentration in supply chain management.

E. Adequacy of Resources:

1. Faculty/Staff

Existing faculty within the College of Business will support this new degree program. The program faculty includes faculty from the Department of Supply Chain Management and Analytics, as well as faculty from other departments within the College of Business who teach the business core fundamentals courses required for the program. A list of relevant faculty from the Department of Supply Chain Management and Analytics is shown below:

- David Olson, Ph.D., Professor, Department of Supply Chain Management and Analytics
- Jennifer Ryan, Ph.D., Professor, Department of Supply Chain Management and Analytics
- Ozgur Araz, Ph.D., Associate Professor, Department of Supply Chain Management and Analytics
- Demet Batur, Ph.D., Associate Professor, Department of Supply Chain Management and Analytics
- Scott Swenseth, Ph.D., Associate Professor, Department of Supply Chain Management and Analytics
- Silvana Trimi, Ph.D., Associate Professor, Department of Supply Chain Management and Analytics
- Heng Chen, Ph.D., Assistant Professor, Department of Supply Chain Management and Analytics
- Shivam Gupta, Ph.D., Assistant Professor, Department of Supply Chain Management and Analytics
- Shawntell Kroese, MBA, Assistant Professor of Practice, Department of Supply Chain Management and Analytics
- Yingchao Lan, Ph.D., Assistant Professor, Department of Supply Chain Management and Analytics
- Erkut Sonmez, Ph.D., Assistant Professor, Department of Supply Chain Management and Analytics
- Liang Xu, Ph.D., Assistant Professor, Department of Supply Chain Management and Analytics
- Yunxia Zhu, Ph.D., Assistant Professor, Department of Supply Chain Management and Analytics

 Majid Nabavi, Ph.D., Assistant Professor of Practice, Department of Supply Chain Management and Analytics

Curriculum vitae (CVs) for the relevant faculty are available upon request.

2. Library/Information Resources

No additional library or information resources are required.

3. Physical Facilities and Equipment

No additional physical facilities or equipment are required. In particular, this is an entirely online degree program that will be administered through the existing Business Graduate Programs Office in the College of Business on the University of Nebraska-Lincoln campus. Hence, no additional classroom space or equipment will be required. The program will be staffed by existing faculty from the College of Business. Thus, no additional office space or office equipment will be required.

4. Instructional Equipment and Informational Resources

No additional instructional equipment and informational resources are required.

5. Budget Projections

Please see the attached budget tables, Tables 1 and 2. These files contain enrollment, cost, and revenue projections for the first five years of the program. The proposed program would be taught using existing faculty from the Supply Chain Management and Analytics Department and the College of Business. The proposed degree will be managed using existing administration, recruiting, and advising staff in the Business Graduate Programs office.

IV. Abstract of Proposal

Program Description and Purpose

The Department of Supply Chain Management and Analytics within the College of Business at the University of Nebraska – Lincoln is proposing a new MS in Supply Chain Management, with the goal of training students in the concepts and tools associated with supply chain management. Topics covered in the proposed program include key aspects of supply chain management, including logistics, production planning and control, sourcing and procurement, lean management, project management, and supply chain software systems and technologies, as well as the statistical and analytical methods used in supply chain management, including forecasting and data mining, and decision-making methods that can be applied to design, analyze and improve supply chain systems, such as optimization and simulation. This program curriculum was designed in consultation with the Department of Supply Chain Management and Analytics industrial advisory board.

The proposed program will consist of 30 credit hours (10 courses) and will be delivered entirely online. The program is capable of being completed in one year. However, we anticipate that the majority of students will be working professionals who choose to enroll on a part-time basis. Following the model used by the MBA program and MS in Business Analytics, both offered by the College of Business at the University of Nebraska-Lincoln, all of the courses required for the program will be offered completely online in five eight-week sessions per year.

Graduates of the MS in Supply Chain Management program will be prepared to take positions in a wide variety of fields related to supply chain management, such as manufacturing, logistics, transportation, sourcing, and operations consulting.

Program Curriculum

The program has an efficient design that leverages existing courses used for three existing programs, i.e., the MBA program, the MS in Business Analytics and the Graduate Certificate in Supply Chain Management, all offered by the College of Business at the University of Nebraska-Lincoln. Thus, initially, no new course development will be required to support the program. However, in the long term, when justified by enrollments, two additional elective courses will be developed.

