### Brothers, Sheila C.

**From:** Cramer, Aaron M.

Sent: Thursday, January 16, 2020 3:27 PM

**To:** Bird-Pollan, Jennifer; Brothers, Sheila C.; Ett-Mims, Joanie; Woolery, Stephanie L.

**Cc:** Sun, Haoying

**Subject:** NEW MS: Supply Chain Management

Attachments: MS SCM Proposal Faculty Senate and CPE 01152020.pdf

### Proposed New MS in Supply Chain Management

This is a recommendation that the University Senate approve, for submission to the Board of Trustees, the establishment of a new MS degree: Supply Chain Management, in the Department of Marketing and Supply Chain within the Gatton College of Business and Economics.

Rationale: Kentucky is one of the logistics hubs in the country due to its central location. There are nearly 500 logistics/distributions operations throughout the state employing more than 60,000 workers. The projected job growth rate in this area in the next five years is more than 13%. The proposed one-year program has been developed in cooperation with the College of Engineering. The program features nine hours of common core courses (shared with the MS in Supply Chain Engineering), 15 hours of Business-specific core courses, three elective hours, and three hours of capstone industry project. Initial enrollment of 20 students growing to 40 is anticipated.

#### Aaron

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Office of Strategic Planning and Institutional Effectiveness (OSPIE). The new program approval process begins when a contact persons submits a "Notification of Intent" (NOI) and substantive change checklist (available HERE) to OSPIE. Units have six months from the point of NOI submission to the time when the completed proposal is approved by Senate. After the NOI is submitted, a contact person should begin working to complete this form. Contact persons should work with OSPIE to identify the program's degree designation and CIP, as well as to solicit a letter of administrative feasibility from the Provost (per SR 3.2.3.A.2).

**Pre-proposal.** The CPE requires that a pre-proposal be submitted after a proposed program has achieved approval at the college level. Answers to questions identified with a \* by the question number on this form will be used by OSPIE staff to submit the pre-proposal to the CPE (Council on Postsecondary Education).

**Form structure.** This form has two sections. The first half (white background) contains information required by the University Senate and Registrar's office and the second half (beige/brown background) contains information required by two external entities, the CPE and SACSCOC (Southern Association of Colleges and Schools Commission on Colleges). Although only the first half is required for University Senate approval, every question must be answered to receive CPE approval. Please do not leave any area blank, but instead write "not applicable" wherever that is the appropriate response.

Approval process. Once approved at the college level, your college will send the proposal to the appropriate Senate academic council (possibly HCCC and/or GC) for review and approval. Once approved at the academic council level, the academic council will send your proposal to the Senate Council office for additional review via a committee and then to the SC and University Senate. (The contact person listed on the form will be informed when the proposal has been sent to committee and other times as appropriate.) Once approved by the Senate, the Senate Council office will submit the proposal for it to be placed on an agenda for the Board of Trustees. After approval by the Board, OSPIE will ensure the proposal is submitted to the CPE for final approval. Generally, a new program proposal must have received approval from the Senate by early spring (February or March) in order for the new program to be effective for the following fall semester.

INFORI	MATION REQUIRED BY UNIVERSITY SENATE
1. Basi	c Information: Program Background and Overview
1a	Home College: Gatton College of Business and Economics
1b	Home Educational Unit (school, department, college <sup>1</sup> ): Marketing and Supply Chain
1c*	Office of Strategic Planning and Institutional Effectiveness (OSPIE) (Please contact OSPIE (OSPIE@L.uky.edu) for help with questions in this section.)
	Date of Contact with OSPIE: 11/29/18
	Appended to the end of this form is a PDF of the reply from OSPIE.
	Appended to the end of this form is a letter of administrative feasibility from the Provost.
	Appended to the end of this form is a letter(s) of administrative feasibility from the dean(s)
	of the college(s) offering the degree.
	CIP Code (confirmed by OSPIE): 52.1399

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<sup>&</sup>lt;sup>1</sup> Only interdisciplinary graduate degrees may be homed at the college level.

	Degree Type (MA, MS, etc.) <sup>2</sup> : MS					
	Is this degree designation on the CPE's list of degree designations <sup>2</sup> ?					□ No
	If "No," please provide an explanation for OSPIE's use in external reporting purposes.					
		, ,	'		1 01	
	1					
1d*	Major Name (Bi	ology, Finance	e, etc.): <i>SCM</i>			
1e	Is there a specia	lized accrediti	ing agency related to	n this program?	Yes 🖂	No 🗌
10				Schools of Business (AACSB)	163	140
			tation from this age		Yes 🔀	No 🗌
<b>1</b> f		lar program e	ver previously offer	ed at UK but subsequently	Yes	No 🔀
	suspended?  If "Yes," describe	e (300 word li	imit\			
	ii res, deserio	c. (500 Word II				
1g*	Requested effec	tive date:	Fall semester	following approval. OR	Specific Date	e³: <i>Fall 20 20</i>
41-*	Austinius taul data	. f	£:	2021		
1h*	Anticipated date	e for granting	first degree(s): Aug,	2021		
1i*	Contact person	name: <i>Haoyin</i>	g Sun	Email: haoying.sun@	uky.edu Phone	e: 859-257-3131
			C	, , ,		
2. Prog	ram Overview					
2a*				am. (300 word limit)	•.7	20 1:
				agement (SCM) will be a one-yo ulti-disciplinary knowledge an		
	_			nt. The program is housed in th	• •	•
	Supply Chain. It	s target startii	ng date is Fall 2020.			
	The MS SCM pr	ooram and the	MS in Supply Chai	n Engineering (SCE) program	(currently being	proposed by the
		•	11.	pendent degree programs shari		• •
	'	-		t course (3 credit hours). In add		
			_	ogram are required to take ano hours) from a list of recommen	-	
	1 '		•	n a subject domain. In the summ		
	course, students will work on an industrial project at a sponsoring company under the supervision of faculty from					n of faculty from
	both Gatton and	the College o	f Engineering.			
	List the program	objectives of	the proposed progr	ram. These objectives should do	eal with the spec	ific institutional
		-		such as how students will bene	•	
2b			_	m objectives" are different fror		_
	(300 word limit)					
	•	_		y due to its central geographic		•
	482 logistics/distribution operations throughout the state that employ nearly 62,000 full-time workers. Fifteen					
				the state that employ nearly 62 have been announced through		

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<sup>&</sup>lt;sup>2</sup> Visit <a href="http://dataportal.cpe.ky.gov/cpedegreedesignations.aspx">http://dataportal.cpe.ky.gov/cpedegreedesignations.aspx</a> for the CPE's list of approved degree designations.

<sup>&</sup>lt;sup>3</sup> Programs are effective the semester following approval. No program will be made effective unless all approvals, up through and including Board of Trustees and CPE approval, are received.

a total investment of \$1.9 billion and nearly 4,000 new full-time jobs. However, within the state, none of the universities offer a Master of Science in Supply Chain Management program.

According to the Burning Glass national database, the job growth rate in the next five years related to operations and supply chain management positions in Kentucky and the neighboring states is 13.04%, which is higher than the 9.92% growth rate in the nation for the same job category and much higher than the 7.4% general growth rate in the nation for all jobs requiring a master's degree. Meanwhile, the salary in this field is also quite attractive, ranging from \$61,947 for beginner analysts to \$97,579 for more experienced managers.

Thus, one of the objectives of the proposed program is to provide trained supply chain professionals for the commonwealth to meet the rising demand in this growing sector. Another objective is to provide students with skill sets that make them competitive in today's labor market. Our program, with four common core courses shared with the College of Engineering, will provide a multi-disciplinary environment for Business and Engineering students to learn and work together collaboratively under the joint-expertise of Business and Engineering faculty. Students also have an opportunity to partner with the industry to apply knowledge and skills gained from the program to recommend solutions for real-world supply chain problems.

2c\*

List the intended student learning outcomes (SLOs) for the proposed program. Address one or more of the five areas of learning: 1. broad, integrative knowledge; 2. specialized knowledge; 3. intellectual skills; 4. applied learning; and 5. civic learning. (300 word limit) (More detailed information will be addressed in a subsequent question.)

Learning Outcome 1: Critical Thinking

Learning Objective: Students will apply analytical, critical, and logical reasoning skills to solve complex operations and supply chain related issues

Learning Outcome 2: Identification of Ethical Issues

Learning Objective: Students will be able to idetify ethical and societal issues that arise in a supply chain related context

Learning Outcome 3: Multidisciplinary Competence

Learning Objective: Students will work in a multidisciplinary team-based environment to identify and solve contemporary supply chain problems

Learning Outcome 4: Technological Skills

Learning Objective: Students will utilize ubiquitous business application software tools to assist decision making in a complex global supply chain setting

Learning Outcome 5: Communications Skills

Learning Objective: Students will demonstrate strong written and oral communication skills

2d

Describe the rationale and motivation for the program. Give reference to national context, including equivalents in benchmark institutions. (150 word limit)

As we explained in section 2b, Kentucky is one of the logistics hubs in the country due to its central geographic location. Jobs in the logistics sectors are expected to grow nationwide and within the state. Meanwhile, with globalization, effectively managing a global supply chain becomes increasingly important to most of the traditional manufacturers. However, none of the universities in the commonwealth offer a Master of Science in Supply Chain program, which creates an opportunity to provide qualified employees with proper trainings.

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	Among UK's peer and aspirant institutions, many do offer a similar program, such as the University of Michigan, Michigan State University, University of Florida, University of Alabama, University of Arkansas, University of Tennessee, Rutgers University, Drexel University, and The University of Texas at Dallas. However, Kentuckians' access to these programs is very limited due to their financial and geographic barriers.							
2e	Describe the proposed program's uniqueness within UK. (250 word limit)							
26	There is no existing Master in Supply Chain Management program at UK. The proposed program is unique in							
	that four core courses are collaboratively developed by faculty from the College of Engin	_	-					
	College of Business and Economics. Both Engineering and Business students would benef							
	achievable through common courses and group work. Engineers leave the program with a							
	understanding of how they, as designers and analysts, can support supply chain manager,	s in makin	g better					
	decisions. Business students would appreciate and learn to take advantage of the analytic	al decisio	n support					
	capabilities offered by supply chain engineers/analysts to help them with their manageria	l tasks.						
2f	Describe the target audience. (150 word limit)							
	Recent graduate students with bachelor's degrees who had basic calculus and introductor	-						
	the target audience. In particular, this program will attract those undergraduate students							
	Engineering, Economics, Agrieconomics, Mathematics, Statistics and related majors, who							
	field of supply chain management and who want to obatin a graduate degree right after g degree. This program will be a good fit for students with a good quantitative problem solven.	_						
	are interested in data driven managerial decision making and who like to work in a team							
	are interested in data driven managerial decision making and who tike to work in a ream	CHVHOTHIC						
2g*	Does the program allow for any concentrations?	Yes	No 🔀					
-8	If "Yes," name the concentration(s). (Specific course requirements will be described in Sec							
	Concentration #1:	7,4-	- ,					
	Concentration #2:							
	Concentration #3:							
21-	Are necessary resources available for the proposed new program? (A more detailed	v 🔽	No 🗆					
2h	answer is requested in Section A, part 4.)	Yes 🔀	No					
2i	Describe how the proposed program will be administered, including admissions, student etc. (150 word limit)	advising,	retention,					
	The MS in Supply Chain Management will be housed in and administered by the Department of Marketing & Supply Chain. The day-to-day operations of the program will be the responsibility of the program director. A faculty committee will be responsible for the admissions process. The program director will make the final decisions on admission based on faculty committee's recommendations. Once enrolled in the program, each student will be assigned a faculty advisor, who will help the student to be successful in the program. The program director and the faculty committee will be selected from members of the faculty of record (see point 4d below).							
		Yes						
2j	Are multiple units/programs collaborating to offer this program?		No 🗌					
	If "Yes," please discuss the resource contribution(s) from each participating unit/program	n. <i>(150 wc</i>	ord limit)					
	(Letters of support will be addressed in Part A, section 7.)							
	Faculty from the Department of Mechanical Engineering will teach one of the common co							
	631 (Production and Operations Management). Faculty from the Department of Finance and Quantitative							

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	Methods will teach MKT 633 (Applied Data Anlytics). Faculty from the Department of Management will teach MKT 634 (Quality and Lean Operations) and MKT 637 (Neogotiations in Supply Chain). The rest of three core courses will be taught by faculty from the Department of Markerting and Supply Chain. The electives are from existing courses offered in the College of Engineering, Gatton College of Business and Economics, College of						
	Public Health, Martin School of Public Policy and Administration and College of Agric Environment.		ı ana ————				
_	List all UK programs <sup>4</sup> that the proposed program could be perceived as replicating. Given		for why this				
2k	is not duplication, or is a necessary duplication. (250 word limit)						
	None						
	Will the faculty of record for the proposed new master's degree be the graduate						
21	faculty of the department/school offering the proposed new degree?	Yes 🔀	No 🗌				
	If "No," please describe the faculty of record for the proposed master's program, inclu	ıding: selecti	on criteria;				
	term of service; and method for adding/removing members. Will the existing director	of graduate	studies (DGS)				
	in the department/school be the DGS for this proposed master's degree?						
	New   1   1   1   1   1   1   1   1   1						
2m	Will the program have an advisory board <sup>5</sup> ?	Yes	No 🔀				
	If "Yes," please describe the standards by which the faculty of record will select members the duration of service on the board, and criteria for removal. (150 word limit)	iers of the ac	avisory board,				
	the duration of service on the board, and enteria for removal. (130 word imit)						
	If "Yes," please list below the number of each type of individual (as applicable) who w	ill be involve	d in the				
	advisory board.						
	Faculty within the college who are within the home educational unit.						
	Faculty within the college who are outside the home educational unit.						
	Faculty outside the college who are within the University.						
	Faculty outside the college and outside the University who are within the Un						
	Faculty outside the college and outside the University who are outside the U	nited States.					
	Students who are currently in the program.						
	Students who recently graduated from the program.						
	Members of industry.						
	Community volunteers.  Other. Please explain:						
	Total Number of Advisory Board Members						
	Total Number of Advisory Board Members						
3. Deli	very Mode UK	DLP and eLe	arning Office 6				
3a*	Initially, will any portion of the proposed program's core courses be offered via distance learning <sup>7</sup> ?	Yes 🖂	No 🗌				

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<sup>&</sup>lt;sup>4</sup> You must include a letter of support from any other program's home unit. Please convert the letter to a PDF and append to the end of this form.