The curriculum for the proposed program follows the design used for the successful MS in Business Analytics; i.e., it combines a subset of the business fundamentals courses used for the MBA program with specialized supply chain management courses, and allows students the flexibility to tailor the program to suit their needs and interests through a set of approved electives. Specifically, the program requirements consist of four business core fundamentals courses, which provide training in basic business concepts that are fundamental to supply chain management. Two of these courses (GRBA815: Supply Chain Management Strategies and GRBA851: Business Analytics) are required, while the remaining two can be chosen from an approved list of existing MBA courses. In addition, there are three required supply chain management courses which cover the foundations of supply chain management, including planning and control, logistics, and global supply chain management. Finally, students will choose three supply chain management electives from an approved list of eight existing courses and two potential future elective courses. Four of these existing courses are in the analytics area and students are limited to one analytics elective. The remaining four existing electives cover a variety of specialized topics in supply chain management, such as ERP systems, project management and lean management. One of the required courses for the program is a capstone course (SCMA839) that will serve as the comprehensive exam and which will be taken at or near the end of a student's program of study. The capstone course will include a major project, simulation or case study that will tie together all of the program coursework.

Evidence of Need and Consistency of Program with Strategic Objectives of University of Nebraska

The proposed program will contribute to the strategic objectives of UNL and the NU system, and is consistent with the Comprehensive Statewide Plan for Post-Secondary Education. The program is efficiently designed and offers an accessible and flexible curriculum that will assist in training students to meet the workforce needs of leading companies in the state of Nebraska and surrounding region.

Supply chain management is a critical component of many Nebraska industries, including transportation (represented by companies such as Crete Carrier, Werner Enterprises, and Union Pacific), manufacturing (represented by companies such as Schneider Electric, Valmont Industries, and Lincoln Industries), engineering and construction (represented by companies such as Kiewit Corporation), and agribusiness and food processing (represented by companies such as ADM and Conagra Brands). The proposed program will contribute to meeting the workforce needs of many of the leading employers in the state by providing rigorous and comprehensive training in supply chain management both for individuals already working in the field of supply chain management and for those looking to transition into a supply chain management career. As evidence of the need for this program, letters of support have been obtained from several of these companies, including Conagra, Crete Carrier and Schneider Electric (attached). The need for the MS in Supply Chain Management can also be seen through data on forecasted job openings in the field, which are available from the Nebraska Department of Labor.

Additionally, an investigation of supply chain management programs offered by other universities in the state indicates that no similar programs are currently being offered. In particular, the University of Nebraska at Kearney, University of Nebraska at Omaha, Creighton University and Bellevue University do not currently offer an MS in Supply Chain Management. Thus, the proposed program will fill an unmet need in the state of Nebraska.

Overall, we anticipate significant demand for this program, an assessment that is supported by a market evaluation which concluded that "[t]here appears, therefore, to be a high level of demand for online options in Supply Chain Management. What's more, the share of degrees awarded by online programs grew substantially over time," where the latter conclusion supports the decision to offer the proposed MS in Supply Chain Management in an entirely online format.

Program Admissions, Administration and Staffing

Applicants for admission to the program will be reviewed holistically. However, we will recommend that students have completed a bachelor's degree with a GPA of 3.0 or higher. We also recommend that entering students have three or more years of professional work experience. Students with less than a 3.0 GPA, or without GMAT or GRE scores, but who have significant work experience (five or more years of professional experience) will be considered for the program.

Faculty advisors, along with the Director of the MS in Supply Chain Management program (a faculty member from the Department of Supply Chain Management and Analytics), will be assigned to help guide admitted students through their degree program and to mentor them as they consider employment opportunities. Advisors will review the student's plan of study and memorandum of courses to ensure that the student is making adequate progress towards the degree.

No additional faculty will be required to implement this proposed program. Existing faculty within the College of Business will be sufficient to support this program, including faculty from the Department of Supply Chain Management and Analytics, as well as faculty from other departments within the College of Business who teach the business core fundamentals courses required for the program.

No additional library resources, physical facilities or equipment are required. In particular, this is an entirely online degree program that will be administered through the existing Business Graduate Programs Office in the College of Business on the University of Nebraska-Lincoln campus. Hence, no additional classroom space or equipment will be required. The program will be staffed by existing faculty from the College of Business. Thus, no additional office space or office equipment will be required.

Letters of Support

Jennifer Ryan, Ron and Carol Cope Professor and Chair of Supply Chain Management & Analytics

Jake Messersmith, Executive Director of Business Graduate Programs

Ted Drummond, Crete Carrier Corp

Scott Headley, Conagra Brands

Jana Saddler, Schneider Electric



COLLEGE OF BUSINESS Department of Supply Chain Management and Analytics

December 9, 2019

Dear Dr. Carr,

As Chair of the Department of Supply Chain Management and Analytics in the College of Business at the University of Nebraska – Lincoln, I am pleased to endorse the proposal for a new MS in Supply Chain Management. The graduate faculty in the Department of Supply Chain Management and Analytics voted to approve the proposed MS program on August 30, 2019.

As shown by the external letters of support from industry representatives, the proposed program addresses an unmet need in the state of Nebraska for advanced training in supply chain management. We anticipate strong demand for this program, which we plan to offer in an entirely online format. This assessment is supported by a market evaluation which concluded that "[t]here appears, therefore, to be a high level of demand for online options in Supply Chain Management."

The proposed program has an efficient design that leverages existing courses used for three existing graduate programs, all of which are currently offered by the College of Business at the University of Nebraska-Lincoln. Thus, the program will not require the development of any new courses or the hiring of any additional faculty.

Sincerely,

Jennifer K. Ryan

Ron and Carol Cope Professor of Supply Chain Management & Analytics

Department Chair

Department of Supply Chain Management & Analytics

College of Business

University of Nebraska – Lincoln

Junt J

Jennifer.ryan@unl.edu

402-472-2256



COLLEGE OF BUSINESS
Office of Graduate Programs

To:

Dr. Tim Carr, Associate Vice Chancellor and Dean of Graduate Education

From:

Dr. Jake Messersmith, Executive Director of Business Graduate Programs

Date:

December 9, 2019

Subject:

M.S. - Supply Chain Management

Dr. Carr,

On 9/17/2019 the MBA/Master's Committee within the College of Business voted to approve a new 30 credit hour Master's of Science degree in Supply Chain Management. The committee unanimously approved this addition to the graduate programs offered by the College of Business. Please let me know if you have any questions.

Sincerely,

Jake Messersmith, Ph.D.

Executive Director of Business Graduate Programs







12/4/19

Professor Jennifer K. Ryan
Department Chair for Supply Chain Management & Analytics
College of Business
University of Nebraska – Lincoln
Lincoln, NE 68588

Subject: Proposed M.S. in Supply Chain Management

Dear Jennifer,

On the behalf of Crete Carrier Corp, I am pleased to submit this letter of support for the proposed M.S. in Supply Chain Management, to be offered by the Department of Supply Chain Management and Analytics, in the College of Business at the University of Nebraska – Lincoln.

As background, Crete Carrier Corp is one of the largest privately-held, family-owned trucking companies with over 6,000 employee servicing the domestic 48 states. We were founded in 1966 in Crete, NE and have strong roots in Nebraska to this day. Today, we are headquartered in Lincoln.

As the Vice-President of Pricing and Productivity, I consistently see the need for graduates with a strong understanding of both supply chain and analytics. It is widely understood that supply chain management is an area of significant current and future market growth. Organizations of all types are recognizing the need for professionals with the knowledge and skills to effectively and efficiently management their operations and supply chains, to support better operational decision-making, provide a sustainable competitive advantage, and generate value for the organization.

With historically low unemployment in Nebraska, companies are constantly in need of graduates with strong fundamental related to supply chain. I see your proposed degree program as a way to address these workforce needs by providing educated and trained professionals ready to contribute to our organization's success and to help grow industry in Nebraska.

The proposed M.S. in Supply Chain Management degree program, which combines courses in the fundamentals of business with specialized supply chain management and analytics courses, and which allows students to customize the degree program through a set of electives, promises to train students who can contribute to the success of organizations such as ours as well as many others whether related to trucking and transportation or other sectors as well. Therefore, I anticipate that this proposed program will produce graduates that are highly employable in a wide variety of industries.

We have employed several students from the UNL Supply Chain program with under-graduate degrees. They are job-ready and are able to hit the ground running. With an MS in Supply Chain Management, I have no doubt that it would be more of the same but at an elevated level. As such, I strong support the addition of an M.S. in Supply Chain Management and will not only support the recommendation but also will be glad to get involved in any way I can and, as always, will look to your candidate pool as we look to fill future positions.