<sup>&</sup>lt;sup>5</sup> An advisory board includes both faculty and non-faculty who are expected to advise the faculty of record on matters related to the program, e.g. national trends and industry expectations of graduates.

<sup>&</sup>lt;sup>6</sup> For questions about alternative delivery modes, please contact UK's Distance Learning Programs and e-Learning office (http://www.uky.edu/DistanceLearning/).

<sup>&</sup>lt;sup>7</sup> Per the Southern Association of Colleges and Schools Commission on Colleges (SACS) definition of distance education, distance education is a formal educational process in which the majority of the instruction (interaction between students and

	If "Yes	," please indicate b	elow the percentage o	of core courses that wi	II be offered via dis	tance lear	ning.
(check one)	1% - 2	4% 🔀	25% - 49% 🗌	50% - 74%	75 - 99% 🗌	100%	,
	NOTE: Programs in which 25% or more of the program will be offered via distance learning may need to submit a <u>substantive change prospectus</u> to SACS. Please contact <u>institutionaleffectiveness@uky.edu</u> for assistance. <i>The</i>						
	prospe	ectus is required by	SACS, but it is NOT red	quired for Senate revie	w.		
	If any	percentage of the p	orogram will be offere	d via the alternative le	arning formats belo	w, check	all that apply,
3b*	below	•					
		Distance learning		::		<b>f</b>	
				f interaction, such as fa ail, interactive televisio	•		ig, audio-
		Technology-enha		,	.,,		
			d/early morning classe	S.			
		Accelerated cours	ses.				
		Instruction at nor	ntraditional locations,	such as employer work	site.		
		Courses with mul	tiple entry, exit, and re	eentry points.			
		Modularized cour	rses.				
			le for the use of altern rate as appropriate. <i>(2</i>	ative delivery modes in	n the proposed pro	gram. Con	isider the
3c	aspect		l asynchronous compo				
Je	•		traditional and non-ti				
	•	Hybrid elements.					
	All coi			proposed program will	be delivered in the	traditiona	al face-to-face,
	All courses taught by the Gatton faculty in this proposed program will be delivered in the traditional face-to-face, classroom seeting. There is one common core course, SCE/MKT 631 (Production and Operations Management),						
				f Engineering. Since th			•
	parallel program currently proposed by CoE, will be an online program, SCE/MKT 631 will be taught as a hybrid course with students meeting in classroom half of the time and meeting online the other half of the time. In						
				m naij oj ine iime ana . ng engineering student			
	SCE program, the two other common courses taught by the Gatton faculty, MKT/SCE 630 (Supply Chain Strategy) and MKT/SCE 635 (Logistics Management), may be delivered in evening sessions. Finally, the						
	capsto	ne course, MKT 74	10 (Industry Project), n	nay require students to	be present at a spo	-	
	and to use video conferencing to communicate with company sponsors.						
4. UK R	esource	es					
4a*	Will th	e program's home	educational unit requ	ire new or additional fa	aculty?	Yes 🔀	No 🗌
				ate faculty resources a			
		port the program. I explain why. <i>(150 v</i>		and additional faculty	will be part-time o	or full-time	e faculty. If
			-	needed to staff the prog	ram. Initially we m	av need ta	o horrow some
			•	n courses on an overloa	•	•	
				new hire joining in Fall			
	-		tion starting Fall 2020	). This faculty will teach	h primarily in this p	proposed n	naster
	progra		.1	CC.		11:4: 1	C 1, 1.
				enerate sufficient reven	eue to support an a	aditional j	taculty hire.
			can replace the adjuncture culty be appointed? (1	<u> </u>			
				so word mmit) nember may be hired to	replace the adjunc	t faculty o	ıfter year
	three.	, jour ur i am				- <i>j = = = = = = = = = = = = = = = = = = </i>	,, ,

instructors and among students) in a course occurs when students and instructors are not in the same place. Instruction may be synchronous or asynchronous.

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4b	Will the program's home educational unit require additional non-faculty resources, e.g. classroom space, lab space, or equipment?	Yes 🔀	No 🗌
	If "Yes," provide a brief summary of additional non-faculty resources that will be needed program over the next five (5) years. If "No," explain why. (150 word limit)	l to impler	ment this
	One classroom with video recording and broadcast capacity is required to teach the three with the SCE program hosted in the College of Engineering. A computer lab is required to MKT 633. Other courses can be taught in regular classrooms. The program will need stuplacement assistance from staff members. Although the Department of Marketing and Suphave these resources, the Gatton College can and is agreed to provide them.	o teach M dent recru	KT 632 and aitment and
4c	Will the program include courses from another educational unit(s)?	Yes 🖂	No 🗌
	If "Yes," list the courses and identify the other educational units and subunits that have a of their courses. (150 word limit)		
	SCE 631, Production and Operations Management from the Department of Mechanical E MKT 637, Negotiation in Supply Chain from the Department of Management In addition, the program offers the following electives:  MFS 613: Sustainability, Ethics & Leadership in Manufacturing Organization from the Department of Mechanical Engineering SCE 614: Sustainable Systems and Supply Chain from the Department of Mechanical Engineering MFS 606: Global Issues in Manufacturing from the Department of Mechanical Engineering MGT 610: Global Management from the Department of Management MGT 697: Leadership, Communications & Ethics from the Department of Management CPH 600: Health Services and Systems Organizations from the Department of Health Mechanical Planning and Organizational Change in the Public and Nonprofit Sectors School of Public Policy & Administration  HMT 588: Strategic Management in the Hospitality & Food Service Industry from Depart Tourism Management  If "Yes," append to the end of this form a letter of support from the appropriate education	Departmen gineering ing unagement ors from t	t of t & Policy he Martin Retailing and
	from whose unit individual courses will be used. A letter must include the following:  • Demonstration of true collaboration between multiple units <sup>8</sup> ;	a	
	<ul> <li>Impact on the course's use on the home educational unit; and</li> <li>Verification that the chair/director has consent from the faculty members of the</li> </ul>	unit.	

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<sup>&</sup>lt;sup>8</sup> Show evidence of detailed collaborative consultation with such units early in the process.

NACCE	COLIDERS TALIGUT	ACADEMIC DEGREES AND	OTHER QUALIFICATIONS AND	
NAME	COURSES TAUGHT	COURSEWORK	COMMENTS	
List name & identify faculty member as "F" (full-time) or "P" (part-time).	Include term; course prefix, number and title; & credit hours. Identify courses as D, UN, UT or G.	List relevant courses taught, including institution and major.	Note qualifications and comments as they pertain to course taught.	
Dr. Haoying Sun (FT)	MBA616 SC Operations (G)	PhD, SCOM, UT Austin, 2011	Will teach MKT 632 SC Modeling & Analysis. Has multiple recent publications at top-tier POM journal.	
Dr. Anita Lee-Post (FT)	AN300 Bus. Oper. (UG)	PhD, OM/MIS, University of Iowa, 1990	Can teach MKT 631 POM if needed.	
Dr. Ram Pakath (FT)	AN300 Bus. Oper. (UG)	PhD, MIS, Purdue University, 1988	Will teach MKT 633 Applied Data Analytics.	
Dr. Chen Chung (FT)	AN403G Pro & Inv Sys (UG)	PhD, OM, Ohio State University, 1982	May teach MKT 634 Quality & Lean Operations.	
Dr. Joe Labianca (FT)	MGT612 Neogotiation (G)	PhD, Management, Pennsylvania State University, 1998	Will teach MKT 637 Negotiation. Has multiple publications in the area of interpersonal conflict, in Science, AMJ, etc.	
Dr. Yunke Mai (FT)	Decision Model (G)	PhD, DS, Duke Univeresity, May 2019	Course taught is at Duke. Will teach MKT 636.	
Dr. Charles Sox (PT)	Operation Management (G)	Ph.D. ORIE, Cornell University, 1992	Mutiple publications in the field of operations and supply chain management, such as MS, EJOR, etc. Currently Professor of OM at the University of Cincinnati. Will teach MKT 635.	
New hire of Mechanical Engineering Departmetn (FT)		PhD, IE or related major	Will teach MKT 631.	
Faculty (new hire, FT)		PhD in SCOM ore related field	Will teach MKT 740. May also teach MKT 630 or MKT 635.	

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	D = developmental	
FT = full time	UN = undergraduate nontransferable	
PT= part time	UT = undergraduate transferable	
	G = graduate	

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# 5. Assessment – Program Assessment and Student Learning Outcomes (SLOs) Referring to program objectives, student benefits, and the target audience (questions 2b and 2f), explain how the program will be assessed, which is different from assessing student learning outcomes. Include how the 5a faculty of record will determine whether the program is a success or a failure. List the benchmarks, the assessment tools, and the plan of action if the program does not meet its objectives. (250 word limit) As part of the program level assessment, the program director, along with the Gatton Graduate Studies Committee, will use five criteria to evaluate the success of the program. Program enrollment numbers over time 1. 2. Program degrees conferred 3. Student attainment of learning outcomes 4. Feedback/suggestions from faculty who teach in the program 5. Graduating exit survey responses from students prior to graduation 5.1) Placement data regarding jobs by graduation and three months post-graduation, along with salary and signing bonus information 5.2) Overall satisfaction with the MS SCM program (related to section 15) Append an assessment plan<sup>9</sup> for the SLOs to the end of this form. (Click HERE for a 5b sample assessment plan.) Explain how the curriculum achieves the program level student learning outcomes by describing the relationship between the overall curriculum or the major curricular components and the program objectives. 5c (300 word limit) There are five learning outcomes (please see 2c for details): 1: Critical Thinking 2: Identification of Ethical Issues 3: Multidisciplinary Competence 4: Technological Skills 5: Communications Skills MKT 630 is an introductory course that is shared with the SCE program (curretly being proposed for approval by the College of Engineering). Both engineering and business students will sit in the same session taking this course together. All five learning outcomes will be introduced in this course. LO1 will be reinforced in the three methodology-focused courses, MKT 631, 632 and 633. It will be emphasized in the four functional area courses (i.e., MKT 634 – 637). Since ethic issues often arise in quality, logistic, sourcing and procurement management settings, LO2 will be reinforced in both MKT 634 and 635. Furthermore, it will be emphasized in MKT 636. In addition to the introductory course MKT 630, there are two other core courses, MKT 631 and 635, that are shared with the SCE program. Therefofre, LO3 will be reinforced in these two courses. MKT 631 also introduces students to, LO4, the use of busniness software tools. LO4 will be reinforced and emphasized in the two hands-on courses that will be taught in the computer lab – MKT 632 and 633.

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<sup>&</sup>lt;sup>9</sup> An assessment plan is typically a tabular grid that illustrates the artifacts, rubrics, assessment team, and periods of assessment for the SLOs.

ced in MKT 631 again and unication skills. Hence, LO5
have obtained in this e team with students in SCE
r a sample curricular map.)
i a sample curricular map.)
uated, i.e. course mapping? riculum and note whether n the development of
s. As shown in the n MKT 636 by a combination in MKT 740 by a 32 by a combination of itten reports.
rning outcome. (e.g, every
arning outcomes will be
assessment is conducted.)
elect courses. The program
ta collection will start from
ıment for details.
ent/faculty feedback.
ty whose courses are to be
m of the learning goal(s)
lassroom assignments.

<sup>&</sup>lt;sup>10</sup> Course mapping (or "curricular mapping") is a representation of how faculty intend to approach and assess each of the student learning outcomes identified for the courses for the degree program, with an emphasis on courses required for all degree candidates. It is a master chart that indicates which objectives are being met, to what extent, and how often. This identifies whether an objective is "introduced," "developed," and/or "mastered" within a given course; it may be helpful also to chart any classroom-based assessment measures used to demonstrate that claim.

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	Selected artifacts from courses across the curriculum will be evaluated using rubrics on an annual basis to inform the faculty as they alter and improve the curriculum. Benchmarks relative to course artifacts will be					
	based on appropriate faculty consensus and will be developed after the first initial	review proc	ess is concluded.			
5j	What individuals or groups will be responsible for data collection? (150 word limit,	)				
<i>-</i>	The graduate committee of the proposed program and faculty who teaches in the		oaram.			
		о. оросов. р.	<u> </u>			
5k	How will the data and findings be shared with faculty? (150 word limit)					
	Data and findings will be shared with the graduate committee of the program who findings to the full program faculty. Assessment data will also be shared with relev committees. Both will occur on an annual basis.	•	•			
51	How will the data he used for making programmatic improvements? (150 word lin	n;+)				
31	How will the data be used for making programmatic improvements? (150 word ling Student performance on selected artifacts will be measured against program learn		es Faculty			
	analysis will focus on shortcomings identified through specific artifacts. That inform	_	-			
	approprirate faculty curriculum committee that will provide input to the program f					
	to the curriculum. This will occur annually.					
_						
5m	What are the measures of teaching effectiveness? (150 word limit)  All instructors will use the University Teacher Course Evaluation (TCE) process to be	a avaluated	huthair students			
	at the end of each course. The Department Chair will review the TCE results and pro		•			
	instructor. This will occur on an annual basis.	ovide jeedb	ack to the			
5n	What efforts to improve teaching effectiveness will be pursued based on these me					
	Faculty will make use of existing University resources (for example CELT – the Center for the Enhancement of					
	Learning and Teaching) to improve.					
5o	What are the plans to evaluate students' post-graduate success? (150 word limit)					
30	Surveys of graduating students will be conducted annually. Surveys to alumni will be	e conducte	d every five			
	years.		, ,			
6. Misce						
6a	Is there anything else about the proposed program that should be mentioned? (15	50 word limi	t)			
	n/a					
7. Non-C	Course Requirements					
7a	Will the program require completion of a bachelor's degree from a fully	Yes 🖂	No 🗌			
7 u	accredited institution of higher learning?	163				
	If "No," explain below. (150 word limit)					
	The Graduate School requires applicants to have an overall GPA of 2.75 on					
7b	undergraduate work. Will the program have a higher undergraduate GPA	Yes 🗌	No 🔀			
	requirement?					
	If "Yes," describe below. (150 word limit)					