Sincerely, Ted Drummond November 23, 2019

Professor Jennifer K. Ryan Department Chair for Supply Chain Management & Analytics College of Business University of Nebraska – Lincoln Lincoln, NE 68588

Subject: Proposed M.S. in Supply Chain Management

Dear Jennifer,

On the behalf of Conagra Brands, I am pleased to submit this letter of support for the proposed M.S. in Supply Chain Management, to be offered by the Department of Supply Chain Management and Analytics, in the College of Business at the University of Nebraska – Lincoln.

As a Senior Director in Supply Chain at Conagra Brands, I was excited to learn about this proposed degree program. It is widely understood that supply chain management is an area of significant current and future market growth. Organizations of all types are recognizing the need for professionals with the knowledge and skills to effectively and efficiently management their operations and supply chains, to support better operational decision-making, provide a sustainable competitive advantage, and generate value for the organization. At Conagra, we depend on highly skilled and trained supply chain employees to help the company save millions of dollars every year and provide a competitive advantage.

Nebraska companies, including those in the agriculture, transportation, logistics, and manufacturing sectors, have struggled to fill their workforce needs in the area of supply chain management. At Conagra, for instance, we have to recruit students from multiple colleges as we cannot find enough qualified candidates through the University of Nebraska. Conagra and many other organizations have a need for employees with expertise in the core functional areas of supply chain management, as well as an understanding of the key analytical and statistical techniques applied in supply chain management. I see your proposed degree program as a way to address these workforce needs by providing educated and trained professionals ready to contribute to our organization's success and to help grow industry in Nebraska.

The proposed M.S. in Supply Chain Management degree program, which combines courses in the fundamentals of business with specialized supply chain management and analytics courses, and which allows students to customize the degree program through a set of electives, promises to train students who can contribute to the success of organizations such as Conagra Brands. I anticipate that this proposed program will produce graduates that are highly employable at Conagra as well as in a wide variety of other industries.

In summary, I strongly support your development of the M.S. in Supply Chain Management degree program. If we can be a resource as you implement this program, please let me know. I am excited about the opportunity to work with you and your graduates.

Sincerely, Scott Headley, Senior Director, Supply Chain



November 13, 2019

Professor Jennifer K. Ryan
Department Chair for Supply Chain Management & Analytics
College of Business
University of Nebraska – Lincoln
Lincoln, NE 68588

Subject: Proposed M.S. in Supply Chain Management

Dear Jennifer,

On the behalf of Schneider Electric, I am pleased to submit this letter of support for the proposed M.S. in Supply Chain Management, to be offered by the Department of Supply Chain Management and Analytics, in the College of Business at the University of Nebraska – Lincoln.

As the OmniChannel Business Development Manager at Schneider Electric, I was excited to learn about this proposed degree program. As a global organization, Schneider Electric employs 50,000+ in Supply Chain of which 25,000 are in North America. Our Lincoln Plant has 350 employees many of which are in the Supply Chain business unit. Our Lincoln facility serves as one of the key locations in the U.S. for our Advanced Development Program which takes new college graduates through a 2 year intensive rotational program. Having talent from the University with a formal supply chain education is critical to maintaining Schneider Electric's position as a premier global leader in Energy Management.

It is widely understood that supply chain management is an area of significant current and future market growth. Organizations have a need for employees with expertise in the core functional areas of supply chain management, as well as an understanding of the key analytical and statistical techniques applied in supply chain management. Your proposed degree program is a way to address these workforce needs by providing educated and trained professionals ready to contribute to our organization's success.

The proposed M.S. in Supply Chain Management degree program, which combines courses in the fundamentals of business with specialized supply chain management and analytics courses, and which allows students to customize the degree program through a set of electives, promises to train students who can contribute to the success of organizations such as Schneider Electric. Therefore, I anticipate that this proposed program will produce graduates that are highly employable in a wide variety of industries.

In summary, I strongly support your development of the M.S. in Supply Chain Management degree program. If we can be a resource as you implement this program, please let me know. I am excited about the opportunity to work with you and your graduates.