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7c	Will the proposed program include requirements for testing (e.g. GRE, GMAT,	Yes 🖂	No 🗍				
	TOEFL) to be considered for admission?						
	If "Yes," name each test and describe the specific requirements, scores, etc. below.	(150 word	limit)				
	Students applying for admission will be evaluated primarily on standardized test scores (GMAT or GRE; either will be accepted) and undergraduate grades and major. The TOEFL will be required for non-native English-speakers who do not have a degree from an accredited U.S. university, though this requirement may be waived based on an interview or other considerations. Work experience is not required. There are no explicit minimum scores established by the UK Graduate School. Furthermore, there are no specific course pre-requisites other than college-level calculus and introductory statistics. However, as mentioned above, we expect that most of the admitted applicants will have undergraduate degrees in business, engineering, economics, mathematics, statistics, or agrieconomics.						
7d	Will the program have a world language requirement?	Yes	No 🖂				
	If "Yes," describe below. (150 word limit)						
7e	The Graduate School allows transfer of up to nine credits or 25% of course work. Pl credit limitations below for the proposed program. (150 word limit)	ease descril	be transfer				
	Not applicable. This is a professional master's degree offered in a cohorted, lock-ste be permitted.	ep format. 1	ransfers will not				
7f	Will the program have a thesis requirement (Plan A)? (If "Yes," explain the requirements below. If "No," proceed to question 6g)	Yes 🗌	No 🖂				
7g	Will the program have a non-thesis requirement (Plan B)? (If "Yes," explain the requirements below. If "No," proceed to question 6h)	Yes 🔀	No 🗌				
	If "Yes," explain the requirements below.						
	After completing all eight core courses, students are required to take MKT 740 Indu	stry Project	t. Please see 7h				
	for details on the final examination criteria of MKT 740. A student will be awarded a successfully completing MKT 740.	a degree on	ly after				
7h	Provide the final examination criteria.	Yes 🔀	No 🗌				
	As part of the required course MKT 740 Industry Project, student teams will be requ	uired to pro	vide a written				
	project report accompanied by an oral presentation to a faculty committee. Comm	ittee memb	ers examine the				
	technical competency of students at the oral presentation. Each team will be assign	ned a grade	based on both				
	their written report and their oral presentation. Each team member will rate other	members o	f the team on				
	their contibutions, in term of efforts, prefssionalism and quality of the contribution	. Finally, ea	ch student's				
	individual grade will be adjusted based on the peer evaluations of their team members	oers.					
7i	Describe termination criteria.	Yes 🗌	No 🗌				
	The termination of a student follows the criteria set forth by the UK Graduate Scho	ol.					
	In particular, when students have completed 12 or more semester hours of graduate	te course w	ork with an				
	average of less than 3.0, they will be placed on scholastic probation. Students will have one full-time semester						

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or the equivalent (9 hours) to remove the scholastic probation by attaining a 3.0 average. If probation is not removed, students will be dismissed from the program. Students who have been dismissed from the program for this reason may apply for readmission after two semesters or one semester and one full summer term. Readmitted students will have one full-time semester or the equivalent (9 hours) to remove the scholastic probation by attaining a 3.0 average. Besides, a student's enrollment in the program will also be terminated for either one of the following reasons: Scholastic probation for three enrolled semesters. 2) Earn a failing grade (E) in MKT 740. 8. Course Requirements. Document the total credit hours required by level below. At least two-thirds of the minimum requirements for the master's or specialist degree must be in regular courses, and at least half of the minimum course 8a requirements (excluding thesis, practicum, or internship credit) must be in 600- or 700-level courses. 500-level: 0% 400G-level: 10% 600-level: 80% 700-level: *10%* What is the total number of credit hours required for the degree?<sup>11</sup> (e.g. 24, 32) 30 8b\* If an explanation about the total credit hours is necessary, use the space below. (150 word limit) n/a Use the grids below to list core courses, electives, courses for a concentration, etc. Use the course title from the Bulletin or from the most recent new/change course form. **Program Major Core Courses.** These courses are required for <u>all</u> students in the program and include 8c\* prerequisite courses. Check the appropriate box to describe the course as either "program core" or "prerequisite." Prefix & Credit Course Status<sup>12</sup> Course Title Type of Course Number Hrs Pgm Core MKT 630 Supply Chain Fundamentals and Strategy 3 Change Prerequisite Pgm Core MKT 631 3 Production and Operations Managment New Prerequisite Pgm Core MKT 632 Supply Chain Modeling and Analysis 3 New Prerequisite Pgm Core MKT 633 Applied Data Analytics 3 New Prerequisite Pgm Core MKT 634 Quality Management and Lean Operations 3 New Prerequisite

Pgm Core

Prerequisite

3

New

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MKT 635

Logistics Management

<sup>&</sup>lt;sup>11</sup> A non-thesis option (Plan B) requires that six or more graduate credit hours of course work be submitted in lieu of a thesis.

<sup>&</sup>lt;sup>12</sup> Use the drop-down list to indicate if the course is a new course ("new"), an existing course that will change ("change"), or if the course is an existing course that will not change ("no change").

MKT 636	Sourcing, Purchasing and Contract Management	Pgm Core Prerequisite	3	New			
MKT 637	Negotiation in Supply Chain		3	Change			
MKT 740	Industry Project	Pgm Core Prerequisite	3	New			
		Pgm Core Prerequisite		Select one			
		Pgm Core Prerequisite		Select one			
		Pgm Core Prerequisite		Select one			
		Pgm Core Prerequisite		Select one			
		Pgm Core Prerequisite		Select one			
		Pgm Core Prerequisite		Select one			
Total <b>Core Courses</b> Credit Hours: 27							
	Is there any narrative about prerequisite courses for the	he program that shoul	d be				
8d	included in the Bulletin? If "Yes," note below. (150 word limit)						
	Students should earn at least C grades in a college-level Calculus course (e.g., MA123 Elementary Calculus and						
	Its Applications, or MA 113 Calculus I, or equivalent) and a Statistics course (e.g., STA 296 Statistical Methods, STA 381 Engineering Statistics, ECO 391 Economic and Business Statistics, or equivalent) before gaining						
	admission.	,	1	/ 3 0 0			
8e	Is there any narrative about core courses for the progrin the Bulletin? If "Yes," note below.	ram that should be inc	luded	Yes No 🖂			
	$ \textbf{Program Guided Electives}^{13} \ ( \textbf{Guided electives for } \underline{\textbf{all}} \ \textbf{st} \\$	tudents in the program	ı.)				
8f*	Does the program include any guided electives? (If "Yes," indicate and note the specific courses in the grid below. If "No," indicate and proceed to question 7i.)						
8g*	Using the grid provided, list the guided electives below	V					
Prefix & Number	Course Title		Credit Hrs	Course Status <sup>14</sup>			
SCE 614	Sustainable Production Systems and Supply Chains	<u> </u>	3	New			
MFS 600	, , , , , , , , , , , , , , , , , , , ,		3	No Change			
	, ,		I .	_			

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<sup>&</sup>lt;sup>13</sup> Guided electives are available to all students in the program and are organized as groups of elective courses, from which a student chooses one (or two, or three, etc.).

<sup>&</sup>lt;sup>14</sup> Use the drop-down list to indicate if the course will be newly proposed as a new course ("new"), if the course is an existing course that will change ("change"), or if the course is an existing course that will not change ("no change").

MFS 613	Sustainability, Ethics & Leadership in Manu. Orga.		3	3 No Change		
MKT430G	Service Marketing Management		3	Change		
MGT610	Global Management		3	No Char	ige	
MGT 697	Leadership, Communications & Ethics		3	No Char	ge	
CPH 600	Health Services and Systems Organizations		3	No Char	ige	
PA 602	Strategic Planning and Organizational Change in the P Nonprofit Sectors	Public and	3	No Char	ge	
HMT588	Strategic Mgmt in the Hosp & Fd Serv Ind		3	No Char	ige	
				Select o	ne	
	Total Credit Hours as	Guided Electives:	3			
8h tl	there any narrative about guided electives courses that some Bulletin? If "Yes," note below. (150 word limit)			Yes 🖂	No	
	tudent can select one elective from the approved list unde irector.	r the guidance of th	ie facult	y advisor o	or the program	
P	rogram Free Electives <sup>15</sup> . (Free electives for <u>all</u> students in	n the program.)				
8i* D	oes the program include any free electives? (If "Yes," ind	icate and proceed	to	Yes 🗍	No 🖂	
q	restion 7j. If "No," indicate and proceed to 7l.)					
8j* V	What is the total number of credit hours in free electives?	n/a				
∣ 8k ∣	rovide the free electives courses language that will be inc mit)	cluded in the Gradu	ıate Sch	ool Bulletii	n. ( <i>150 word</i>	
n,	/a					
С	ourses for a program's concentration(s).					
С	lick <u>HERE</u> for a template for additional concentrations <sup>16</sup> .					
D D	oes the program include any concentrations? (If "Yes," in	ndicate and procee	d to (	v 🗆	N- M	
8I q	uestion 7m. If "No," indicate and proceed to 7p.)			Yes	No 🔀	
			·			
8m C	oncentration name: n/a					
Prefix &	Course Title		Credit			
Number	(Check the appropriate box to describe the course as "a	a core course for	Hrs	Cou	rse Status <sup>17</sup>	
INGITIDE	the concentration" or "an elective course for the co	ncentration.")	1113			
		Core Elective		Select o	ne	
		Core Elective		Select o	ne	

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<sup>&</sup>lt;sup>15</sup> Program free electives are available to all students in the program (regardless of any concentration(s)) and the choice of which course(s) to take is up to the student. Courses are not grouped but can be described as "student must take three courses at the 600-level or above."

<sup>&</sup>lt;sup>16</sup> Append a PDF with each concentration's courses to the end of this form.

<sup>&</sup>lt;sup>17</sup> Use the drop-down list to indicate if the course will be newly proposed as a new course ("new"), if the course is an existing course that will change ("change"), or if the course is an existing course that will not change ("no change").

			Core Elective		Select one
			Core Elective		Select one
			Core Elective		Select one
			Core Elective		Select one
			Core Elective		Select one
			Core Elective		Select one
			Core Elective		Select one
			Core Elective		Select one
8n	Provide concentration-relate limit)	d language that should be	included in the Gradu	uate Scho	ol Bulletin. (150 word
	n/a				
80	Does the program have an acproceed to question 7p. If "N	•			Yes No 🖂
8p	Concentration #2 Name:	n/a			
		Course Title			
Prefix & Number	(Check the appropriate be	ox to describe the course a "an elective course for the	concentration.")	Credit Hrs	Course Status <sup>18</sup>
			Core Elective		Select one
			Core Elective		Select one
			Core Elective		Select one
			Core Elective		Select one
			Core Elective		Select one
			Core		Select one
			Elective		

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<sup>&</sup>lt;sup>18</sup> Use the drop-down list to indicate if the course will be newly proposed as a new course ("new"), if the course is an existing course that will change ("change"), or if the course is an existing course that will not change ("no change").

			Core Elective	Select one			
			Core Elective	Select one			
	<u> </u>		<u> </u>				
		Total Credit H	ours, Concentration #	2:			
	Provide concentra			aduate School Bulletin for the second			
8q	concentration. (1	• •	be included in the di	addate school bulletiil for the second			
	n/a						
8r	Is there anything	else about the proposed program t	that should be mention	oned? (150 word limit)			
	n/a			,			
9. Degre	e Plan						
J. Degre		lan for the proposed program by li	isting in the table bale	but the courses that a tunical student			
			•	by the courses that a typical student			
9a		semester. Use the spaces for "Year	•	·			
	available, click <u>HERE</u> for a template for additional concentrations. Append a PDF with each concentration's						
	semester-by-sem	ester program of study to the end	of this form.				
	YEAR 1 - FALL:	MKT 630: Supply Chain Strategy MKT 631: Productuction and Operations Management MKT 632: Supply Chain Modeling and Analysis	YEAR 1 - SPRING:	MKT 634: Quality Management and Lean Operations MKT 635: Logistics Management MKT 636: Sourcing, Purchasing and Contract Management MKT 637: Negotiation in Supply			
		MKT 633: Applied Data Analytics		Chain One Elective (any semester) Industry Project (summer session)			
	YEAR 2 - FALL :		YEAR 2 - SPRING:				
	YEAR 3 - FALL:		YEAR 3 - SPRING:				
9b	courses that make	o the degree plan above, explain ho e up the program. (150 word limit)					
	and frameworks of three core course, modeling supply of predictive models.  In the second sem they learn lean and methods and softwintegrated logistic contract design. I models they learn improve their integrated	of supply chain. Students also learn is taught in the first semester: proceed thain and using Excel solver to solve, building decision trees and using tester, students learn three functional of the six sigma concepts and statistical ware they learned in MKT 633. In Mare they learned in MKT 633.	some more in-depth tess analysis and basice optimization supply Tableau for data visual areas of supply chall quality control tools MKT 635, they learn we 636, they learn strate need to utilize the investing and MKT 632. In	chain problems in MKT 632; running alization in MKT 633.  In in three core courses. In MKT 634, which require them to utilize some varehousing and location models, gic sourcing, supplier selection and entory models and optimization this semester, they also further			

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Students are allowed to chose one elective from the list of eligible courses to acquire background information in a particular industry that interests them, such as manufacturing, health care, service, hospitality, small business, and non-profit. This is generally done in the second semester. But, it can also be done in the first semester to suit a student's schedule (subject to the approval of the program director.)

In the summer session of year one, students apply the knowledge they have learned in the classroom in the previous two semesters to an industry project at a sponsoring company (a.k.a. MKT 740). Each project is carried out by a team of three to five students. A team needs to write a report and present their findings to both the faculty advisors and the personnel from the sponsoring company at the end of the summer session to earn course credit. The final grade for this course will be granted by the faculty committee consisting of all faculty advisors.

	Reviewing Group	Date		ically takes the form of meeting minutes).
	Name	Approved	Contact Perso	n Name/Phone/Email
	(Within College) In addi	tion to the inform	nation below, att	ach documentation of department and college
10a	approval. This typically	takes the form o	f meeting minutes	s but may also be an email from the unit head
	reporting department-	and college-level	votes.	
	Department of			
	Marketing and	12/13/2018	David Hardest	ty / (859) 257-9419 / david.hardesty@uky.edu
	Supply Chain faculty			
	Gatton College of			
	Business and	4/19/2019	Nicole Jenkins	/ (859) 218-1649 / nicole.t.jenkins@uky.edu
	Economics faculty			
			/	/
			/	/
10b	(Collaborating and/or A  Department of  Mechanical  Engineering faculty	inected Offits)	/	/
	College of Engineering faculty		/	/
			/	/
			/	/
			/	/
			/	/
			/	/
			/	/
			/	

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He	ealth Care Colleges Council (if
ap	oplicable)
Gı	raduate Council

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#### **INFORMATION REQUIRED BY CPE AND SACS**

### 11. Program Overview – Program Quality and Student Success

11a\*

Highlight any distinctive qualities of the proposed program. Are any faculty nationally or internationally recognized for expertise in this field? Does this program build on the expertise of an existing locally, nationally, or internationally recognized program at UK? (300 word limit)

The Gatton College of Business and Economics has a number of nationally and internationally recognized faculty members with expertise in the area of supply chain management and related fields. The proposed program is hosted within the Department of Marketing and Supply Chain, where faculty members serve on the editorial boards of several premier journals in the field of supply chain management or a related field, such as POM, JMR and JM.

The Gatton College has a proven track record in providing high quality graduate level business education. The one year accelerated MBA program was ranked in the top 15% of all AACSB accredited U.S. business schools. The recently launched Master of Science in Finance program shows the sign of success by doubling its enrollment in the second year.

The proposed SCM program is developed collaboratively by the business and engineering schools at UK with courses taught by faculty from both colleges. The program is designed to develop multi-disciplinary skills in students by providing collaboration between students enrolled in both SCM and SCE (currently proposed by UK's engineering school). There is no other supply chain MS program in the United States with a such a unique structure.

Thus, the proposed MS in Supply Chain Management will be distinguished in its scientific depth and breadth, collaboration between engineering and business schools in its development and delivery, its nationally and internationally recognized faculty, and the proven experience in delivering graduate level business education. It will serve UK, Kentucky and the nation as a unique place to train the next generation of business leaders in the field of supply chain and operations management.

11b

Clearly state the student admission, retention, and completion standards designed to encourage high quality. (300 words)

The MS in Supply Chain Management will be housed in and administered by the Department of Marketing & Supply Chain. The day-to-day operation of the program will be the responsibility of the program director. A faculty committee will be responsible for the admissions process. The program director will make the final decisions on admission.

Admission: Students will be evaluated on standardized test scores (GMAT or GRE; either will be accepted) and undergraduate grades and major. The TOEFL will be required for non-native English-speakers who do not have a degree from an accredited U.S. university, though this requirement may be waived based on an interview or other considerations. Work experience is not required. There are no explicit minimum scores established by the UK Graduate School. Furthermore, there are no specific course pre-requisites other than college-level calculus and introductory statistics. Applicants with undergraduate degrees in business, engineering, economics, mathematics, statistics, or agrieconomics will be given priority.

Retention: Once enrolled in the program, each student will be assigned a faculty advisor, who will help the student be successful in the program.

Completion: Students must meet all requirements set by the Graduate School. In particular, they must maintain a GPA of 3.0 or better. Students whose GPA falls under 3.0 are placed on probation; if they cannot improve their GPA during the probation period (one semester), they are removed from the program.

11c\*

Describe how the proposed program will articulate with related programs in the state. Include the extent to which student transfer has been explored and coordinated with other institutions. Note: Convert all draft articulation agreements related to this proposed program to PDF and append to the end of this form. (300 word limit)

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None of the universities in the commonwealth offer a Master of Science in Supply Chain Management program, which creates an opportunity to train professionals for jobs in this growing field. Since this is a lock-step, one year accelerated program, only fall admission is offered and transfer is not accepted. 11d Identify the applicant pool and how applicants will be reached. (300 word limit) The program will be marketed regionally and internationally to recruit undergraduate students who are considering graduate ediucation and are interested in pursuing an advanced degree in supply chain management. Information sessions will be held in other colleges at the University of Kentucky, such as the College of Arts and Sciencess and College of Engineering, and other universities in the commonwealth such as EKU and WKU, etc. Open houses in conjuction with other master level degreen programs at the Gatton College will be held in major cities in Kentucky, such as Lexington, Louisville and northern Kentucky. Online marketing and advertisement (e.g., Facebook ads and other social media channels) will also be utilized aggressively to increase the awareness of the program to the targeted students. International student recruitment efforts will be focused on a selected set of Gatton College's partner schools. This will be marketed as a 2+2+1 program, i.e., international students finish the first two years at their home institutions and the later two years at UK. Then, they attend this master program in their fifth year of study at *UK.* The application process will be streamlined for these 2+2+1 students. 12. Mission: Centrality to the Institution's Mission and Consistency with State's Goals (related to 2b) Explain how the program objectives support at least two aspects of UK's institutional mission and 12a\* academic strategic plan? (150 word limit) The proposed MS SCM program will directly support and implement UK's strategy in (1) Graduate Education and (2) Research and Scholarship. This will be achieved by: 1. Facilitating learning informed by scholarship and research, thereby expanding knowledge and skills; and 2. Serving the commonwealth and the society by developing capabilities and expanding scholarship to address some of the most challenging problems faced by industry in the supply chain domain. (related to 2b) How do the program objectives support at least two aspects of the Council on Postsecondary 12b\* Education's (CPE) Strategic Agenda and the statewide implementation plan? (300 word limit) One aspect of the CPE's Strategic Agenda that the proposed program will support is to "Increase degree and certificate completion, fill workforce shortages, and guide more graduates to a career path." Another aspect of the CPE agenda that will be impacted by the proposed program is that "Kentucky will be stronger by training a globally competitive, entrepreneurial workforce; educating an engaged, informed citizenry; improving the health and well-being of families; and producing new research and discoveries that fuel job creation and economic growth." KY is a national logistics hub due to its geographical location. The state is home to some of the large companies who are major players in supply chain (e.g., UPS, DHL, Amazon, etc.). In addition, KY is also home to some large OEMs (e.g., Toyota, GE Appliances, Ford, etc.) and a major player in the automotive and aerospace industries. The proposed SCM MS degree will contribute to CPE's strategic objectives by offering advanced education in the supply chain area that will directly impact a number of important industry sectors in the state. The program will prepare industry-ready graduates who can help enhance the performance of supply chain operations and help increase competitiveness of Kentucky companies to promote economic growth. Irrespective of the technologies used by companies, successful supply chain operations are essential to develop products and deliver them to end consumers. The proposed SCM program will prepare graduates who can contribute to achieving this goal. Further, the online modality will increase program accessibility statewide, as well as across the nation, and provide better opportunities to increase degree completion. If an approval letter from an Education Professional Standards Board (EPSB) is required, check the box below 12c\* and append a PDF version of the letter to this form. (E.g. any program leading to teacher, principal, or superintendent certification, rank change, etc.)

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### 13. Resources

13a\*

How will the program support or be supported by other programs within the institution? For example, shared faculty, shared courses, collaborative research, etc. (300 word limit)

The MS SCM program and the MS in Supply Chain Engineering (SCE) program (currently being proposed by the College of Engineering) are designed as two independent degree programs sharing three common core courses (9 credit hours) and one capstone Industry Project course (3 credit hours). In addition to taking the three common course courses, students in the MS SCM program are required to take another five Business core courses (15 credit hours) and one elective course (3 credit hours) from a list of recommended courses.

The elective is intended to allow students to become familiar with a subject domain. Hence, the list of elective courses are carefully selected from existing courses offered by the Gatton College of Business and Economics, College of Engineering, College of Public Health, Martin School of Public Policy and Administration and College of Agriculture, Food and Environment.

Furthermore, in the summer capstone Industry Project course, students will work on an industrial project at a sponsoring company under the supervision of faculty from both Gatton and College of Engineering.

13b

What will be the projected "faculty-to-student in major" ratio? (150 word limit)

There are three FTE faculty in the program. The initial target enrollment will be 20. It is expected to grow to 40 students in 5 years. So the ratio is between 1:6.7 to 1:13.3.

13c

Describe the library resources available<sup>19</sup> to support this program. Access to the qualitative and quantitative library resources must be appropriate for the proposed program and should meet recognized standards for study at a particular level or in a particular field where such standards are available. Adequacy of electronic access, library facilities, and human resources to service the proposed program in terms of students and faculty will be considered. (300 word limit)

UK library resources are generally sufficient to support this program. The request to subscribe to a new journal, INFORMS Journal on Applied Analytics, in assisting the teaching needs of the program has been made to the library.

13d

Describe the physical facilities and instructional equipment available to support this program. Physical facilities and instructional equipment must be adequate to support a high-quality program. Address the availability of classroom, laboratory, and office space, as well as any equipment needs. (300 word limit)

The three shared core courses (MKT 630, 631 and 635) will be delivered in a classroom with recording and brodcasting capability. MKT 632 and 633 will be delivered in a computer lab. MKT 740 will need multiple small group study rooms. The rest of the courses will be delivered in a regular classroom. All of these are available in the Gatton College building. No additional physical facilities will be required to deliver the courses for this program.

### 14. Demand and Unnecessary Duplication

Provide justification and evidence to support the need and demand for this proposed program. Include any data on student demand, career opportunities at any level, or any recent trends in the discipline that necessitate a new program. (300 word limit)

14a\*

- This evidence is typically in the form of surveys of potential students and enrollments in related programs at the institution.
- Anecdotal evidence is insufficient. Demonstrate a systematic collection of data, thorough study of the data, and a reasonably estimated student demand for the program.

Provide evidence of student demand at state and national levels.

Kentucky is a national logistics hub due to its central geographic location. The state is within a day's drive of 65 percent of the U.S. population. It boasts highly developed logistics and distribution infrastructure and facilities. It

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<sup>&</sup>lt;sup>19</sup> Please contact Institutional Effectiveness (<u>institutionaleffectiveness@uky.edu</u>) for more information.

total investment of \$1.9 billion and nearly 4,000 new full-time jobs. Jobs related to o management are expected to grow strongly within the state as well as nationwide.	tember, 2017 perations an	7, representing a
Clearly state the degree completion requirements for the proposed program.		
(150 word limit)		
<ol> <li>Completion of the three common core courses (MKT 630, MKT 631, MKT 635)</li> <li>Completion of the five required business courses (MKT 632, MKT 633, MKT 634, MKT 636, MKT 637)</li> <li>Completion of the Industry Project course (MKT 740)</li> <li>Completion of an elective course from a list of approved electives.</li> </ol> Students must obtain an average GPA of 3.0 or higher to complete the degree		
requirements.		
Will this program replace or enhance any existing program(s) or tracks (or concentrations or specializations) within an existing program? (300 word limit)	Yes 🖂	No 🗌
being proposed in the UK. So it does not replace any other existing programs. Howe knowledge and capacity developed through this program, i.e., the research and teach	ver, the intel hing expertis	lectual e developed in
Current college students who had calculus and introductory statistics courses, and we degrees immediately after getting their bachelor's degrees are the target students. For undergrauate student majoring in Business, Engineering, Economics, Agrieconomics a related major, who wants to work in the field of supply chain management and has candidate. Both domestic and international students will be recruited. A diverse stude cultural and academic backgrouds will be highly valuable to students' learning and supply chain professional — one who works well with individuals from diverse backgrouds disciplines.  Primary feeders include UK's undegraduates in the Gatton College of Business and the supplication of the supplier of the sup	or example, as, Mathematical high GPA lent body with training to be rounds and a	a 4th year cs, Statistics or will be a good h various e a successful academic  College of Arts
public and private higher-education institutions in KY.	unaergraau	uies ai oinei
Describe the student recruitment and selection process (200 word limit)		
	te students w	vho are
considering graduate education and are interested in pursuing an advanced degree in Information sessions will be held in other colleges at the University of Kentucky and commonwealth. Open houses in conjuction with other master level degree programs held in major cities in Kentucky. Online marketing and advertisement (e.g., Facebook channels) will also be utilized aggressively to increase the awareness of the program International student recruitment efforts will be focused on a selected set of Gatton Constitution.	in supply cha other univer at the Gattor k ads and oth to the targe College's par	in management. sities in the n College will be her social media ted students. tner schools.
	new logistics/distribution locations or expansions have been announced through Septotal investment of \$1.9 billion and nearly 4,000 new full-time jobs. Jobs related to a management are expected to grow strongly within the state as well as nationwide.  With all these job opportunities in this growing area, we expect a high demand for the local property of the proposed program. (150 word limit)  Clearly state the degree completion requirements for the proposed program. (150 word limit)  Students must meet the following requirements for degree completion:  1. Completion of the three common core courses (MKT 630, MKT 631, MKT 635)  2. Completion of the five required business courses (MKT 632, MKT 633, MKT 634, MKT 636, MKT 637)  3. Completion of the industry Project course (MKT 740)  4. Completion of an elective course from a list of approved electives.  Students must obtain an average GPA of 3.0 or higher to complete the degree requirements.  Will this program replace or enhance any existing program(s) or tracks (or concentrations or specializations) within an existing program? (300 word limit) if "Yes," explain:  This (along with the SCE program being proposed in the engineering school) is the being proposed in the UK. So it does not replace any other existing programs. Howe knowledge and capacity developed through this program, i.e., the research and teach the field of supply chain management, will certainly enhance the existing MBA program identify the primary feeders for the program. (150 word limit)  Current college students who had calculus and introductory statistics courses, and we degrees immediately after getting their bachelor's degrees are the target students. For undergrautate students who had calculus and introductory statistics courses, and we degrees immediately after getting their bachelor's degrees are the target students. For undergrautate students who had calculus and introductory statistics courses, and we degrees immediately after getting their bachelor's degrees are the target students. For	new logistics/distribution locations or expansions have been announced through September, 2017 total investment of \$1.9 billion and nearly 4,000 new full-time jobs. Jobs related to operations an management are expected to grow strongly within the state as well as nationwide.  With all these job opportunities in this growing area, we expect a high demand for this program.  (150 word limit)  Students must meet the following requirements for the proposed program.  (150 word limit)  Students must meet the following requirements for degree completion:  1. Completion of the three common core courses (MKT 630, MKT 631, MKT 635)  2. Completion of the five required business courses (MKT 632, MKT 633, MKT 633, MKT 634, MKT 636, MKT 637)  3. Completion of the Industry Project course (MKT 740)  4. Completion of an elective course from a list of approved electives.  Students must obtain an average GPA of 3.0 or higher to complete the degree requirements.  Will this program replace or enhance any existing program? (300 word limit)  If "Yes," explain:  This (along with the SCE program being proposed in the engineering school) is the first supply cheing proposed in the UK. So it does not replace any other existing programs. However, the intel knowledge and capacity developed through this program, i.e., the research and teaching expertis the field of supply chain management, will certainly enhance the existing MBA program at Gatton identify the primary feeders for the program. (150 word limit)  Current college students who had calculus and introductory statistics courses, and who want to a degrees immediately after getting their bachelor's degrees are the target students. For example, a undergrauate student majoring in Business, Engineering, Economics, Agrieconomics, Mathemata a related major, who wants to work in the field of supply chain management and has a high GPA candidate. Both domestic and international students will be recruited. A diverse student body wit cultural and academic backgrouds will be highly valuable to stu