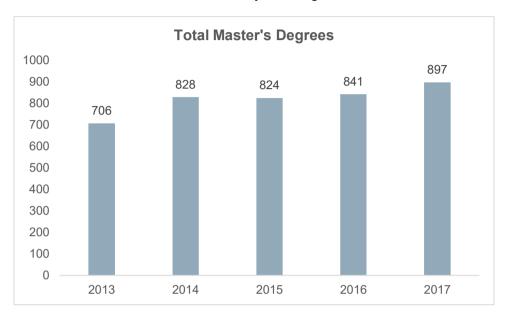
Sincerely,

Jana Saddler OmniChannel Business Development Manager Schneider Electric



Snapshot Overview for: Master's in Supply Chain Management

Demand for Master's programs in Supply Chain Management has increased in recent years – 27% growth between 2013 and 2017. There were nearly 900 degrees awarded in 2017.



Interest in online programs has grown over time as well. There were 17 institutions offering online programs in 2017 and these programs accounted for 69% of all degrees awarded in the field. There appears, therefore, to be a high level of demand for online options in Supply Chain Management. What's more, the share of degrees awarded by online programs grew substantially over time.





The sudden increase from 2013 to 2014 was primarily due to two large programs becoming available online: Florida Institute of Technology (97 degrees awarded per year) and the Air Force Institute of Technology (26 degrees awarded per year).

In UNL's region, there are very few online Master's programs in Supply Chain Management. Fontbonne University (St. Louis) offers an online M.S. in Supply Chain Management as well as a graduate certificate. The M.S. program also requires that all students complete a concentration in project management. At 36 credit hours and \$775 per credit hour, the estimate minimal cost of the program is \$27,900.

Additionally, Colorado Technical University offers an MBA concentration in <u>Operations Supply Chain Management</u>. As an MBA, the program is distinct from a focused Master's in Supply Chain Management and requires 48 credit hours.

Other flagship and/or land-grant universities with online Master's programs in Supply Chain Management include:

- Texas A&M University
- Michigan State University
- Penn State (World Campus)
- Rutgers University
- University of Washington
- Oregon State University
- Indiana University

To the best we can, we've summarized enrollment of degree conferment data for these programs in the accompanying Excel file. Unfortunately, many of these institutions do not report enrollment or degree conferment data separately for their Supply Chain Management programs. In some cases (e.g., Oregon State), data are aggregated for the MBA as a whole without breaking down enrollment by concentration areas; in others, the institution simply doesn't make the information available.

Key Takeaways:

- Demand for Master's programs in Supply Chain Management—regardless of modality—is relatively small but growing quickly (27% growth between 2013 and 2017).
- Online programs account for about 40% of all options available in the market today and account for a greater share of degrees awarded – students appear to be interested in online options in this field.
- There are few regional competitors for an online Master's in Supply Chain Management.
- There are successful examples of online programs at other flagship and land-grant universities.
- The data point to solid demand and opportunity for an online Master's in Supply Chain Management at UNL.

TABLE 1: PROJECTED EXPENSES - NEW INSTRUCTIONAL PROGRAM UNL MS in Supply Chain Management

	(FY2020)	(FY2021)		(FY2022)		(FY2023)		(FY2024)	
	,	Year 1	· ·	Year 2	· ·	Year 3		Year 4		Year 5	Total
Personnel	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	Cost
Faculty											
Professional											
Graduate Assistants											
Support Staff											
Benefits											
Subtotal											\$0
Operating				•				•		•	
Operating and Supplies											
Equipment											
Library/Information Resources											
Subtotal											\$0
Total Expenses		\$0		\$0)	\$0)	\$()	\$0	\$0

TABLE 2: PROJECTED REVENUES - NEW INSTRUCTIONAL PROGRAM LINE MS in Supply Chain Management

_	ONE MS III Supply Chain Management							
	(FY2020)	(FY2021)	(FY2022)	(FY2023)	(FY2024)			
	Year 1	Year 2	Year 3	Year 4	Year 5	Total		
Reallocation of Existing Funds								
Required New Public Funds								
State Funds								
Local Tax Funds (community colleges)								
Tuition and Fees	\$189,000	\$283,500	\$378,000	\$378,000	\$378,000	\$1,606,500		
Other Funding								
Total Revenue	\$189,000	\$283,500	\$378,000	\$378,000	\$378,000	\$1,606,500		
Revenue Projections Based on F	•							
Enrollment	10	15	20	20	20			
Credit hours taken per year	30	30	30	30	30			
Tuition per credit hour	\$630	\$630	\$630	\$630	\$630			
Gross revenue generated	\$189,000	\$283,500	\$378,000	\$378,000	\$378,000	\$1,606,500		