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		at UK. Then, they attend this master progrest estreamlined for these $2+2+1$ students.	am in the	eir fifth yed	ar of study at		
	Applications (on-line applications submitted in accordance with the Graduate School Policies and including resume, relevant university transcripts, statement of purpose, letters of recommendation) will be reviewd by the SCM program admission committee consisting of 2-3 faculty members. The program director will make the final admission decision.						
1 / f*	Coosify any distinctive qualities of	the proposed program (200 ward limit)					
14f*	The proposed Supply Chain Manag Economics at UK, but will be devel Economics (Gatton) and the Colle courses that will also be required for apporach is adopted to ensure that	the proposed program. (300 word limit) tement (SCM) MS program is offered by the oped and taught jointly by faculty from both ge of Engineering (CoE) at UK. The proposor the newly proposed (by CoE) Supply Chastudents can understand the complexity of atture of the supply chain related jobs.	th the Gai sed degre ain Engin	tton Colle ee include. reering M	ge of Business & s a set of core S program. This		
14g	Provide any evidence of a projecte proposed program. (300 word limit	d net increase in total student enrollments	s to the ca	ampus as	a result of the		
	will come from the Gatton undergra students from other colleges and un	nber of students enrolled in the Gatton Colladuate programs. But we are expecting to a viversities, as well as a few young pofession chain management programs exist in the s	have a sig nals from	gnificant n the indus	number of try to enroll in		
14h	Use table below to estimate stude	nt demand for the first five years following	imnleme	entation			
2 111	Academic Year	# Degrees Conferred	•	(headcour	nt)		
	2020 - 2021	20	20				
	2021 - 2022	25	25				
	2022 - 2023	30	30				
	2023 - 2024	35	35				
	2024 - 2025	40	40				
14i	Clearly describe all evidence justify academic reasons. (300 word limit	ing a new program based on changes in th	ie acaden	nic discipl	ine or other		
	Several reports have highlighted the chain related careers (see point 14d savvy workforce capable of manage technologies such as Internet of The Therefore, the establishment of the	e national and state skills gap and demand a, 14m, ad 14n for details). In addition, the ing and improving complex supply chains t ings (IoT), digitalization, blockchain, etc., MS in SCM degree program at UK is both force for the state, it will also help to deve	importar o operate has also l compelli	nce of a sk e in enviro been well ng and tin	cilled, technically naments with new publicized. nely. No only will		
1.4:	Has the Council on Postsocondany	Education identified similar programs 20	V	'es 🖂	No 🗌		
14j	If "Yes," the following questions (1	Education identified similar programs? <sup>20</sup> 4jh1 – 14jh5) must be answered.	Υ	es 🖂	NO [		
100	Does the program differ from exis	sting programs in terms of curriculum, focu	ıs,	<b>.</b>	N- C		
(1)	objectives, etc.? (150 word limit)	,	Y	'es 🔀	No 🗌		
	If "Yes," explain:						
	0 <b>1</b> 0	er of Science in Data Analytics (MSDA) pro program are very different in terms of curr	_	•	· ·		

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<sup>&</sup>lt;sup>20</sup> Please contact OSPIE (OSPIE@L.uky.edu) for help with this question.

	students supply chain specific domain knowledge with a few common data analytic and Tableau. Their program teaches students general data analytics methodologie using various programming languages and packages.							
	Our nine core courses are: Supply Chain Strategy; Production and Operations Madeling & Analysis; Applied Data Analytics; Quality Management & Lean Operation Management; Strategic Souring & Procurement; Negotiation in Supply Chain; and	ations; Logis	rtics					
	MSDA's ten core courses are: Programming for Analytics (Python); Introduction of Introduction to Statistical Programming (R); Story Telling with Data (Tableau); Data Analytics III (R); Data Mining (SAS); Data Management; and Capstone.	_						
(2)	Does the proposed program serve a different student population (e.g., students in a different geographic area or nontraditional students) from existing programs? (150 word limit)	Yes 🗌	No 🔀					
	If "Yes," explain:							
(-)			57					
(3)	Is access to existing programs limited? (150 word limit)	Yes	No 🔀					
	If "Yes," explain:							
(4)	Is there excess demand for existing programs? (150 word limit)	Yes 🖂	No 🗌					
(4)	If "Yes," explain: According to the CPE, MSDA at University of Louisville is the ex							
	overlap with our proposed program due to the shared CIP code. Both programs sh							
	students who like quantitative problem solving. However, our program is intended							
	interested in the domain knowledge and want to work in the supply chain area. The							
	University of Louisville attracts those who are more generalist and like to work with							
	In summary, there is little overlap in the markets that these two programs cater. In		, we can also					
	consider that there is excess market demand beyond what MSDA can accommadate	e.						
	A STATE OF THE STA							
(5)	Will there be collaboration between the proposed program and existing programs? (150 word limit)	Yes 🖂	No 🗌					
	If "yes," explain the collaborative arrangements with existing programs. If "no," excellaboration with existing programs.							
	The proposed SCM is hosted in the department of Marketing and Supply Chain. The	=	O .					
	Analytics, is hosted in College of Business, University of Louisville. There are ongoing research collaborations							
	between the two units. For example, U of L organizes annual CLIK conference in early June and our							
	department always send speakers and participants there. With the building of the two new master degree programs in the two universities, the research collaborations between the two units will be strengthened in the							
	future. Gatton College sponsors a Supply Chain Forum annual conference in late Feb. which attracts around							
	150 participants. In the future, we will reach out and invite faculty and students from the new Data Analytics							
	program at U of L to participate in our annual conference.							
	In addition, the propose SCM program has close collaborations with the College of	_	g at University					
	of Kentucky. Details are explained in the Program Overview section (point 2a and	2e).						
	Are there similar programs in other Southern Besievel Education Beauti (CDED)							
14k*	Are there similar programs in other <u>Southern Regional Education Board (SREB)</u> states in the nation?	Yes 🖂	No 🗌					
	If "Yes," please answer the questions below to demonstrate why this proposed pr	ngram is noc	ded in addition					
	to the one(s) currently in existence.	ografii is fiee	dea in addition					
14k.								
TTK.	The following universities also have an MS degree in Supply Chain Managemer	nt: University	of Florida					
	University of Alabama, University of Arkansas, University of Tennessee, and Ur	•						
	There is one MS program in International Logistics at the Toyas ASM Internation	· · · · · · · · · · · · · · · · · · ·						

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14k.i	i*	Does the program differ from existing programs in terms of curriculum, focus, objectives, etc.?	Yes 🔀	No 🗌
		If "Yes," explain. (300 word limit)		
		The UK program is a collaboration with the College of Engineering, which make	s it unique a	nd different
		from any of the aforementioned programs (or any similar programs in the U.S.)	•	na amerent
		Trom any or the diorementioned programs (or any similar programs in the o.s.,		
		Does the proposed program serve a different student population (e.g.,		
14k.ii	i*	students in a different geographic area and non-traditional students) from	Yes 🖂	No 🗌
141.11	•	existing programs?	163	140
		If "Yes," explain. (300 word limit)		
		This program will mainly serve students in Kentucky and international students	No other si	milar program
		exists within the state of Kentucky.	. NO Other 31	illiai piografii
		Chists within the state of Kentucky.		
14k.iv	/*	Is access to existing programs limited?	Yes 🖂	No 🗌
		If "Yes," explain. (300 word limit)	163	140
		Kentuckians' access to these programs in other states is very limited due to the	ir financial a	nd geographic
		barriers.	ii iiiaiiciai a	na geograpine
		burners.		
14k.\	<b>/</b> *	Is there excess demand for existing similar programs?	Yes 🖂	No 🗌
± 11		If "Yes," explain. (300 word limit)	163	.,,,
		Same as the above.		
		Same as the above.		
		Will there be collaboration between the proposed program and existing	_	_
14k.v	i*	programs?	Yes	No 🔀
		If "No," explain. (300 word limit)		
		Due to the geographic distance, no faculty from those univesities will teach in t	he proposed	l program.
		but to the geographic distance, no ractify from those univestics will teach in t	ine proposee	, program.
	W	ould your institution like to make this program available through the		
141		ademic Common Market <sup>21</sup> ?	Yes 🔀	No
		<u> </u>		
	Cle	early describe evidence of employer demand or discipline needs. Such evidence	may include	employer
		rveys, current labor market analyses, and future human resources projections. N	•	
14m		ould demonstrate employers' preferences for graduates of the proposed progra		
		ernative existing credentials and employers' willingness to pay higher salaries to		
		ogram. (300 word limit)	J	
	-	cording to the reports published by the KY Center for Statistics, there are projec	ted 6,415, 90	01 and 9,336 job
	op	enings in KY with the job titles of "general and operations manager", "operation	ns research d	analyst", and
	"b	usiness operations specialists", respectively, in 2018 – 2022.		
	123		C .1	<i>c</i> .
		Y Occupational Outlooks to 2026 projects the "operations research analyst" to b cupations in KY with a 28.2% growth rate. The same report also projects that "g		
		cupations in K1 with a 28.2% growth rate. The same report also projects that 'g inager" to be one of the occupations with the most openings in KY, with 25,327 o		*
		ojects 15.5%, 7.3%, 5.9%, and 4.6% growth for "transportation, storage, and dis		
		ogistician", "purchasing manager", and "industrial production manager", resp		
		ening of 7,624 in Kentucky.	convery, with	a comonica
	P			
	Sin	milarly, the occupational outlook handbook published by the US Bureau of Labor	Statistics pr	rojects 27%,
		% and $7%$ national growth for "operations research analyst", "management and	alyst", and '	ʻlogistician",
	re	spectively, in 2016 – 2026.		

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<sup>&</sup>lt;sup>21</sup> Please contact OSPIE (OSPIE@L.uky.edu) for more information.

Salary information for these occupations is given in point 14n.

14n\*

Describe the types of jobs available for graduates, average wages for these jobs, and the number of anticipated openings for each type of jobs at the regional, state, and national levels.

Table 1 shows the projected job growth rate in the next five years for graduates with a master's degree in SCM from the Burning Glass national database. The job growth rate related to operations and supply chain management positions in Kentucky and the neighboring states is 13.04%, which is higher than the 9.92% growth rate in the nation for the same job category and much higher than the 7.4% general growth rate in the nation for all jobs requiring a master's degree. Meanwhile, the salary in this field is also quite attractive. Table 2 shows the statistics on the salary for two representative positions: Logistics and Supply Chain Managers and Logistics and Supply Chain Analysts/Specialists.

Table 1: Job growth in the next five years for people with a master's degree

Selected Occupations Geography Relative Growth

Selected States\*13.04%8.20%AverageNationwide9.92%7.40%Average

\* Selected states include Kentucky, Georgia, Virginia, West Virginia, Illinois, Indiana, Ohio, Alabama, Tennessee, North Carolina, Missouri, and South Carolina

Table 2: Salary Statistics

Occupation Group 25th Percentile Average 75th Percentile

Logistics and Supply Chain Managers \$65,919 \$81,984 \$97,579

Logistics and Supply Chain Analysts

/Specialists \$61,947 \$72,365 \$80,471

Note: In general, 25th percentile corresponds to people with 0-2 years of experience; average corresponds to people with 3-5 years of experience; and 75th percentile corresponds to people with 6 more years of experience.

### 15. Assessment and Oversight

15a\*

Describe *program* evaluation procedures for the proposed program. These procedures may include evaluation of courses and faculty by students, administrators, and departmental personnel as appropriate. Program review procedures shall include standards and guidelines for the assessment of student outcomes implied by the program objectives and consistent with the institutional mission. (300 word limit)

The Gatton College of Business and Economics is accredited by the Association to Advance Collegiate Schools of Business (AACSB). As part of the accreditation process that takes place every five years, all academic programs are reviewed to ensure that standards of quality and alignment with workforce needs are met. For each program, the college is required to demonstrate that relevant and appropriate learning goals have been identified and have been assessed on a regular basis to ensure students are meeting these goals. If not, the college has processes in place to identify steps for improvement. These goals are assessed annually within a three-year cycle in accordance with university requirements.

As a basic tenant of this review, all programs must capture "input from key business school stakeholders" and must be "influenced by assurance of learning results, new developments in business practices and issues" and "revision of mission and strategy that relate to new areas of instruction (2013 Eligibility Process and Accreditation Standards for Business Accreditation, pgs. 32-33). The college must demonstrate that curricular improvements have been made based on the assurance of learning (assessment) process.

All Gatton academic programs participate in the University's periodic program review, which includes a review of program curricula and assurance of learning/obtaining the learning goals outlined by each academic program.

Describe how each program-level student learning outcome will be assessed and how assessment results will be used to improve the program. (300 word limit)

All programmatic learning outcomes are assessed within a three-year cycle per university requirements. Each year, at least one learning outcome (usually several) is assessed for each academic program. Course instructors

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assess the learning outcome(s) tied to their courses through the most appropriate assessment method based on the course and learning outcome. These methods may include embedded questions on an exam, team projects/presentations, case studies or other written assignments. Faculty within each department identify the target/benchmark that assessment results should meet based on national standards or previous data collections.

Course instructors submit an assessment report, including results of the assessment itself, an interpretation of the results and suggestions for improvement if the target/benchmark was not met. The Gatton Office of Assessment and Accreditation provides oversight and assistance to faculty for the assessment process, including the submission of reports to the University central assessment office. Completed reports, along with feedback from the central assessment office, are then reviewed by the college graduate studies committee (GSC), which oversees all curricular management and changes for the graduate programs. The GSC will then recommend changes to the college/departmental faculty, as needed.

16. Cost	and Funding of the Propos	ed Program <sup>22</sup>				
16a	Will this program require				Yes 🔀	No 🗌
	If "Yes," please provide a	•	additional resour	ces that will be nee	eded to implem	ent this program
	over the next five years. (.	•				
	Existing faculty members					
	the program. However, a	•		•		
	other courses in the progr				due to schedulii	ng conflicts).
	One or two part-time instr	ructors will also b	e recruited to tea	ch in the program.		
	VACULABLE AND			tanal matea mieleta		
16b	Will this program impact of	~ . ~	and/or organizat	ional units within	Yes	No 🖂
	your institution? (300 wor	ra ilmit)				
	If "Yes, briefly describe.					
	Provide adequate docume	entation to domai	astrata sufficient	ratura an invastm	ant to the state	to offcot now
	costs and justify approval					
16c	retention rates; increase r					
	into fields that have been		•			
	The costs of implementing					
	funds that will be generate	0	11 "	C	0	
	implementing this program	v			·	· ·
	in the supply chain area in					
	Supply Chain Managemen		~ ~			
	develop talents in the supp			-	J	J
	The collaborative approach	• •	•			
	establish with industry (fo	•	oject course) can p	promote interdiscip	olinary research	and convergent
	research at the University	of Kentucky.				
	dget Funding Sources, by Ye					
	ields in number 16 are requ					
resource	es that will be required to in	mplement and su	stain the prograr	n using the spread	sheet below. Pl	ease answer in
terms of	f dollar amounts. All narrat	ives have a 100-w	vord limit.			
Total Re	sources Available from					
Federal	Sources (Federal sources	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
	grants, earmarks, etc.)					

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<sup>&</sup>lt;sup>22</sup> For questions about cost and funding of the program, please contact your department chair, business officer, or associate dean for academic affairs.

New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative/Explanation:	0				
Total Resources Available from Other Non-State Sources (Non- state sources include philanthropies, foundations, individual donors, etc.)	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative/Explanation:					
,					
State Resources (State sources include general fund revenue, grants, pass-thru funds, etc.)	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative/Explanation:					
Internal (The source and process of allocation and reallocation should be detailed, including an analysis of the impact of the reduction on existing programs and/or organization units.) <sup>23</sup> :	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
(New) Allocated Resources	0	0	0	0	0
(Existing) Reallocated Resources  Narrative/Explanation:		ove numbers incli	141,141 estment from the Coude salary and frin		
Student Tuition (Describe the impact of this program on enrollment, tuition, and fees.)	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New	600000	750000	900000	1050000	1200000
Existing	0	0	0	0	0
Narrative/Explanation:	steady state of 4 in-state and \$35	0 in FY24. The pr	nched in FY20 wi cogram will be prid and the pro forma 40.	ced at \$30,000 ini	tially (\$25,000
<u>Total</u> Funding Sources	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year

<sup>&</sup>lt;sup>23</sup> The source and process of allocation and reallocation should be detailed, including an analysis of the impact of the reduction on existing programs and/or organizational units.

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750000

900000

1050000

1200000

600000

Total New

<u>TOtal</u> New	000000	730000	900000	1030000	1200000
<u>Total</u> Existing	137000	139050	141141	143258	145407
<b>TOTAL FUNDING SOURCES</b>	737000	889055	1041141	1193258	1345407
18. Breakdown of Program Expense	es/Requirements <sup>4</sup>				
(Please note – all the fields in numl	ber 17 are required	d for the CPE's p	re-proposal form.		
Staff: Executive, Administrative &					
Managerial (Include salaries and whether new hires will be part time or full time.)	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New	25,000	25,000	25,000	25,000	25,000
Existing	23,000	23,000	23,000	23,000	25,000
Narrative/Explanation <sup>24</sup> :	Stinand and resear	arch support for	the director of the	nrogram	
Namative/Explanation .	Supena ana reset	irch support jor	ine director of the	program.	
Other Professional (Include salaries.)	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New					
Existing					
Narrative/Explanation:					
Faculty (Include salaries and whether new hires will be part time or full time.)	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New	213,890	221,944	230,028	238,143	246,29
Existing	250,000	256,250	262,656	269,223	275,95.
Narrative/Explanation <sup>25</sup> :	two faculty from (PT); Revenue sh other electives.	other department earing to the Coll	FT faculty; Overl ts in Gatton; Salar ege of Engineering one FT assistant p	ry for two adjuct p g for providing PC	rofessors
Graduate Assistants (Include salaries and/or stipends.) <sup>26</sup>	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New					
Existing					
Narrative					
Explanation/Justification:					
Student Employees (Include salaries and/or stipends.)	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New					
Existing					
Existing					

<sup>&</sup>lt;sup>24</sup> Discuss whether new hires will be full-time or part-time.

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 $<sup>^{25}</sup>$  If new hires are involved, explain whether new hires will be full-time or part-time.

<sup>&</sup>lt;sup>26</sup> Identify the number of assistantships/stipends to be provided; Include the level of support for each.

Narrative					
Explanation/Justification:					
Equipment and Instructional Materials	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New					
Existing					
Narrative					
Explanation/Justification:					
Library (Include new journal					
subscriptions, collections, and electronic access.)	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New					
Existing					
Narrative Explanation/Justification:					
Explanation/Justinication.					
Contractual Services	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New					
Existing					
Narrative Explanation/Justification:					
Academic and/or Student	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
Services	I fedi	z reai	5 Teal	4 (ea)	J Teal
New					
Existing					
Narrative Explanation/Justification:					
Oth or Command Co.	4 St V	and v	ard v	ath v	Eth War
Other Support Services  New	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
Existing	50,000	50,000	50,000	50,000	50,000
Narrative					
Explanation/Justification:	Scholarship to a	ttract top student	S.		
E. U.D. I. I. I.					
Faculty Development (Include	1st Vaar	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
travel, conference fees, consultants, etc.)	1 <sup>st</sup> Year	z Year	3 rear	4 fear	5 Year
New	10,000	10,000	10,000	10,000	10,000
Existing	13,000	13,000	13,000	13,000	13,000
Narrative Explanation/Justification:	Travel to profess	ional conference se competitions. I	s. Memebership du Build a student cha	ies. Taking studen	ts to

**NEW** MASTER'S DEGREE Page 32 of 37

TOTAL NET COST:	125,110	265,362	405,557	545,695	685,775
Total Expenses/Requirements	611,890	<u>623,694</u>	635,584	647,563	659,632
Total Funding Sources	737,000	<u>889,055</u>	1,041,141	1,193,258	1,345,402
GRAND TOTAL	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
			GENERATING P		10 014 117 15
				R THE GRAND TO E PROPOSED PI	
				omics. BEGINNIN	
				absorbed within th	
Expenses/Requirements:		•		ain Management p	· ·
TOTAL Program Budgeted	, , , , , , , , , , , , , , , , , , ,		<u> </u>	xpenditures assoc	
Existing	263,000	266,750	270,556	274,420	278,34
New	348,890	356,944	365,028	373,143	381,29
Total Expenses/Requirements	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
Narrative Explanation/Justification:	Students recruitm	nent and retentior	n. Program marke	eting.	
Existing					
New	50,000	50,000	50,000	50,000	50,00
Other	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
Explanation/Justification:					
Narrative					
Existing					
New	1 Teal	2 (64)	3 Teal	4 (64)	J Teal
Student Space and Equipment	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
Explanation/Justification:					
Narrative					
Existing					
New					
outside consulting services, etc.)					
tools, survey administration,	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
software tools, data collection					

19. Course Descriptions			
19a Program Core Courses (includes pre-major and pre-professional courses)			
Prefix &	Course Description (from the Bulletin or the most recent new/shange source form)		
Number	Course Description (from the Bulletin or the most recent new/change course form)		
	SUPPLY CHAIN FUNDAMENTALS AND STRATEGY. This course concerns the integration of key business		
MKT 630	processes that enable fulfillment of end-customers' real needs. Central to supply chain management		
	philosophy is integration - the socio-technical linkages that facilitate the efficient flows of information,		

**NEW** MASTER'S DEGREE Page 33 of 37

	ideas, knowledge, goods, services, and cash through the supply chain. This course will introduce students to the terminology, concepts, and skills related to supply chain management, with a focus on strategic, relational, and operations issues. Through this course, students will develop an understanding of important supply chain terminology, processes, systems, and improvement methodologies that enable effective management and strategy deployment.
MKT 631	PRODUCTION AND OPERATIONS MANAGEMENT. This course will introduce students to concepts, tools, and techniques necessary for planning and control of production and other operations of an organization. Organizational processes from sourcing and inventory management to production planning and scheduling as well as quality control will be covered. Students will learn how to model and analyze operations, and to evaluate impact of various strategies on the processes and on products/service quality, productivity, efficiency, and cost effectiveness, especially when there are uncertainties.
MKT 632	SUPPLY CHAIN MODELING & ANALYSIS. This course teaches students how to make business decisions based on the data and quantitative models. It introduces students to the optimization methods used in business – primarily linear and integer programming. The concepts are studied mainly in the context of applications to the operations and supply chain management field. Examples from other business disciplines such as finance and human resource management are included too. In this course, students learn to model the business problems on Excel spreadsheets, analyze and solve the models, and then interpret the solutions obtained to make recommendations to managers.
MKT 633	APPLIED DATA ANALYTICS. In today's business settings, knowledge workers increasingly rely on data-driven decision-making strategies. This course provides the necessary data analytics background for subsequent coursework dealing with topics such as quality control, inventory management, sourcing, and logistics management. It introduces students to the Normal distribution, Decision Tree Analysis, Demand Forecasting, and Interactive Data Visualization, all of which rely on data as the grist to help generate useful managerial information and insights.
MKT 634	QUALITY MANAGEMENT & LEAN OPERATIONS. This course focuses on the principles, and practices of total quality management (TQM) and lean operations. Topics that are covered include: process focus; continuous improvement; service quality; customer satisfaction; process control and capability; Six-Sigma methodology and tools; economics of quality; and organizational learning.
MKT 635	LOGISTICS MANAGEMENT. This course focuses on the physical distribution, movement, and delivery of goods and services throughout the supply chain so that the right amount of materials and/or products arrive at the right place at the right time. It requires the co-ordination, organization, and management of an organization's distribution network to perform such function as facility location, transportation, storage, material handling, packaging, inventory control, order fulfillment, and reverse logistics.
MKT 636	SOURCING, PURCHASING AND CONTRACT MANAGEMENT. Sourcing and purchasing are the processes of acquiring goods and services to support an organization's operations. Once tactical functions in vertically integrated firms, sourcing and purchasing have now become a core capability vital to an organization's success in the wake of specialization, disintegration and globalization during the past decades. Today's complex supply chain landscape poses tremendous challenges, but also generously rewards world-class management. This calls for professionals trained to understand and manage the subject on a strategic level.
IVIKI USO	This is an advanced course that aims to educate students about strategic considerations and complex decision-making processes in sourcing, purchasing and contract management. The course broadens and enhances students' knowledge and skills to manage related issues through a mixture of lectures and case analyses and discussions. Students will learn how to systematically and effectively approach complicated supply chain management problems on strategic sourcing, supplier selection, and contract design by integrating and applying the knowledge, analytics skills, and ways of thinking that they acquired in prior SCM coursework.

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NEGOTIATION IN THE SUPPLY CHAIN. This course focuses on developing your negotiating skills and
making you a more confident negotiator. By the conclusion of this course, you will have improved your
ability to diagnose negotiation situations, strategize and plan upcoming negotiations, and engage in more
fruitful negotiations, even in situations where you are dealing with difficult negotiation partners.
Because negotiating agreements is as much art as science, learning in this course will take place mainly by
doing experiential exercises, and research on negotiations will be used to supplement this learning. You will
be placed into numerous realistic negotiation settings, and you will need to prepare for, participate in, and
analyze your negotiations.
INDUSTRY PROJECT. This is a team-based industry project course where collaborative teams of Supply
Chain Engineering (those who registered in SCE 740) and Supply Chain Management students are paired
with a company or organization. Each company or organization provides the team with a supply chain
related problem of importance. Student teams are co-advised by Engineering and Business faculty who
have direct contact with the company. The faculty co-advisers will mentor and guide each team to work
together collaboratively to propose solutions for a real-world supply chain problem facing an industry
partner.

	rogram Guided Electives Courses (for the major)
Prefix & Number	Course Description (from the Bulletin or the most recent new/change course form)
MKT 530	SERVICES MARKETING MANAGEMENT. (3) This course addresses marketing and management issues and problems faced by service organizations. Marketing and management concepts are broadened and applied to the service organizations. Topics related to service quality, the marketing mix, and service delivery are covered. Prereq: MKT 300, MGT 301. (Same as MGT 430.)
MFS 613	is intended to provide future manufacturing managers and leaders a basic understanding of important theories and practices necessary to successfully manage and lead teams to achieve manufacturing organizational objectives. The course is organized into several modules. The first module will focus on developing an understanding and capability to approach ethical and sustainability concerns confronted by manufacturing organizations. This will include coverage of tools to help identify and address societal and environmental obligations of manufacturing organizations and issues confronting them that span multiple cultures and nations. Because people are one of the most important resources in any organization, the second and third modules will address organizational behavior (OB) and individual effectiveness. OB theories and practices that can be used to increase the capability to observe, understand and manage people's behavior will be covered. The last module considers safety and ergonomics as they relate to manufacturing organizations. Coverage will include tools and techniques that can be used to analyze the manufacturing workplaces and ensure its ergonomic design as well as an overview of the current state of occupational safety and health regulations. Prereq: Graduate standing.
MFS 606	GLOBAL ISSUES IN MANUFACTURING. (3) The need to increase quality, productivity, efficiency and sustainability in manufacturing operations spanning the product, process and systems (manufacturing systems as well as supply chain) domains is essential for companies to be successful. The increased globalization of markets and manufacturing operations, declining natural resources and negative consequences of some manufacturing practices as well as increased legislation in many regions have led to many new challenges that companies must overcome to be successful in competitive markets. This seminar course will introduce students to a variety of global issues in manufacturing through presentations by leading national and international experts in these domains. The seminars will cover a broad range of manufacturing related topics relevant to many disciplines including manufacturing, mechanical and

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# **NEW** MASTER'S DEGREE PROGRAM

	electrical engineering. The course can also help graduate students identify topical issues that need further
	investigation and could become potential research topics. (Same as EE/ME 606.)
MGT 610	GLOBAL MANAGEMENT. (3) This course examines the problems of managing a business enterprise which spans international boundaries. Students will develop an understanding of the political, social, economic, and technological factors driving globalization and will consider the impact of these forces on competition, markets, industry structure, and organization.
MGT 697	LEADERSHIP, COMMUNICATIONS AND ETHICS. Political, historical, and philosophical perspectives on the meaning and processes of top management leadership. Applications of leadership perspective to the development of organizational culture, ethics and values, stakeholder relations, business-government relations, and competitiveness.
СРН 600	HEATH SERVICES AND SYSTEMS ORGANIZATIONS. (3) An introduction to the health care delivery system in the United States, including its composition, functioning, the interrelationships of organizations and professional groups within the system in various settings, health care terminology, and major problems and issues in the delivery of health services. Prereq: College of Public Health graduate program enrollment or permission of instructor.
HMT 588	STRATEGIC MANAGEMENT IN THE HOSPITALITY AND FOOD SERVICE INDUSTRY. A course requiring students to use integrative skills to evaluate theories and applications regarding decision making, strategic planning and management concepts specific to hospitality and food service organizations. Prereq: Graduate student status or HMT 120, HMT 210, HMT 270, HMT 308, MGT 301 and MKT 300.
SCE 614	SUSTAINABLE PRODUCTION SYSTEMS AND SUPPLY CHAIN. This course aims to provide students with an understanding of the sustainability opportunities and challenges facing manufacturing systems and supply chains. Students will be introduced to the 6R-based approach to sustainable manufacturing and the importance of product-process-system (manufacturing system, and supply chain) integration for improving sustainability performance. Students will also learn tools and techniques that can be used to model, measure and evaluate manufacturing systems and supply chains to improve economic and environmental performance while meeting the needs of consumers, employees, and other stakeholders.
19c Pr	ogram Free Electives Courses
Prefix & Number	Course Description (from the Bulletin or the most recent new/change course form)
190	<b>Durses for a Track.</b> (If multiple tracks are available, click <u>HERE</u> for a template for additional tracks. Append a DF to the end of this form with each track's courses and descriptions.
Prefix & Number	Course Type Course Description (from the Bulletin or the most recent new/change course form)
	☐ Track Core

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# **NEW** MASTER'S DEGREE PROGRAM

Track Elective
Track Core
Track Elective
Track Core
Track Elective

**NEW** MASTER'S DEGREE Page 37 of 37

# UNIVERSITY OF KENTUCKY GATTON COLLEGE OF BUSINESS AND ECONOMICS

# STUDENT LEARNING OUTCOMES

Master of Science in Supply Chain Management (SCM)

Submitted to the University of Kentucky, Office of Assessment
September, 2019

#### 1. Introduction

# Assessment Plan for Master of Science in Supply Chain Management (SCM) College of Business and Economics

#### **Unit Mission Statement:**

The Gatton College of Business and Economics is focused on enriching people's lives by creating and disseminating intellectual capital through excellence in teaching, research and engagement. The Gatton College's intellectual domains within the University are the intellectual disciplines of business and economics.

Across these disciplines the College:

- Expands knowledge through research, scholarship and creative activity
- Facilitates learning, informed by scholarship and research
- Serves a global community by disseminating, sharing and applying knowledge
- Promotes human and economic development that improves lives within Kentucky's borders and beyond.

### Basic Assessment Approach:

Assess all learning outcomes within a three-year cycle, using direct and indirect methods. Please see attached Curriculum Map and Artifact Map.

#### Definition of Key Terms:

Assessment: A strategy for evaluating and improving student learning through a continuous, systematic process.

Curriculum Map: A visual depiction of how learning outcomes and/or professional standards are translated into individual courses taught within a program

Learning Outcomes: Statements of learning expectations.

*Indirect Evidence:* Data from which you can make inferences about learning but do not demonstrate actual learning, such as perception or comparison data. Includes, but is not limited to: surveys, focus groups, exit interviews, grades, and institutional performance indicators.

*Direct Evidence:* Students show achievement of learning goals through performance of knowledge and skills. Includes, but is not limited to: capstone experiences, portfolios, and substantial course assignments that require performance of learning.

# 2. Assessment Oversight, Resources

Data are collected by the instructors through either embedded questions on exams and/or quizzes or from other written assignments. These items are scored based on the Learning

Outcomes (see below) the courses were assigned to assess. To have sufficient data, at least 40% of all students in each course must be assessed.

Students are categorized based on their scores on embedded questions or written assignments. Those with a 90% or above are considered Exemplary, 70-89% scores are Proficient, and 69% and below are Deficient. This data is then summarized into percentages and are included in the assessment reports. Lastly, course faculty describe how they plan to improve students' mastery of the learning goal moving forward.

The reports are then sent to the Gatton Office of Assessment. Data are aggregated for the year across courses by learning goal. These annual summaries are reviewed by the program's Advisory Committee where the College's continuing strengths and weaknesses are discussed. Plans to address weaknesses are generated, agreed upon and executed by this Committee.

# 3. Program-Level Learning Outcome

Learning Outcome 1: Critical Thinking

Learning Objective: Students will apply analytical, critical, and logical reasoning skills to solve complex operations and supply chain related issues

Learning Outcome 2: Identification of Ethical Issues

Learning Objective: Students will be able to identify ethical and societal responsibilities that arise in a supply chain context

# Learning Outcome 3: Multidisciplinary Competence

Learning Objective: Students will work in multidisciplinary team-based environment to identify and solve contemporary supply chain problems

#### Learning Outcome 4: Technological Skills

Learning Objective: Students will utilize ubiquitous business application software tools to assist decision making in a complex global supply chain setting

#### Learning Outcome 5: Communications Skills

Learning Objective: Students will demonstrate strong written and oral communication skills

# 4. Curriculum Maps

# Core Curriculum

Course Name	Goal	Critical Thinking	Identification of Ethical Issues	Multidisciplinary Competence	Technological Skills	Communication Skills
	Course #	SLO1	SLO2	SLO3	SLO4	SLO5
Supply Chain Fundamentals						
and Strategy	MKT 630	I	I	I	I	I
Production and Operations						
Management	MKT 631	I, R	-	R	I	I
Supply Chain Modeling &						
Analysis	MKT 632	I, R	-	-	I, R, E	R
Applied Data Analytics	MKT 633	I, R	-	-	I, R, E	R
Quality Management & Lean						
Operations	MKT 634	Е	R	-	R	R
Logistics Management	MKT 635	Е	R	R	R	R
Sourcing, Purchasing &						
Contract Management	MKT 636	Е	Е	-	R	R
Negotiation in Supply Chain	MKT 637	Е	R	-	-	Е
Industry Project	MKT 740	Е	Е	Е	Е	Е

<sup>\*</sup> I=Introductory, R=Reinforced, E=Emphasized

# Measurement of the student learning goals:

Student Learning Goals						
Learning Goal	Critical Thinking	Identification of Ethical Issues	Multidisciplinary Competence	Technology Skills	Communication Skills	
MKT 632				X		
MKT 636	X	X				
MKT 637					X (Written)	
MKT 740			X		X (Oral)	
Learning	Students will apply	Students will be able to	Students will work in	Students will utilize	Students will demonstrate	
Objective	analytical, critical, and	identify of ethical and	multidisciplinary team-based	ubiquitous business	strong written and oral	

logical reasoning skills to solve complex operations	societal responsibilities that arise in a supply chain	environment to identify and solve contemporary supply	_	communication skills in a supply chain-related context
and supply chain related issues	context	chain problems	complex global supply chain setting	

<sup>\*</sup>Note: X indicates where the assessment of the goal will occur.

#### 5. Assessment Methods and Measures

Direct Methods:

- Exams
  - Using a series of embedded questions that align with the learning outcomes the course is oriented toward.
  - o This is the primary method for courses assessing LO2, LO4, and LO5.
- Written Paper and/or Group Projects with attached Rubrics
  - o This is the primary method for courses assessing LO1 and LO3.

#### 6. Data Collection and Review

SCM 2020-2023 SLO Reporting Cycle						
Cycle	Learning Outcome Outcome (LO) #		Academic Year	Reporting Year		
Year 1	LO 1	Demonstrate the ability to apply analytical, critical, and logical reasoning skills to solve complex operations and supply chain related issues	2020-2021	31-Oct-21		
	LO 2	Identify ethical and societal responsibilities in a supply chain related context				
Year 2	LO 4	Demonstrate ability to utilize ubiquitous business application software tools to assist decision making in a complex global supply chain setting	2021-2022	31-Oct-12		
1011 2	LO 5	Demonstrate strong written and/or oral communication skills in a supply chain-related context	d/or oral			
Year 3	LO 3	Demonstrate the ability to work in multidisciplinary team-based environment to identify and solve contemporary supply chain problems	2022-2023	31-Oct-23		

### 7. Assessment Cycle and Data Analysis

Assessment of student learning takes place throughout the program and occurs in select courses. Program faculty will be asked to maintain records of course-level assessment. Program-level assessment data will only be gathered at summative points in the curriculum.

The program will follow a three-year cycle with two/one outcomes assessed during each year. All students must be evaluated for course purposes. Therefore, all student data will be gathered for the purposes of the program assessment.

Results will be analyzed and reviewed with the Graduate Studies Committee each year. Assessment reports will be completed by the end of each term, (Spring and/or Fall) and

submitted to the college's Assessment Office. Final reports will be sent to the university's assessment office as required.

# 8. Teaching Effectiveness

All instructors will use the University Teacher Course Evaluation (TCE) process to be evaluated by their students each semester. Each instructor will be asked to provide a self-reflection which will include areas of improvement. The Department Chair will review the TCE results, any available peer review forms, and the self-reflection with the instructors and provide feedback to the instructor. This will occur on an annual basis.

# 9. What are the plans to evaluate students' post-graduate success?

Our department will look at data provided by the Alumni Survey and will work with the Office of Institutional Research to look at other possible methods.

# 10. Appendices-Required

Rubrics for the above Learning Outcomes can be found in Appendix A.

# **Appendix A: Rubrics of Learning Outcomes**

- SLO 1 and 2 will be evaluated by case analyses, quizzes and exams conducted in MKT 636.
- SLO 3 will be evaluated by peer review conducted in MKT 740. Table 1 is the peer review rubric.

Table 1: Grading rubric of peer review

	Exemplary (A)	Satisfactory (B)	Developing (C)	Beginning (D)
Team interaction (30 %)	Communicates effectively with other team members. Handles conflicts constructively and professionally.	Communicates often with other team members. Handles conflicts professionally.	Try hard to communicate with other team members. Do not know how to handles conflicts.	Almost no communication with other team members. Causes conflicts. Don't try to resolve conflicts.
Quality of work (30%)	Excellent work quality. Exceed the expectations of the other team members. Cannot achieve the project outcomes without this member's input.	High work quality. Meet the expectations of the other team members. This person's inputs contribute to the project outcomes.	Adequate work quality. Need occasional re-work by others. May achieve the same project outcomes without this person.	In-adequate work quality. Need constant re-work by others. The team will perform better without this person.
Fair distribution of workload (20%)	Does more than his/her share of the workload. Help others.	Does his/her share of the workload in a timely manner	Does his/her share of the workload with occasional delays.	Cannot finish his/her share of the workload.
Participation in team events (20%)	Participates in all team events and meetings. Very accommodating other's schedules	Misses 1 team events (without excuse). Accommodating other's schedules.	Misses 2 team events (without excuse). Less accommodating.	Misses more than 3 team events (without excuse). Not accommodating.

- SLO 4 will be evaluated by quizzes and exams conducted in MKT 632.
- The oral communication component in SLO 5 will be evaluated by student's presentations in MKT 740. Tables 2 is the rubrics for the oral presentation. The written communication component in SLO 5 will be evaluated by written reports in MKT 637. Table 3 is the rubrics for the written report.

Table 2: Oral presentation grading rubric

Exemplary	Satisfactory	Developing	Beginning
(A)	<b>(B)</b>	(C)	<b>(D)</b>

Organization of information (25%)	Information is presented in a logical sequence. Capture audience's attention.	Information is presented in a logical sequence.	Logical sequence is unclear and hard to follow	Cannot understand presentationno sequence of information
Subject knowledge (25 %)	Demonstrates full knowledge. Propose interesting questions. Answer them with detailed explanations and elaborate.	At ease with knowledge. Answer questions, but does not elaborate	Unable to show understanding of knowledge. Answer only rudimentary questions	Does not have a grasp of the knowledge. Cannot propose and answer questions
Visual presentation (25%)	The vivid use of graphics/videos to explain and elaborate	The moderate use of graphics/videos to support text	Occasionally uses graphics that rarely support text and presentation	Uses superfluous graphics or no graphics at all
Elocution (25%)	Maintains eye contact. Clear voice. Good body gesture. Fluent.	Maintains eye contact most of the time. Most audience members can hear the presentation	Occasionally uses eye contact, mostly reading presentation. The audience has difficulty hearing	Reads scripts with no eye contact. Speaks too softly

Table 3: Written report grading rubric

	Exemplary	Satisfactory	Developing	Beginning
	(A)	<b>(B)</b>	(C)	<b>(D)</b>
Subject	Demonstrates full	At ease with domain	Unable to show a	Does not have a
knowledge (30	domain knowledge.	knowledge. Apply	real understanding	grasp of domain
%)	Apply proper	proper problem-	of domain	knowledge. Use the
, , ,	problem-solving	solving techniques.	knowledge. Use	wrong techniques to
	techniques. Explain	Do not explain them	only rudimentary	solve the problems.
	in detail.	in detail.	techniques.	
Relevance and	Counterintuitive and	Somewhat	Obvious or	Fundamentally
novelty of results	yet sensible results	surprising and	superficial results	flawed results
(30%)	("Wow!")	interesting results		
Structure and	Smooth transitions.	1-2 rough	3-5 rough	No clear transitions.
flow (20%)	Clear of major	transitions. 1-2	transitions. 3-5	Confusing. More
, ,	logical fallacies	instances of major	instances of major	than 5 instances of
		fallacies	fallacies.	major fallacies
Spelling and	Less than 2 errors.	3-4 error.	5-6 errors.	More than 7 errors.
grammar (20%)				Wiore man / chors.

From: Pearson, RaeAnne

**Sent:** Monday, March 25, 2019 10:19 AM

**To:** Sun, Haoying

**Cc:** Weber, Annie; Lee-Post, Anita

**Subject:** Fw: Untitled

Hello Haoying,

I have updated the CIP Code as requested. Please let me know if you have any other questions.

Dear Anita Lee-Post,

Thank you for submitting a Notification of intent for **Master of Science in Supply Chain Management**, **MS**, **Master of Science** (52.1399).

My email will serve 2 purposes: 1.) Next steps for SACSCOC, and 2.) Verification and notification that you have contacted OSPIE—a Senate requirement for proposal approval.

- 1. Next steps for SACSCOC: None required
- 2. **Verification that OSPIE has reviewed the proposal:** Based on the documentation presented the proposed program does not constitute a substantive change as defined by the University or SACSCOC, the university's regional accreditor. Therefore, no additional information is required by the Office of Strategic Planning & Institutional Effectiveness at this time. The proposed program change(s) may move forward in accordance with college and university-level approval processes.

IMPORTANT: Certificates (undergraduate and graduate) will be added to the CPE Inventory once they have been approved by the University Senate. For degree programs, an NOI will be submitted by the Office of Strategic Planning and Institutional Effectiveness to CPE and you will need to work closely with our office to ensure that your proposal meets all external CPE requirements and deadlines.

Should you have any questions or concerns about UK's substantive change policy and its procedures, please do not hesitate to contact our office.

Office of Strategic Planning & Institutional Effectiveness University of Kentucky

Visit the Office of Strategic Planning and Institutional Effectiveness Website

April 23, 2019

#### **MEMORANDUM**

TO: Haoying Chen, Gatton College of Business and Economics

Fazleena Badurdeen, College of Engineering

FROM: Simon Sheather, Dean Juna Sheather

SUBJECT: Letter of Support – Master's in Supply Chain Management/Master's in Supply Chain

Engineering

The Master's in Supply Chain Management (MSCM) and Master's in Supply Chain Engineering (MSCE) are examples of what can be accomplished when two colleges—Gatton COBE and the College of Engineering—work cooperatively to achieve an outcome of mutual benefit. I am in full support of both programs and am looking forward to the success of both colleges in providing new opportunities for our students and supply chain expertise to employers in the region and around the world.

Currently, the programs share three courses, two of which will be provided by the Gatton College and one by the College of Engineering. The Gatton College will be adding a new tenure track faculty member in supply chain who will be joining us in fall of 2019, and we are committed to hiring a lecturer for fall of 2020 to provide necessary teaching capacity and support to both programs. These additions, along with faculty experts who are currently in the college, represent all the pieces needed to successfully launch the MSCM program and support the MSCE.

The demand for supply chain professionals is strong within the region and our corporate partners are supportive of this newly designed program. It is our expectation that students who matriculate through the MSCM program will find opportunities within the region and beyond. I am personally very excited to be providing the Commonwealth with a much-needed educational opportunity that is an excellent match to a growth area in the state.

If you or anyone else involved with this process has any questions, please do not hesitate to reach out to me.

cc: Rudolph G, Buchheit, Dean of Engineering
David Hardesty, Department Chair of Marketing and Supply Chain
Nicole Thorne Jenkins, Executive Associate Dean



## **University of Kentucky**

College of Engineering
Office of the Dean
353 Ralph G. Anderson Bldg.
Lexington, KY 40506
P: 859-257-1687
F: 859-257-5727 www.uky.edu

October 23, 2019

Dr. Haoying Sun Assistant Professor of Marketing and Supply Chain Gatton College of Business and Economics University of Kentucky Lexington, KY 40506

Dear Professor Sun,

I am pleased to give my wholehearted support the new Master's degree program in Supply Chain Management (SCM), which is being proposed by the Gatton College of Business and Economics and the College of Engineering.

I understand that SCM is proposed as a one-year, 30 credit-hour program targeted at teaching students with a Business background the understanding and abilities necessary to manage complex supply chain processes.

The faculty expertise needed to teach courses in the SCM program currently exists in in the Gatton College of Business and Economics and the College of Engineering. Any additional resources needed implement the program offerings are or will be in place in advance of the proposed program launch date. The SCM program will not negatively impact other programs in the College of Engineering.

I believe that content and mode of delivery of this program is well conceived and will address critical educational needs for the workforce of Kentucky and beyond. I am pleased that the College of Engineering and the Gatton College have partnered to bring together faculty expertise to create graduate programming that is distinctive and highly relevance for business and industry.

I look forward to the speedy approval of this program and formation of its first student cohort.

Sincerely,

Rudolph G. Buchheit

PG Buckey

Dean, College of Engineering

Professor, Chemical and Materials Engineering



From: Jenkins, Nicole

**Sent:** Friday, April 19, 2019 8:51 AM

To: B&E Faculty

**Cc:** Greenwell, LeeCarol; Richards, Melissa

**Subject:** Faculty Voting Results - Faculty Meeting Issues

#### **Electronic Faculty Vote Results**

The following matters were supported 100%:

- 1. The Masters of Supply Chain Management
- 2. The courses for the Masters of Supply Chain Management
- 3. The policy to limit the credit hour transfer for majors and minor requirements of the College

The MSCM program and courses will be moved through the faculty senate with a planned launch date of fall 2020.

Thank you to everyone who participated in the voting.

Nicole

# Nicole Thorne Jenkins PhD, CPA

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# **Minutes MKT Faculty Meeting:**

#### 12/13/2018

# 1:00pm

- -David begins meeting at 1pm
- -Haoying begins by talking about the 3 SC candidates that came for recruiting- for the Supply Chain Masters Program that is being started: Brett Hathaway, Jiankun Sun, and Yunke Mai: 1:00-1:20pm.
  - -All faculty discusses each candidate: 1:20 1:30pm
- -Everyone agrees to offer Yunke the position, and if he says no, then to make an offer to Brett as the second option.
- -David talks about that in January/February B&E will hire someone for MKT potentially, as a visiting assistant professor, which will be for about 3 years.
  - 1:45pm- Lecturers join
- -David mentions also in Spring we will possibly hire another faculty for Supply Chain.
  - -Haoying discusses the new Supply Chain Master's Program details:
    - -Looking at the budget for this
    - -Faculty availability for the program
- -Looking at the options of either an adjunct or a new lecture to teach some of the courses.
  - -Hoping to start the program by Fall of 2020
- -Everyone votes for the motion to move forward of this program: everyone agrees.
- -Allan discusses having our MKT faculty to go and visit and present there. 3+1 program being kickstarted
  - -Online Digital MKT courses being started By Leslie Vincent and Andrew Grimes
    - -David brings up possibly doing a certificate, with digital media.
- -Brian Murtha discusses that a possible sales certificate is an option, that was discussed with Nicole Jenkins.
- -Possibly making another few courses to add to our current courses- so this certificate and be added with other majors in different dept.

- -David mentions the budget changing to possibly go towards number of students in each course/department.
- -Transfer credits: David discusses that for transferring credits there is no exceptions right now. We will try to establish a rule to have transfer credits from incoming students
- -David mentions that Meike found a rule in the MKT dept where two people could not vote, so everyone agreed to have that taken out.
- -David mentions that there needs to have a doctoral student representative on the DGS committee as well as the committee with Leslie.
- -David mentions that Adam asked about MKT 395- which does not count for MKT elective, it is only a college elective.
- Holly mentions Honors MKT courses, is that an option, can we offer more courses for those in the honors college?



March 18, 2019

David Hardesty, Chair Marketing and Supply Chain University of Kentucky

Dear David:

The Mechanical Engineering faculty have approved developing the course Supply Chain Engineering (SCE) 631 - Production and Operations Management and using it as a core course in the proposed Supply Chain Management (SCM) degree program. The vote to permit this course usage was unanimous in favor as reflected in our faculty meeting minutes from March 6, 2019. Students in the SCM program may also take other engineering electives that will be offered as part of our proposed SCE program or that are currently offered as part of the Manufacturing Systems Engineering (MFS) program. It is our understanding that a portion of the tuition revenue from the SCM students will be shared with Engineering for their enrollment in these courses, as separately agreed to by the College Deans.

Sincerely,

Michael W. Renfro

Professor and Chair of the Mechanical Engineering Department

University of Kentucky

153 Ralph G. Anderson Building

Michael W. Renfro

Lexington, KY 40506

michael.renfro@uky.edu

March 26, 2019

TO: David Hardesty

Chair, Department of Marketing and Supply Chain

FROM: Paul Childs

Chair, Department of Finance and Quantitative Methods

The Department of Finance and Quantitative Methods approves the use of Ram Pakath to teach MKT 633, entitled Applied Data Analytics, in the Master's in Supply Chain program. MKT 633 is a new course developed for the Master's in Supply Chain program.

March 26, 2019

The Department of Management supports Chen Chung teaching MKT 634, entitled Quality and Lean Management, and Joe Labianca teaching MKT 637, entitled Negotiation, in the Master's in Supply Chain Management program. We also agree to allow Supply Chain Management students to register as classroom space allows for MGT 610 (Global Management) and MGT 697 (Leadership, Communications, and Ethics) as potential electives.

Daniel J. Brass J. Henning Hilliard Professor of Innovation Management Chair, Department of Management

From: Jackson, Vanessa

Sent: Thursday, February 14, 2019 9:26 AM

To: Sun, Haoying Cc: Sun, Pei

**Subject:** RE: HMT 588 as elective for a few Gatton students

#### Dr. Sun:

Thank you very much for considering our class as a potential elective for your graduate students. We welcome future MS students from the Gatton College of Business & Economics to take HMT 588 as an elective. Please let me know if you need any other information. I have included Dr. Pei on this e-mail as she teaches the course. With great respect,

Vanessa P. Jackson, Professor Chair, Retailing & Tourism Management University of Kentucky 317 Erikson Hall Lexington, KY 40506-0050 (859) 257-7633 Fax (859) 257-1275

e-mail: Vanessa.jackson@uky.edu

From: Jackson, Vanessa

**Sent:** Wednesday, February 13, 2019 5:45 PM **To:** Sun, Haoying <Haoying.Sun@uky.edu>

Subject: Re: HMT 588 as elective for a few Gatton students

I would be glad to write the letter. Thank you for thinking of our program. Dr. jackson

Sent from my iPad

On Feb 13, 2019, at 12:36 PM, Sun, Haoying < <a href="mailto:Haoying.Sun@uky.edu">Haoying.Sun@uky.edu</a> wrote:

Dear Dr. Jackson,

This is Haoying Sun from Gatton College of Business & Economics. I am responsible for developing a new Master of Science in Supply Chain Management program for my department. We would like to put HMT 588 as one of the electives a student in the MS program can choose since some of the students may go to work in retail and hospitality industry after graduation. Currently, we want to have 9 courses in the list of recommended courses from which a student can select one as his/her elective. The MS program will have an expected students size of 25-45 per year. Hence, I would estimate that the number of students who may choose HMT 588 as an elective will be less than 5 per year. The target starting date of the new MS program is Fall 2020.

I am wondering if allowing a few of our future MS students taking HMT 588 as an elective is ok with your department. If so, we would need a letter of support (email is suffice) from the current department chair stating that. Please feel free to contact me if you have any questions.

Best regards,

Haoying

Haoying Sun
Assistant Professor
Dept. of Marketing and Supply Chain Management
Gatton College of Business and Economics
University of Kentucky

Email: haoying.sun@uky.edu

February 19, 2019

Haoying Sun, PhD
Assistant Professor,
Department of Marketing and Supply Chain Management
Gatton College of Business and Economics
University of Kentucky

Dear Dr. Sun:

I write this letter to confirm that the Department of Health Management and Policy will allow CPH 600 (Health Services and Systems Organization) to be listed as an elective for the new Master of Science in Supply Chain Management program.

Per our discussion, students will be allowed to enroll in the summer (online) session of CPH 600. This will allow them to be covered under our current MOU with Gatton.

Please feel free to contact me with any questions.

Sincerely,

Teresa M. Waters, PhD

Charles T Wethington Endowed Chair in the Health Sciences

Chair, Department of Health Management & Policy

Associate Dean for Research

From: Renfro, Michael

**Sent:** Wednesday, March 20, 2019 4:06 PM **To:** Badurdeen, F; Hardesty, David M.

**Cc:** Sun, Haoying **Subject:** RE: SCE/MKT 740

#### David,

Thank you for the note. Likewise, the Department of Mechanical Engineering will support the delivery of the SCE/MKT 740 course by assigning a faculty member for co-teaching. Let me know if you need something more formal.

#### Mike

From: Badurdeen, F <badurdeen@uky.edu> Sent: Wednesday, March 20, 2019 3:58 PM

To: Hardesty, David M. <dmhard3@email.uky.edu>; Renfro, Michael <michael.renfro@uky.edu>

Cc: Sun, Haoying <Haoying.Sun@uky.edu>

Subject: RE: SCE/MKT 740

#### David,

Thanks for this email. We were in need of this to submit the SCE/MKT 740 course in Curriculog.

#### Fazleena

Fazleena Badurdeen, Ph.D.
Professor of Mechanical Engineering
Director of Graduate Studies, Manufacturing Systems Engineering
414L CRMS Building
University of Kentucky
Lexington, KY 40506, USA

Phone: (859) 323-3252 Fax: (859) 257-1071

From: Hardesty, David M. <dmhard3@email.uky.edu>

Sent: Wednesday, March 20, 2019 3:54 PM

**To:** Renfro, Michael < <u>michael.renfro@uky.edu</u>>; Badurdeen, F < <u>badurdeen@uky.edu</u>> **Cc:** Hardesty, David M. < <u>dmhard3@email.uky.edu</u>>; Sun, Haoying < <u>Haoying.Sun@uky.edu</u>>

Subject: SCE/MKT 740

Hello Michael and Fazleena,

The Department of Marketing and Supply Chain will support the delivery of the SCE/MKT 740 course by assigning a faculty member for co-teaching.

David

**David Hardesty** 

Carol Martin Gatton Endowed Chair Department Chair Marketing and Supply Chain Director of the Behavioral Research Lab University of Kentucky david.hardesty@uky.edu

**From:** Sun, Haoying

Sent: Wednesday, February 13, 2019 2:28 PM

**To:** Zimmer, Ronald W

**Subject:** RE: PA 602 as elective for a few Gatton students

Ron,

Thanks for the quick reply! Since this is an existing course, a faculty vote is not necessary. All we need is a letter of support from you stating that your department would allow the future MS SCM students to register this course. If the number of seats in the classroom become a problem in the future, you can always grant higher priority to students in your program than ours. So our future MS students may register the course only two weeks after your students register and there are still seats available by then.

Best,

#### Haoying

From: Zimmer, Ronald W

**Sent:** Wednesday, February 13, 2019 2:18 PM **To:** Sun, Haoying <Haoying.Sun@uky.edu>

Subject: RE: PA 602 as elective for a few Gatton students

Haoying,

I think we would be happy to support this. Do you need us to have a faculty vote? Do you need a letter?

Ron

From: Sun, Haoying

**Sent:** Wednesday, February 13, 2019 12:24 PM **To:** Zimmer, Ronald W <<u>ron.zimmer@uky.edu</u>> **Subject:** PA 602 as elective for a few Gatton students

Dear Dr. Zimmer,

This is Haoying Sun from Gatton College of Business & Economics. I am responsible for developing a new Master of Science in Supply Chain Management program for my department. We would like to put PA 602 as one of the electives a student in the MS program can choose since some of the students may go to work in government or nonprofit organizations after graduation. Currently, we want to have 9 courses in the list of recommended courses from which a student can select one as his/her elective. The MS program will have an expected students size of 25-45 per year. Hence, I would estimate that the number of students who may choose PA 602 as an elective will be less than 5 per year. The target starting date of the new MS program is Fall 2020.

I am wondering if allowing a few of our future MS students taking PA 602 as an elective is ok with your school. If so, we would need a letter of support (email is suffice) from the current director stating that. Please feel free to contact me if you have any questions.

Best regards,

# Haoying

Haoying Sun Assistant Professor Dept. of Marketing and Supply Chain Management Gatton College of Business and Economics University of Kentucky

Email: haoying.sun@uky.edu